Table of Contents

Graduate Catalog	5
Admission Policies	5
Application Process	5
Admission Status Categories	10
Admission Status Change	12
Tuition, Fees, and Exemptions	12
Legal Resident Status	
Requirements Quick Reference	15
Degrees and Majors Offered	23
Graduate Assistantships	31
Academic Policies	34
Program of Study Policies	35
Master's Degree Requirements	37
Educational Specialist Degree Requirements	39
Doctoral Degree Requirements	39
Enrollment & Registration	42
Academic Performance	44
Graduate Committee	47
Colleges and Degree Programs	
Office of Academic Affairs	50
Master of Physician Assistant Studies	
Agriculture and Life Sciences	53
Agribusiness Management	57
Agricultural Economics	
Agricultural and Biological Engineering	60
Animal Nutrition	63
Animal Physiology	64
Animal and Dairy Sciences	66
Biochemistry, Molecular Biology, Entomology, and Plant Pathology	68
Food Science, Nutrition, and Health Promotion	73
Genetics	
Human Sciences, School of	
Agricultural and Extension Education	80
Fashion Design and Merchandising	85
Gerontology Certificate	
Human Development and Family Science	87
Landscape Architecture	
Plant and Soil Sciences	92
Poultry Science	

Architecture, Art, and Design	
School of Architecture	101
Arts & Sciences	
Anthropology and Middle Eastern Cultures	
Biological Sciences	
Chemistry	109
Classical and Modern Languages and Literatures	111
Communication	112
English	114
Gender Studies Certificate Program	115
Geosciences	116
History	122
Mathematics and Statistics	
Philosophy and Religion	
Physics and Astronomy	133
Political Science and Public Administration	134
Psychology	
Sociology	
Business	
Adkerson School of Accountancy	
Business Administration - Ph.D.	
Finance and Economics	153
Management and Information Systems	
Marketing, Quantitative Analysis, and Business Law	
Master of Business Administration	
Education	
Counseling, Educational Psychology, and Foundations	
Curriculum, Instruction, and Special Education	173
Educational Leadership	178
Instructional Systems and Workforce Development	
Kinesiology	
Music Education	
Engineering	
Aerospace Engineering	
Agricultural and Biological Engineering	
Applied Physics	
Biomedical Engineering	
Certificate Programs	209
Chemical Engineering	
Civil and Environmental Engineering	214
Computational Engineering	
Computer Science and Engineering	

Electrical and Computer Engineering	226
Engineering Education	229
Industrial and Systems Engineering	231
Master of Engineering	239
Mechanical Engineering	241
Forest Resources	243
Forestry	243
Sustainable Bioproducts	246
Wildlife, Fisheries, and Aquaculture	248
Veterinary Medicine	250
Environmental Toxicology	251
Veterinary Medical Science	253
Online Education	257
Meridian Campus	258
Graduate Calendar	259
Graduate Council	259
Graduate Faculty	261
Graduate Forms	296
Graduation	296
Other Information	296
Certificate Programs	297
Consortia	297
Contact Information	298
Course Numbering Information	299
Definitions	300
Equal Opportunity Statement	300
Graduate School Mission & History	301
HEOA Disclosure Statements	302
Student Grievances	302
University Mission & Vision	302
University Officers	303
Student Life	304
Assessment and Testing	304
Books and Supplies	304
Career Center	304
Dining Services	305
Graduate Student Association	305
Health Services	305
Housing Services	306
Information Technology	306
Institutional Diversity and Inclusion	307
International Services	307

L	Learning and Teaching Centers	308
L	Libraries	308
F	Parking Services	309
F	Recreational Sports	309
(Office of Technology Management	309
١	Veterans Services	310
A-Z I	Index	310
Index		315

June 2021

Introduction

The information contained in this publication most accurately describes the policies, procedures, regulations, and requirements of the University and the Board of Trustees of Institutions of Higher Learning at the time of publication. The University reserves the right to delete, substitute, change or supplement any statement in this publication without prior notice.

The policies, procedures, and requirements described herein are University minimums. Colleges and programs may impose additional or more stringent requirements. It is the student's responsibility to review and understand the specific college and program information provided in later sections of this catalog when applying to a program or completing degree requirements.

Council of Graduate Schools

Mississippi State University is a member of the Council of Graduate Schools (CGS) and the Conference of Southern Graduate Schools (CSGS). The University subscribes to the CGS Resolution Regarding Graduate Scholars, Fellows, Trainees and Assistants; the resolution and a complete list of participating institutions are available at http://www.cgsnet.org.

Student Responsibility Disclaimer

Each student is responsible for understanding and completing all requirements established for his or her degree by the University, college, and department. A student's advisor may not assume that responsibility. Any substitution, waiver, or exemption from established degree requirements may be accomplished only with the approval of the appropriate faculty, Academic Dean, and Dean of the Graduate School.

This catalog presents information which, at the time of preparation, most accurately describes the courses, curricula, degrees, policies, procedures, regulations, and requirements of the University. No contractual relationships, however, can be established between students and the University upon the information contained herein. The University reserves the right to delete, substitute, change, or supplement any statement in this publication without prior notice.

Mississippi State University does not discriminate on the basis of race, creed, color, religion, national origin, sex, age, disability, sexual orientation, group affiliation, or veteran status.

Admission Policies

The Graduate School is responsible for the administration of the University graduate admission policy. Admission to MSU for graduate study is open to qualified students regardless of race, creed, color, religion, national origin, sex, age, disability, sexual orientation, group, or veteran status. Submitting false information in the application will result in cancellation of the application without refund and/or immediate dismissal from the University.

The decision to admit an applicant to pursue graduate study at MSU is based upon evaluations of both qualitative and quantitative information by the applicant's program of interest. At a minimum, an applicant must submit a completed application, a statement of purpose for graduate study, three letters of recommendation, records of previous academic achievements, and a non-refundable application fee (not required of full-time benefits-eligible MSU employees) for a review of the application to occur. Some degree programs may require additional credentials, such as the Graduate Record Examination (GRE) or another standardized test score(s). All admission applications and supporting documents become the property of Mississippi State University upon receipt.

Standardized test scores, required by some degree programs, represent only one element considered in the admission decision of an applicant. Scores are never used as the sole criterion, but rather are considered in conjunction with other factors such as the applicant's purpose for study relative to the number of positions available in the program, prior professional and employment activities, and/or recommendations of the faculty in the proposed field of study, especially regarding the availability of faculty support for research. Consequently, an applicant who meets the required grade point average (GPA) and/or whose standardized scores fall at or above a competitive level is *NOT* automatically granted admission. Admission is granted only to those students considered to have the potential to complete the program successfully and with the knowledge that there are sufficient and appropriate resources available to support the needs of the student.

Application Process

A prospective applicant who has researched admissions requirements of the Graduate School at Mississippi State University and of the academic program of interest can apply online at http://www.grad.msstate.edu/.

Once all the required materials are received, the application is sent to the program for review. The Graduate Coordinator of a department/program recommends to the Graduate School that an applicant be admitted or rejected. The Academic Dean reviews admission decisions pertaining to applicants that do not meet the admission requirements of the University or program and the admission decision is forwarded to the Graduate School.

The Dean of the Graduate School will review these cases and may consult the Academic Dean and program before a final admission letter is sent to the applicant. The Graduate School sends a letter to the applicant communicating the decision. Only a written notice of admission from the Graduate School to the applicant is valid proof of admission. Beginning in the Summer 2020 semester, decision letters will be posted to the applicant status portal.

An additional application for graduate admission, including the application and other requirements listed, must be submitted in the following instances:

- An individual admitted to a graduate degree program who wants to pursue a second graduate degree (requires approval from both Graduate Coordinators);
- An individual enrolled in a graduate degree program who decides to change to a different program (unless the change is allowed via the Change of Program Status Form); Note: An exception may be made if both degree programs are within the same department and the change is supported by the graduate coordinator of each program;
- · An individual who was admitted to a program but did not enroll within three semesters (including semester of admission); or
- A student who has graduated with a degree and wishes to take another course or earn another graduate degree;
- An individual who has applied to a graduate degree program and decides to change to a different program before the application has been reviewed or before the Graduate School has released a decision;
- An individual who has applied for unclassified admission and decides to change to a graduate degree program (or vice versa).

New recommendation letters are generally required for students who are applying to a different program at MSU or reapplying to a program from which they have previously been rejected. Programs may wave the requirement for new letters of recommendation if desired. In this case, graduate coordinators may request that the Graduate School waive the requirement for new recommendation letters.

Applicants must also request any required test scores be sent to the Graduate School (TOEFL, GRE, GMAT, etc.) electronically. Additional information on TOEFL/IELTS requirements is presented in the English language Test Scores Requirements section.

It is the applicant's responsibility to ensure that all supporting materials are received. The Graduate School requires applicants to use the online application process. All required materials not submitted electronically must be mailed to the following address:

Mississippi State University The Graduate School Box G Mississippi State, MS 39762

University Application Deadlines

University deadlines are listed in the table below. All deadlines are at 11:59 PM (CST) unless otherwise stated. All dates and deadlines are subject to change. Some departments have different deadlines. Please refer to the departmental listings in this publication or the department's website for degree-specific admission deadlines. Because of anticipated delays in obtaining visas, international applicants are encouraged to submit admission materials by January 1 for consideration for the fall semester.

Semester	International Applicants Applying for Degree Programs or Unclassified Admission on Starkville and Meridian Campuses	Domestic Applicants Applying for Degree Programs on Starkville Campus	Domestic Applicants Applying for Degree Programs on Meridian Campus	Domestic Applicants Applying for Distance Degree Programs	International Applicants Applying For Distance Degree Programs	International- Distance Unclassified only; Domestic Unclassified on all Campuses
Fall	May 1	August 1	August 1	August 1	August 1	11:59 PM (CST) before the first day of class: see University Calendar for class dates
Spring	October 1	December 1	December 1	December 1	December 1	11:59 PM (CST) before the first day of class; see University Calendar for class dates

Summer	March 1	May 15	May 15	May 15	May 15	11:59 PM (CST)
						before the first
						day of class: see

before the first day of class; see University Calendar for class dates

Application

The applicant is responsible for completing the application online at www.grad.msstate.edu/admissions (http://www.grad.msstate.edu/admissions/) and paying the non-refundable application fee (not required for full-time benefits-eligible MSU employees). The application process cannot be completed until the application fee has been paid. Applicants must also provide the names and e-mail addresses of three individuals who have agreed to recommend the applicant to graduate study. These individuals will subsequently receive an e-mail request from the Graduate School to submit their letter of recommendation through an online portal. Their timely response is critical to the application process.

Applicants must request an official transcript from the bachelor's degree granting institution and from each college or university attended following the bachelor's degree. If fewer than 60-70 hours were completed at the institution which awarded the bachelor's degree, official transcripts from previous institution(s) are required as well. The program may require previous transcripts to verify prerequisites. The official transcript must be in a sealed envelope bearing the institution's return address with the Registrar's signature or stamp across the flap. The Graduate School will accept electronic transcripts directly from Parchment or National Clearinghouse. Electronic transcripts sent by Parchment or National Clearinghouse should be sent to Mississippi State University, Graduate School.

International applicants must provide their transcripts in their native language with translated copies. Receipt of these transcripts must follow the same requirements as above. Additionally, a Documentation of Support Form and a Bank Letter or Document of Financial Support must be completed and sent directly to the MSU International Services Office, including all required signatures (these are not required if the applicant is applying to an online program). If admitted, students will be sent instructions for uploading financial documents through the International institute's online portal.

All international applicants must submit TOEFL or IELTS scores unless they are from a TOEFL/IELTS exempt country provided below:

TOEFL/IELTS Exempt Countries

Anguilla Antigua and Barbuda Australia Bahamas Barbados Belize Bermuda British Virgin Islands Canada (except Quebec) Cayman Islands Christmas Island Dominica Gambia Ghana Gibralter Grenada Guyana Northern Ireland Republic of Ireland Isle of Man Jamaica Liberia Malawi Malta Micronesia Montserrat New Zealand Nigeria Pitcairn Islands Saint Helena, Saint Kits, and Saint Vincent Sierra Leone Swaziland Tanzania

Trinidad and Tobago Turks and Caicos Islands Uganda England/Wales/United Kingdom

English-Language Test Score Requirements

An international student is not required to submit English language test scores, unless required by the program, if they meet one of the following criteria:

- 1. Holds one or more degrees (baccalaureate or higher) from a U.S. institution,
- 2. Holds one or more degrees (baccalaureate or higher) from a college or university in a country where English is the first language, or
- 3. Is from a country where English is the first language (as documented by a statement on the high school graduating certificate that English is the official [first] language of the country).
- 4. Holds one or more degrees (baccalaureate or higher) from a college or university where English is the medium of instruction (as documented by an official statement from the college or university).
- 5. The Graduate School will accept English proficiency scores taken within the past five years to process international students' applications. However, official scores must be provided directly from the TOEFL, IELTS, and PTE testing company. The Graduate School will also accept official scores provided by students' previous institution as a copy of the original score report or reported in a letter on an official letterhead. Those scores should be emailed directly to the Graduate School (gradapps@grad.msstate.edu). If student is unable to provide these scores, he/she will need to retake the English proficiency exam and provide new official scores. If the new scores are less than the required English proficiency, the student will be required to enroll in required ESL classes. Note: The five year English language score policy is temporary and subject to change.

An international applicant whose primary language is not English, and is not exempted by reasons above, must submit evidence of English language proficiency by means of an approved assessment. The two main assessments accepted by MSU are the TOEFL (Test of English as a Foreign Language) score and IELTS (International English Language Testing Systems). Other assessments or proof of language proficiency, such as the PTE (Pearson Test of English), may be considered (contact the International Institute to determine if an English language proficiency test is acceptable). If more than one test score is submitted, the highest score will be the valid score used to determine if the applicant qualifies for regular admission or must complete ESL courses to gain full admission. The scores submitted must be from an official assessment taken no more than two years prior to application. If an applicant has submitted an official score and takes the test again to improve his or her score, that official score must be received by the Graduate School no later than five business days before the first day of class and **prior to course registration in a graduate program at Mississippi State University**.

A minimum TOEFL score of 53 iBT (Internet-Based Test) or IELTS score of 4.5 is required for admission to Mississippi State University. The following degree programs require higher test scores than the University requirement:

- The College of Veterinary Medicine requires a minimum TOEFL score of 61 iBT or IELTS score of 5.5.
- The College of Education requires a minimum TOEFL score of 79 iBT or IELTS score of 6.5 for admission to master's and doctoral level programs.
- The College of Business requires a minimum TOEFL score of 84 iBT or IELTS score of 7.0.

Applicants must check the requirements of the specific department offering the program for which he or she is applying to determine if there are other requirements. A student not holding a U.S. baccalaureate or higher degree must submit English proficiency scores that are not older than two years.

The following table describes the English language proficiency requirements for international graduate applicants. A student admitted with a score less than the proficient-level equivalencies must enroll in the specified English as a Second Language (ESL) course requirement(s) beginning with the initial enrollment period.

Mississippi State University does not accept ESL transfer work from another college or university. All required ESL courses must be taken at MSU.

A student admitted with less than the required English language proficiency will have a "hold" placed on their account that limits their ability to register for courses. The International Institute/English Institute (II/ELI) is responsible for managing English language holds. Students with a hold will complete a "TOEFL Hold" registration form with the help of their major professor/advisor and then submit it to the II/ELI each semester they are enrolled in ESL classes in order to be registered. The II/ELI will release the hold when the student has successfully completed all their ESL requirements. Once the hold is released, the student can register for courses through MyState.

English Language Test Score Requirements

TOEFL iBT	IELTS	Admission Eligibility	Outcome
79 and above	6.5 and above	Eligible for admission for any term	Considered proficient in English.
		and a graduate assistantship	Applicant is not required to enroll
			in an ESL course unless his/her

academic program requires a higher

test score.

69-78	6.0-6.4	Eligible for admission for Fall,	Scores indicate a need for assistance
		Spring, or Summer and a graduate assistantship.	in English writing, research, and editing skills. Applicant must enroll in ESL 5323 Academic Research and Writing (graded on a Satisfactory/ Unsatisfactory basis). Student may enroll in up to 6 credit hours in his/ her graduate program.
61-68	5.5-5.9	Eligible for admission for the Fall term only. Not eligible for a graduate assistantship until ESL requirements are met.	Applicant is required to enroll in ESL 5120, a 9-hour intensive English course (graded on a Satisfactory/ Unsatisfactory basis). The student must complete this course prior to registering for courses in his/her graduate program. The student must pass the English Proficiency Exam consisting of grammar, reading, writing, oral, and aural skills, and must attend the English immersion class for one semester. The student must then enroll in ESL 5323.
54-60	4.6-5.4	Eligible for admission for the Fall term only. Not eligible for a graduate assistantship until ESL requirements are met.	Applicant is required to enroll in ESL 5110, an intensive English course (graded on a Satisfactory/ Unsatisfactory basis). The student cannot enroll in courses in his/ her program until ESL 5110 and ESL 5120 have been successfully completed. The student completes the course once he/she passes the English Proficiency Exam, has attended the English immersion class regularly for at least one semester, and has done satisfactory work. The student must then complete ESL 5120 before proceeding to enroll in ESL 5323.
53 and below	4.5 and below	Not eligible for admission to the Graduate School.	Applicant can enroll in the English Language Institute on a non- credit basis after which he/she can retake the English-language test in preparation for submitting another application to graduate study at MSU.

Required Measles/Rubella Immunization

In cooperation with the Mississippi State Department of Health and for the protection of our University community, Mississippi State University requires new students, including transfers, born after 1956 to provide proof of immunity of measles and rubella. A student will not be allowed to register for classes until this requirement has been met. Prior enrollment at MSU does not automatically clear a student from immunization updates. This proof consists of **one** of the following:

- 1. Documented history of *two* doses of measles vaccine and one of rubella, usually given as MMR (Measles, Mumps, Rubella). The first of these immunizations MUST have been given AFTER 12 months of age and AFTER 1968. Immunizations given prior to the age of 12 months or before 1968 are not valid.
- 2. Serologic confirmation of immunity to measles AND rubella (must be confirmed by laboratory report).
- 3. Documented history of physician-diagnosed measles and rubella.

Temporary waivers are available for pregnant women with a physician's letter of confirmation and expected date of confinement, or women suspecting pregnancy.

Permanent waivers are given for the following groups of students.

- 1. Born before January 1, 1957, or
- 2. Provide documented proof of a significant life-threatening allergic reaction to this particular vaccine (requires documentation of reaction), or
- 3. With a disease that will cause a permanent contraindication to immunization (requires documentation of disease).

A student can confirm his/her status with Longest Student Health Center by emailing health@msstate.edu or by calling 662-325-0706. Additional information regarding this requirement is available at http://www.health.msstate.edu (http://www.health.msstate.edu/).

Admission Status Categories

An applicant who is admitted to a degree level and program can enroll only in the program of admission. Before registering for classes, the individual can subsequently apply to a different level and/or degree program. However, once the student enrolls in classes he/she must remain in that program for one semester before applying to another degree program. The decision to admit is valid for three terms with the admitting department's approval (including term of admission) to allow for the student's initial enrollment in classes. Students may defer enrollment for up to two semesters following an admission decision. Students must contact the Graduate School by email (gradapps@grad.msstate.edu) to change the enrollment term. If the student does not enroll for three semesters, however, the student must submit a new application, statement of purpose, application fee, and other program-required documentation. If the student attended another university in the interim, transcripts may also be required.

Regular Admission

Any person granted regular admission for graduate study must hold a bachelor's degree from a regionally accredited institution. However, an applicant with a bachelor's degree from a non-accredited institution may request consideration from the Academic Dean of the appropriate college before applying for admission. In either case, the Graduate Coordinator of the academic program may prescribe specific undergraduate level courses as prerequisites to admission.

In addition to holding a bachelor's degree, an applicant who receives regular admission status must satisfy one of the following graduate admissions requirements based on the level of work completed at the time of the application.

- 1. 2.75 GPA on the last two years (approximately 60-70 semester hours or 90-100 quarter hours) OR
- 2. 2.75 GPA on 30 or more semester hours of undergraduate credit attempted after earning a bachelor's degree OR
- 3. 3.00 GPA on 9 or more graded graduate credit hours (courses taken as Pass/Fail or for S/U grades do not apply). For students with less than 9 hours of graded graduate coursework, No. 1 or 2 would apply. OR
- 4. An earned master's or higher-level degree.

An applicant not satisfying the minimum grade point average for his/her level of work may be admitted to a degree program provisionally if recommended by the program's Graduate Coordinator. The minimum acceptable undergraduate GPA for admission as a provisional student is 2.50 (see Provisional Admission below).

Meeting minimum requirements for admission does not guarantee admission into a program. Each applicant competes with all other applicants for availability in each program. Exceptions to these requirements for either "regular" or "provisional" admission must be made by the appropriate Academic Dean who will notify the Graduate School in writing.

Graduate programs may have requirements for regular admission in addition to the University requirements described above. For this information, see the specific program section in this publication.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. A provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C, unless one course retake is approved per the Graduate Course Retake Policy). The first 9 hours of graduate courses must be within the student's Program of Study. Courses with an S grade or transfer credits cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student shall be dismissed from the graduate program at the request of the program Graduate Coordinator and Academic Dean. *Academic departments may set higher standards for students to fulfill provisional requirements*. A student admitted with provisional status should contact the Graduate Coordinator for the program's specific requirements. While in provisional status, a student may not be funded through state sources but may hold an assistantship or be funded through non-state funded sources (e.g., extramural grants).

Contingent Admission

A student may be admitted with a contingency, meaning a requirement for admission is lacking (e.g., a bachelor's degree). Applicants currently earning their bachelor's degree are automatically admitted contingent. In this case, when the Graduate School receives the final transcript verifying the degree was awarded, the admission contingency is removed. University contingencies are monitored by the Graduate School and typically involve receipt of transcripts, confirmation of degree conference, and standardized test scores.

A prospective international applicant who:

- is sponsored by his/her government, is funded for one year of English language study, and has a low or no English language proficiency score (TOEFL/IELTS); OR
- a student meeting all programmatic admission requirements, has a low or no English language proficiency score (TOEFL/IELTS), and was admitted by a program at MSU

may be admitted contingently by the Graduate School. The student must meet all other requirements for admission to graduate study in an academic department at MSU. Once a student is contingently-admitted without the required English language proficiency score (TOFL/IELTS), the student cannot submit a new score and cannot be enrolled in any other classes by virtue of a hold placed on their account. Contingently-admitted students must complete one year of ESL study, satisfy all contingent admission requirements, and demonstrate English language proficiency to be eligible for regular admission status. Contingently-admitted students can be admitted only for a fall semester to ensure completion of the required ESL course(s) within one academic year.

An applicant may also be admitted with one or more departmental contingencies, requirements the department expects the student to fulfill by a certain deadline. Programmatic admission contingencies are monitored by the program and typically involve prerequisite courses or another similar requirement.

Contingencies are expected to be cleared within one academic year. Students may request additional time to clear their contingencies in writing to their Graduate Coordinator with approvals from the Graduate Coordinator, Department Head, and Academic Dean. The request is then submitted to the Dean of the Graduate School. Students that fail to clear their contingencies by the deadlines stated by the program of the University are subject to dismissal.

Unclassified Admission

An applicant wishing to take graduate-level courses may be admitted as an unclassified graduate student. This process requires submission of the unclassified graduate application, a statement of purpose, an official transcript verifying the applicant's bachelor's degree, and a \$60.00 application fee. International students must also submit an English language proficiency score for admission. Current and retired Mississippi State University faculty are not required to submit a transcript in order to enroll in a graduate course as an unclassified graduate student.

Once admitted unclassified, the student may not apply for a graduate degree program for the same semester. Up to 9 hours of graduate work earned while unclassified may be transferred to a degree program with the approval of the graduate program. Students must confirm eligibility of enrolling as unclassified student with academic department before applying. The College of Business does not allow unclassified graduate students to take courses in their college. Students must be accepted to a business degree program prior to registering for courses in that college.

There are limitations to financial aid for students in unclassified status. Applicants seeking financial aid should contact the Student Financial Aid Office (https://www.sfa.msstate.edu/).

Once admitted, an unclassified graduate student must request permission from the instructors of each course or the Graduate Coordinator of the program offering the course(s). The instructors or Graduate Coordinator will notify the appropriate departmental representative(s) to enter a major override for each approved course, and the department will release the student for registration. The student can then register online.

Military Deferment of Admission

A military student who has been admitted to a degree program but has not yet registered and who subsequently receives deployment orders may request deferment of admission. The new date of admission may be up to two years from the date of release from active duty.

Faculty Admission

An MSU faculty member may elect to earn an advanced degree while employed at MSU. These individuals should discuss their plans with their supervisor prior to applying for admission. Admission will follow the same processes and review procedures described above.

Senior Citizen Admission

Legal residents of the State of Mississippi age 60 or older may enroll tuition-free in a maximum of 6 hours per semester (fall, spring, or combined summer term) with a maximum of 18 credit hours per calendar year. Course registration is available to senior citizens on a first-come, first-served basis, space permitting. Enrollment in courses offered for the Doctor of Veterinary Medicine degree is not permitted. Senior citizen students must apply for admission or readmission to MSU before each semester begins. The non-refundable application fee is required with the graduate application.

Undergraduate Enrollment in Graduate Courses

An undergraduate student at Mississippi State University, or any university with which MSU has an agreement, may take up to 9 graduate credit hours in conjunction with undergraduate credit hours (not to exceed 15 total hours). Programs may have limits for the maximum number of combined credit hours (graduate and undergraduate) a student may enroll in during a given semester. The student should meet the GPA requirement for regular admission to graduate study at MSU. The Provost must approve any exceptions to these requirements.

In order to register for the course(s), the student must submit the Undergraduate Request to Enroll in Graduate Courses form for approval to the instructor(s) of the graduate course(s), the student's undergraduate Department Head and Academic Dean, and the Department Head and Academic Dean of the graduate program offering the course(s). If approved, the department offering the coursework will issue a level override. The completed form is provided to the Graduate School.

Accelerated Program

A number of academic departments offer an Accelerated Program. These programs permit highly qualified undergraduate students to earn graduate credit during the final year(s) of undergraduate studies. Upon completion of the credits, the students also earn undergraduate credit for the same course(s). University minimum requirements for students to be accepted into an Accelerated Program are a GPA of 3.00 or higher on all undergraduate work and a minimum of 60 hours toward a Bachelor's degree. The academic department may have additional requirements such as the completion of specific courses or a statement of professional interests and goals. See Accelerated Programs (http://catalog.msstate.edu/graduate/colleges-degree-programs/) for a list of these departments and more complete information.

Admission Status Change

Following admission to a graduate program at Mississippi State University, a student may wish to change some aspect of his/her admission status. See the appropriate tab for information on the process to change the degree level, add or change a concentration, change campus, or change the thesis/non-thesis designation associated with the student's program.

Degree Level Change

A student admitted to a degree program may subsequently want to change to a lower degree level (e.g., from doctoral to M.S.) in the same program. This student should submit to the Graduate School an approved Request to Change Program Status form, including all required signatures. No other document is required. Once approved, the degree-level change will be made effective for the following semester, unless the student will be graduating during the semester of submission. If a student admitted to a degree program elects to change to a higher degree level in the same program, a new application with additional departmental requirements will be required.

Concentration Change/Add a Concentration

A student admitted to a major with two or more concentrations may change concentrations within the same department, or the same umbrella major, by submitting to the Graduate School an approved Request to Change Program Status form, including all required signatures. No other document is required. Once approved, the concentration change will be made effective for the following semester, unless the student will be graduating during the semester of submission.

Graduate students may pursue a maximum of two concentrations within one degree/major program at the same time. Requirements for both concentrations must be fulfilled prior to graduation. Once a student graduates, a **second degree** in the same program with a different concentration cannot be earned. The student must submit the Request to Change Program Status form, including all approval signatures. No other documents are required. Once approved, the secondary concentration change will be made effective for the following semester, unless the student will be graduating during the semester of submission.

Campus Change

Students are admitted to the Starkville Campus, the Meridian Campus, or via the Center for Distance Education. An admitted student who wishes to change to another campus must submit an approved Request to Change Program Status form to the Graduate School, including all required signatures. If the student is Unclassified, the Dean of the Graduate School will approve for both campuses. Once approved, the campus change will be made effective for the following semester, unless the student will be graduating during the semester of submission.

Change of Thesis/Non-Thesis Designation

An admitted student desiring to change from thesis status to non-thesis status (or vice versa) for programs that offer both options should contact their major professor or graduate coordinator. If curriculum rules exist for thesis and non-thesis options, the student must submit the Request to Change Program Status form to the Graduate School. The form must be signed by the student and approved by the current Graduate Coordinator, Department Head (if applicable), Academic Dean (if applicable), and the Dean of the Graduate School. Once approved, the campus change will be made effective for the following semester, unless the student will be graduating during the semester of submission. NOTE: Completed research hours cannot be used to fulfill coursework requirements for non-thesis programs of study.

Tuition, Fees, and Exemptions

Tuition & Required Fees (T&RF)

Tuition and Required Fees are assessed on a per-credit-hour basis at the prevailing rates as determined by the Institutions of Higher Learning, the governing board of the University. These rates are applicable at the time of publication and are subject to change without notice.

For Tuition and Required Fee information, access https://www.controller.msstate.edu/accountservices/tuition/ and select the applicable tab.

- Starkville Campus Graduate
- Distance Education
- Meridian Campus

T&RF Relative to Student Activities

All students, by payment of Tuition & Required Fees, are eligible for use of facilities, participation in intramural sports, admission to intercollegiate athletic events, student health services (Starkville students only) and other miscellaneous activities. These fees are applicable regardless of the method of course instruction (i.e., traditional, online, distance, etc.).

Course Participation Fees

Fees in addition to Tuition & Required Fees are associated with some courses which require the use of special equipment, facilities or materials. These fees, which vary by course, will be charged as part of registration.

Schedule Change Fees

Please see http://www.registrar.msstate.edu/Calendars/academiccal.html and access information by the applicable term.

Graduate Student Financial Information

Additional information regarding tuition and fees, cost of living, assistantships, and other relevant information is found on the Graduate School website at https://www.grad.msstate.edu/tuition/fees/. (https://www.grad.msstate.edu/tuition/fees/)

International Student Charges

All international students are assessed an Administrative Programming fee of \$100.00 each fall, spring, and summer term. Sponsored international students whose programs of study are administered through the International Services are assessed an additional fee of \$200.00 each fall, spring, and summer term. Health insurance for international students will be assessed at the prevailing rate for the fall semester and for the spring/summer semester. All international students are required to purchase the International Health Insurance unless an acceptable, alternative policy can be proven and accepted by International Services, preferably prior to registration. Health insurance charges will not be removed after the 10th class day.

Student Account Management

Tuition, Billing, Payment, Refund, Delinquent Accounts and other information: https://www.controller.msstate.edu/accountservices/index.php (https:// www.controller.msstate.edu/accountservices/).

Tips for Managing Your Account: https://www.controller.msstate.edu/accountservices/resources/

Refund schedule information: http://www.registrar.msstate.edu/Policies/RefundSchedule.pdf.

Failure to take appropriate withdrawal action may result in significant payment obligations. According to established University policy, student accounts must be current (i.e., not on an Account Services/Financial hold) in order to continue enrollment at MSU. To avoid unnecessary delays in your continued enrollment, please review your account to insure all previously billed charges have been paid. If you have questions about this policy, please feel free to contact Account Services:

Contact Information

Account Services Phone: 662-325-2071 Fax: 662-325-8236 Email: studentaccounts@msstate.edu; refunds@msstate.edu

Tuition Exemptions

Graduate Assistantships

For complete information, see https://next.catalog.msstate.edu/graduate/graduate-assistantships/. (p. 31)

Employees

Mississippi State University "Benefits Eligible" employees who have appropriate approval may have tuition remitted for up to 6 credit hours per semester with a maximum of 18 credit hours per calendar year. Employees are required to pay tuition and required fees for any additional hours taken during the

enrollment period and other assessments to their student account. In order to receive tuition remission, employees must gain admission/readmission to the University and complete the Application for Tuition Remission – Employee e-form.

Senior Citizen

Legal residents of the State of Mississippi age 60 or older may enroll tuition-free in a maximum of 6 hours per semester with a maximum of 18 credit hours per calendar year. These courses are available on a space-available, first-come, first-serve basis. Enrollment in courses offered for the Doctor of Veterinary Medicine degree is not permitted. The application fee is required with the graduate application.

Alumni Nonresident Exemption

Graduate students who are sons or daughters of an MSU alumnus or alumna, and who have not received other tuition waivers, may be eligible to receive up to \$4,000 per year (\$2,000 per semester) to apply towards the non-resident tuition fee. To qualify as an alum for this scholarship, the parent must have completed a minimum of 48 undergraduate credit hours, 30 graduate credit hours, or have received a degree from Mississippi State University. A minimum 3.00 cumulative GPA is required for renewal of the exemption. Grades are reviewed at the end of each fall semester. For more information, contact the Office of Admissions and Scholarships at scholarships@msstate.edu.

Academic Common Market

Academic Common Market non-resident tuition remission (exemptions) are available for specific academic programs for students from certain states. Application must be made first with the awarding state. The student must be a legal resident of that state and approved for a specific major at MSU. Both undergraduate and graduate students are eligible to apply. The waiver is 100 percent of the non-resident tuition remission and will remain at this level unless the student's field of study changes, the student no longer has full-time status, or the student has fallen below an MSU and cumulative 2.0 GPA.

A qualified student must maintain full-time status, remain in academic good standing and comply with all the requirements of the degree program. If a student changes his/her major from the approved ACM certified major, then they must inform the Office of the Provost and Executive Vice President of the change of status. The student will be responsible for the non-resident tuition for the remaining semesters at Mississippi State University. To be eligible for the non-resident tuition remission during the first semester of enrollment, applications and resident verification must be submitted to and approved by the Office of the Provost and Executive Vice President prior to the first day of class.

For more information about submission and deadlines, please contact that office at 662-325-3742. Students seeking information on the Academic Common Market waiver should contact the Academic Common Market, Southern Regional Education Board, 592 10th Street NW, Atlanta, GA 30318-5790 or access the Web site at http://www.sreb.org/page/1304/academic_common_market.html

Legal Resident Status

Students are classified as in-state or out-of-state for the purpose of paying University fees. The Graduate School will make the initial classification at the time a student's application for admission is processed. The burden of proof for establishing residency resides with the applicant. If a student misrepresents his or her status, he or she shall be responsible for paying the fees he or she would have otherwise been required to pay and will be subject to disciplinary action or dismissal from school. The University Registrar is authorized to change a student's residence status upon receipt of evidence that the student is improperly classified.

The following Institutions of Higher Learning and Mississippi State University policies apply in determining the residential status of students for the purpose of enrolling and paying fees at a state-supported institution of higher learning:

• Institutions of Higher Learning

http://www.ihl.state.ms.us/board/downloads/policiesandbylaws.pdf Paragraphs 610 and 611.

Mississippi State University

http://www.msstate.edu/dept/audit/3102.html Academic Operating Policy AOP 31.02 Legal Resident Status

Petition for Change of Residency Classification.

A person who enters the State of Mississippi from another state and enters an educational institution is considered a non-resident. Any person who has after attaining the age of twenty-one (21) and has since their twenty-first birthday established residency and resided within the State of Mississippi for twelve (12) consecutive months may: (1) upon sworn affidavit and other representation, and (2) who can prove financial independence, petition for a change in residency classification for the purposes of fees and tuition assessment.

Residency changes are not retroactive, and the following conditions apply:

- 1. The institution may make reasonable inquiry into the validity of the petitioner's claim.
- 2. A petition for change of residency must be received **prior to the last day** a student may register without penalty of the term for which the student is applying for residency.

Although domicile and residency for educational purposes are largely matters of intention, this intention is determined objectively from the facts and circumstances surrounding a claim of in-state residency. Some of the factors relevant to determining residency include:

- · Actual physical residence of habitation
- · Length of time at actual physical residence Residence used for income tax, loan, banking and other purposes
- · Voter registration
- Motor vehicle registration (Persons moving into the state on a permanent basis have 30 days to register vehicles.)
- Driver's license held (Persons moving into the state on a permanent basis have 60 days to acquire driver's licenses.)
- · State to which personal income taxes or other taxes paid
- · Status of income sources
- · Location of bank, savings and other accounts

Responsibility for Reporting Change.

It is the individual student's responsibility to report immediately to the Registrar any change which will affect his or her residence status under these regulations.

Institutions of Higher Learning (College Board) and University Policies Concerning Nonresident Tuition.

In addition to state laws and regulations, the University has established certain IHL Board approved regulations concerning the payment of non-resident tuition. Mississippi State University (except the College of Veterinary Medicine) may waive a percentage of the non-resident tuition for the following groups of students:

- 1. Those who are currently awarded athletic scholarships.
- 2. Those who are currently awarded band scholarships.
- 3. Those who are currently awarded choral scholarships.
- 4. All graduate students holding assistantships. (Rules applicable to these awards may be found in the Graduate Catalog or in the Graduate Assistant Handbook. Both publications are available on the MSU Web: http://www.grad.msstate.edu/about/)
- 5. Children of Mississippi State University alumni. (Application deadline is April 1) (For this purpose, an alumnus or alumna is defined as one who has earned a minimum of 48 MSU undergraduate credit hours or 30 MSU graduate credit hours of course work or received a degree from Mississippi State University.) Graduate students must maintain a B (3.0) grade point average to continue eligibility for this award. STUDENT AFFAIRS OP 91.178: Policy on Out-of-State Tuition Waivers is available on the MSU Web: http://www.msstate.edu/dept/audit/PDF/91178.pdf.
- 6. Non-resident students who are certified participants in the Academic Common Market.

Requirements Quick Reference

Degrees Offered

Master of Agribusiness Management (M.A.B.M.)

Master of Arts (M.A.)

Master of Arts in Teaching (M.A.T.)

Master of Arts in Teaching-Middle Level (M.A.T.M.) (ADMISSION CURRENTLY SUSPENDED)

Master of Arts in Teaching-Secondary (M.A.T.S.)

Master of Arts in Teaching-Special Education (M.A.T.X.)

Master of Business Administration (M.B.A.)

Master of Engineering (M.Eng.)

Master of Landscape Architecture (M.L.A.)

Master of Music Education (M.M.E.)

Master of Physician Assistant Studies (M.P.A.S.)

Master of Professional Accountancy (M.P.A.)

Master of Public Policy and Administration (M.P.P.A.)

Master of Science (M.S.)

Master of Science in Information Systems (M.S.I.S.)

Master of Science in Instructional Technology (M.S.I.T.)

Master of Taxation (M.TX.)

Educational Specialist (Ed.S.)

Doctor of Philosophy (Ph.D.)

Abbreviations for Majors and Concentrations (alpha order by major or concentration)

Abbreviation	Description
ACC	Accounting
ASE	Aerospace Engineering
AGBM	Agribusiness Management
AEC	Agricultural Economics
AEE	Agricultural and Extension Education
AEEL	Agricultural and Extension Education-Leadership
AEET	Agricultural and Extension Education-Teaching
AGS	Agricultural Sciences
ALSC	Agricultural Life Sciences
AGR	Agriculture
AGN	Agronomy
ADS	Animal and Dairy Sciences
ANNT	Animal Nutrition
PHY	Animal Physiology
ASC	Animal Science
APAN	Applied Anthropology
APMT	Applied Meteorology
ACSC	Cognitive Science
APHY	Applied Physics
APSY	Applied Psychology
BCH	Biochemistry
BE	Biological Engineering
BIO	Biological Sciences
BME	Biomedical Engineering
BMP	Broadcast Meteorology
BA	Business Administration
BUSI	Business Administration (Meridian)
BIS	Business Information Systems
CHE	Chemical Engineering
СН	Chemistry
CE	Civil Engineering
MH	Clinical Mental Health Counseling
CLPS	Clinical Psychology
COG	Cognitive Science
СС	College Counseling
CED	Community College Education
PHCL	Community College Leadership
VCBC	Computational Biology

CME	Computational Engineering
CS	Computer Science
PHCE	Counseling/Mental Health Counseling
PHSE	Counseling/School Counseling
COE	Counselor Education
СОЕМН	Counselor Education/Clinical Mental Health Counseling
COED	Counselor Education
CIED	Curriculum and Instruction-Early Childhood Education (ADMISSION
	CURRENTLY SUSPENDED.)
CIEE	Curriculum and Instruction-Elementary Education
CIGE	Curriculum & Instruction-General Education (ADMISSION CURRENTLY SUSPENDED.)
CIRE	Curriculum and Instruction-Reading Education (ADMISSION CURRENTLY SUSPENDED.)
CISE	Curriculum and Instruction-Secondary Education
CIEX	Curriculum and Instruction-Special Education
CYDE	Cyber Defense
CYOP	Cyber Operations
CYSO	Cyber Security & Operations
DPD	Design & Product Development
EASC	Earth & Atmospheric Sciences (see Geosciences)
EC	Economics (also see GAEC)
EDUC	Education
ET	Education-Technology
EDLD	Educational Leadership
EPY	Educational Psychology
ECPE	Electrical and Computer Engineering
ELED	Elementary Education
ECED	Elementary Education-Early Childhood Education
GEED	Elementary Education-General Education
MLED	Elementary Education-Middle Level Education
ENGR	Engineering (see M ENG)
ENGT	Engineering Technology
EN	English
ENT	Entomology
ENGS	Environmental Geoscience
ENVT	Environmental Toxicology
EXPY	Exercise Physiology
EXSC	Exercise Science
FDM	Fashion Design & Merchandising
FIN	Finance
NFSH	Food Science, Nutrition & Health Promotion
FST	Food Science and Technology
FL	Foreign Language
FOR	Forest Resources
FO	Forestry
GEOL	Geology
GG	Geosciences (also Earth & Atmospheric Science)
GESP	Geospatial Sciences
GBIO	General Biology
GEP	General Educational Psychology
GNS	Genetics
GPHY	Geography

GAEC	Grad Applied Economics
HLPR	Health Promotion
HEL	Higher Education Leadership
HI	History
НО	Horticulture
HDFS	Human Development & Family Studies
HFE	Human Factors & Ergonomics
IE	Industrial Engineering
SYS	Industrial Systems
VIDC	Infectious Disease
ISE	Industrial & Systems Engineering
INFS	Information Systems
ITID	
ISWD	Instructional Design
IT	Instructional Systems & Workforce Development
	Instructional Technology
	Instructional Technology Distance
	Instructional Technology Multimedia
KINE	Kinesiology
LA	Landscape Architecture
LFSC	Life Sciences
MGT	Management
MGTS	Management Systems
MFGS	Manufacturing Systems
MKT	Marketing
MASC	Mathematical Sciences
MA	Mathematics
ME	Mechanical Engineering
MERC	Merchandising
MLAR	Middle Level Alternate Route (ADMISSION CURRENTLY SUSPENDED)
MOLB	Molecular Biology
MED	Music Education
MED NTR	Music Education Nutrition
MED NTR OPRS	Music Education Nutrition Operations Research
MED NTR OPRS PSL	Music Education Nutrition Operations Research P-12 School Leadership
MED NTR OPRS PSL MPAS	Music Education Nutrition Operations Research P-12 School Leadership Physician Assistant Studies
MED NTR OPRS PSL MPAS PH	Music Education Nutrition Operations Research P-12 School Leadership Physician Assistant Studies Physics
MED NTR OPRS PSL MPAS PH PSS	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil Sciences
MED NTR OPRS PSL MPAS PH PSS PP	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil SciencesPlant Pathology
MED NTR OPRS PSL MPAS PH PSS PP PS	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil SciencesPlant PathologyPolitical Science
MED NTR OPRS PSL MPAS PH PSS PP PS	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil SciencesPlant PathologyPolitical SciencePoultry Science
MED NTR OPRS PSL MPAS PH PSS PP PS	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil SciencesPlant PathologyPolitical Science
MED NTR OPRS PSL MPAS PH PSS PP PS	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil SciencesPlant PathologyPolitical SciencePoultry Science
MED NTR OPRS PSL MPAS PH PSS PP PP PS PD	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil SciencesPlant PathologyPolitical SciencePoultry ScienceProfessional Meteorology/Climatology
MED NTR OPRS PSL MPAS PH PSS PP PS PS PO POCL	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil SciencesPlant PathologyPolitical SciencePoultry ScienceProfessional Meteorology/ClimatologyProject Management
MED NTR OPRS PSL MPAS PH PSS PP PS PS PO PO PMCL PMCL	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil SciencesPlant PathologyPolitical SciencePoultry ScienceProfessional Meteorology/ClimatologyProject ManagementPopulation Medicine Non-Thesis
MED NTR OPRS PSL MPAS PH PSS PP PSS PO PO PMCL PMCL PM	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil SciencesPlant PathologyPolitical SciencePoultry ScienceProfessional Meteorology/ClimatologyProject ManagementPopulation Medicine Non-ThesisPopulation Medicine
MED NTR OPRS PSL MPAS PH PSS PP PSS PO POCL PMCL PMNT POPM POPM	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil SciencesPlant PathologyPolitical SciencePoultry ScienceProfessional Meteorology/ClimatologyProject ManagementPopulation Medicine Non-ThesisPopulation MedicinePsychology
MED NTR OPRS PSL MPAS PH PSS PP PS PO PMCL PM POPM POPM POPM POPM POPM POPM PCHM	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil SciencesPlant PathologyPolitical SciencePoultry ScienceProfessional Meteorology/ClimatologyProject ManagementPopulation Medicine Non-ThesisPopulation MedicinePsychologyPsychology
MEDNTROPRSPSLMPASPHPSSPPPOPMCLPMNTPOPMPSYPCHMPCHMPCHMPPA	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil SciencesPlant PathologyPolitical SciencePoultry ScienceProfessional Meteorology/ClimatologyProject ManagementPopulation Medicine Non-ThesisPopulation MedicinePsychologyPublic Policy & Administraiton
MED NTR OPRS PSL MPAS PH PSS PP PS PO PMCL PM PMT POPM PSY PCHM PPA RC	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil SciencesPlant PathologyPolitical SciencePoultry ScienceProfessional Meteorology/ClimatologyProject ManagementPopulation Medicine Non-ThesisPopulation MedicinePsychologyPsychonetryPublic Policy & AdministraitonRehabilitation Counseling
MED NTR OPRS PSL MPAS PH PSS PP PS PO PMCL PM PMSL PM PO PMCL PM POM POPM POPM PSY PCHM PDA RC EDLS	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant & Soil SciencesPlant PathologyPolitical SciencePoultry ScienceProfessional Meteorology/ClimatologyProject ManagementPopulation Medicine Non-ThesisPopulation MedicinePsychologyPsychonetryPublic Policy & AdministrationRehabilitation CounselingSchool Administration
MED NTR OPRS PSL MPAS PH PSS PP PS PO PMCL PM POMPL PM POPM POPM POPM PSY PCHM PL PL PL <tr td=""></tr>	Music EducationNutritionOperations ResearchP-12 School LeadershipPhysician Assistant StudiesPhysicsPlant Assistant StudiesPlant & Soil SciencesPlant PathologyPolitical SciencePoultry ScienceProfessional Meteorology/ClimatologyProject ManagementPopulation Medicine Non-ThesisPopulation MedicinePsychologyPublic Policy & AdministraitonRehabilitation CounselingSchool AdministrationSchool Psychology (PhD concentration)

SEED	Secondary Education
STAR	Secondary Teacher Alternate Route
SO	Sociology
EXED	Special Education
EXAR	Special Education Alternate Route
SPAD	Sport Administration
SPPE	Sport Pedagogy
SS	Sport Studies
ST	Statistics
SAHE	Student Affairs & Higher Education
SBP	Sustainable Bioproducts
SYS	Systems
ТАХ	Taxation
TCLE	Teacher Leadership
TIG	Teachers in Geosciences
MST	Technology (Admission Currently Suspended)
TOXI	Toxicology
UNC	Unclassified (No degree)
VMRC	Veterinary Medical Research
VMS	Veterinary Medical Science
WS	Weed Science
FOWL	Wildlife, Fisheries & Aquaculture (concentration)
WEL	Workforce Education Leadership
WFA	Wildlife, Fisheries and Aquaculture (major)

The chart below is in alpha order by abbreviation of major.

Major	Degree	GRE	GMAT	GPA	TOE-IELTS
ACC	MPA		Yes	3.00	575-7.0
ACC-Concentration:					
SYS	MPA		Yes	3.00	575-7.0
AEE-Concentrations:					
AEEL	MS	Yes		2.75	550-6.5
AEET	MS	Yes		2.75	550-6.5
AGBM	MABM	Yes or GMAT	Yes or GRE	3.00	575-7.0
AGR-Concentrations:					
AEC	MS	Yes		2.75	575-7.0
ANNT	MS			3.00	550-6.5
ASC	MS			3.00	550-6.5
ENGT	MS	Yes		2.75	550-6.5
PO	MS			2.75	550-6.5
AGS-Concentrations:					
ADS	PhD	Yes		3.00	575-7.0
AEE	PhD	Yes		2.75 undergraduate/3.00 graduate) 550-6.5
ANNT	PhD			3.00	575-7.0
ENGT	PhD	Yes		2.75	550-6.5
PO	PhD			2.75	550-6.5
ALSC-Concentrations:					
BCH	MS	Yes		2.75	550-6.5
ENT	MS	Yes		3.00	500-5.5
GNS	MS	Yes		3.00	500-5.5
PHY	MS			3.00	575-7.0

PP	MS	Yes		3.00	500-5.5
APAN	MA	Yes		3.00	550-6.5
APSY-Concentrations:					
ACSC	Ph.D.	Yes		3.00	550-6.5
CLPS	Ph.D.	Yes		3.00	550-6.5
ASE	MS	Yes or ABET-accredited		3.00	550-6.5
		degree			
BA	MBA	or GMAT	or GRE	3.00	575-7.0
BA-Concentrations:					
BIS	PhD		Yes	3.00 undergraduate/3.25 graduate	575-7.0
EC	PhD		Yes	3.00 undergraduate/3.25 graduate	575-7.0
FIN	PhD		Yes	3.00 undergraduate/3.25 graduate	575-7.0
MGT	PhD		Yes	3.00 undergraduate/3.25 graduate	575-7.0
МКТ	PhD		Yes	3.00 undergraduate/3.25	575-7.0
				graduate	
BE	MS	Yes		2.75	550-6.5
BIO	MS/PhD	Yes		2.75	500-5.5
BME	MS/PhD	Yes		3.00	600-7.5
CE	MS	Yes		3.00	550-6.5
CED	MAT			2.75	550-6.5
СН	MS/PhD			2.75	500-6.0
CHE	MS	Yes		3.00	550-6.5
CIED-Concentrations					
CIED (ADMISSION CURRENTLY SUSPENDED.)	PhD	Yes		3.4	550-6.5
CIEE	PhD	Yes		3.40	550-6.5
CIEX	PhD	Yes		3.40	550-6.5
CIGE (ADMISSION CURRENTLY SUSPENDED.)	PhD	Yes		3.40	550-6.5
CIRE (ADMISSION CURRENTLY SUSPENDED.)	PhD	Yes		3.40	550-6.5
CISE	PhD	Yes		3.40	550-6.5
CME	MS/PhD	Yes/Yes		2.75	550-6.5
COE-Concentrations:					
CC	MS	Yes		3.00	550-6.5
MH	MS	Yes		3.00	550-6.5
RC	MS	Yes		3.00	550-6.5
SA	MS	Yes		3.00	550-6.5
SLC	MS	Yes		3.00	550-6.5
CS-Concentrations:	MS/PhD	Yes		2.75	550-6.5
CYSO	MS				
CYOP					
CYDE					
EASC	PhD	Yes		3.00	550-6.5
EC	MA	Yes		2.75	575-7.0
ECPE	MS	Yes		3.00 undergraduate	550-6.5
-	-				

EDLD-Concentrations:MSYeEDLSSAHEYeSAHEMSYeTELEMSYeEDLD-Concentrations:PhDYeHELPSLYeEDUC-Concentrations:YeEDUC-Concentrations:YeEDLSEdSYeEDLSEdSYeELEDEdSYeETEdSYe	/es	3.50 undergraduate or master's2.752.753.40	550-6.5 550-6.5 600-7.5
EDLSSAHETELEMSEDLD-Concentrations:PhDPSLEDUC-Concentrations:COEEdSEDLSEdSELEDEdSYetELEDEdSYetETEdSYet	⁄es	2.75	550-6.5
SAHETELEMSEDLD-Concentrations:PhDPSLEDUC-Concentrations:COEEdSEDLSELEDELEDEdSYetELEDEdSYetELEDEdSYetELEDEdSYetETEdSYet	/es		
TELEMSEDLD-Concentrations:PhDYeHELPSLYeEDUC-Concentrations:YeEDLSEdSYeELEDEdSYeETEdSYe	/es		
EDLD-Concentrations:PhDYeHEL PSLPSLEDUC-Concentrations:YeCOEEdSYeEDLSEdSYeELEDEdSYeETEdSYe	/es		
HELPSLEDUC-Concentrations:COEEdSEDLSEdSELEDEdSETEdS		3.40	600-7.5
PSLEDUC-Concentrations:COEEdSEDLSEdSELEDEdSETEdS			
EDUC-Concentrations:COEEdSYeEDLSEdSYeELEDEdSYeETEdSYe	·		
COEEdSYeEDLSEdSYeELEDEdSYeETEdSYe			
EDLSEdSYeELEDEdSYeETEdSYe			
ELEDEdSYeETEdSYe	/es	3.30	550-6.5
ET EdS Ye	/es	3.20 on master's	550-6.5
	/es	3.20 on master's	550-6.5
EXED EdS Ye	/es	3.20 on master's	550-6.5
	/es	3.20 on master's	550-6.5
SEED EdS Ye	ſes	3.20 on master's	550-6.5
SPSY EdS Ye	/es	3.30 on master's	550-6.5
ELED-Concentrations:			
ECED MS Ye	/es	2.75	550-6.5
GEED MS Ye	/es	2.75	550-6.5
		2.75	550-6.5
EN MA		3.00	625-8.0
		3.00	550-6.5
ENGR-Concentrations:		0.00	000 0.0
APHY PhD		2.75	523-6.0
		3.00	
			550-6.5
		2.75	550-6.5
		3.00	550-6.5
		3.20	550-6.5
		2.75	550-6.5
ENVT PhD		3.00	550-6.5
EPY MS			
GEP			
PCHM			
EPY-Concentrations:			
GEP PhD Ye	/es	3.40	550-6.5
SLP PhD Ye	/es	3.40	550-6.5
EXAR MATX Ye	/es	2.75	550-6.5
EXED MS Ye	/es	2.75	550-6.5
FDM MS			
DPD MS Ye	/es	2.75	
MERC			
FL MA		2.75	525-6.0
FO MS		3.00	550-6.5
FOR-Concentrations:			
FO PhD		3.25 undergraduate/3.10 graduate	550-6.5
SBP PhD		3.00	550-6.5
		3.20	550-6.5
	/es	3.00 undergraduate/3.00 graduate	

GBIO	MS			2.75	500-5.5
GG-Concentrations:					
BMP	MS	Yes		2.75	550-6.5
ENGS	MS	Yes		2.75	550-6.5
GEOL	MS	Yes		2.75	550-6.5
GESP	MS	Yes		2.75	550-6.5
GPHY	MS	Yes		2.75	550-6.5
PMCL	MS	Yes		2.75	550-6.5
APMT	MS			2.75	550-6.5
TIG	MS			2.75	550-6.5
HDFS	MS	Yes		3.00	550-6.5
HDFS	PhD	Yes		3.00 graduate	550-6.5
HI	MA/PhD	No/Yes		3.00	550-6.5
IE-Concentrations					
HFE	MS	Yes		3.00	550-6.5
MFGS	MS	Yes		3.00	550-6.5
MGTS	MS	Yes		3.00	550-6.5
OPRS	MS	Yes		3.00	550-6.5
SYS	MS	Yes		3.00	550-6.5
ISE	PhD	Yes		3.50	550-6.5
INFS	MSIS	or GMAT	or GRE	3.00	575-7.0
ISWD	PhD	Yes	OF OILE	3.40	550-6.5
	FIID	165		3.40	550-0.5
IT	MOIT	Yes		0.75	550 G 5
ITDE	MSIT			2.75	550-6.5
ITID	MSIT	Yes		2.75	550-6.5
	MSIT	Yes		2.75	550-6.5
KINE-Concentrations					
EXPY	MS	Yes		3.00	550-6.5
EXSC	PhD	Yes		3.00	550-6.5
SPAD	MS	Yes		3.00	550-6.5
SPPE	MS	Yes		3.00	550-6.5
SS	PhD	Yes		3.00	550-6.5
LA	MLA			2.80	550-6.5
LFSC-Concentrations:					
BCH	PhD	Yes		3.00	500-5.5
ENT	PhD	Yes		3.00	500-5.5
GNS	PhD	Yes		3.00	500-5.5
PHY	PhD	Yes		3.00	575-7.0
PP	PhD	Yes		3.00	500-5.5
MA	MS			2.75	477-5.0
MASC	PhD	Yes		2.75	477-5.0
ME	MS	Yes		2.75	550-6.5
MED	MME			3.00	550-6.5
MLAR (ADMISSION CURRENTLY SUSPENDED)	MATM	Yes		2.75	550-6.5
MOLB	PhD	Yes		2.75	550-6.5
MST- Concentrations: Admission Currently Suspended					
END	MST	Yes		2.75	550-6.5
TFA	MST	Yes		2.75	550-6.5
IIUT	MST	Yes		2.75	550-6.5

NFSH-Concentrations:					
FST	MS/PhD	Yes/Yes		2.75	550-6.5
HLPR	MS	Yes		2.75	550-6.5
NTR	MS/PhD	Yes/Yes		2.75	550-6.5
PH	MS/PhD			2.75	523-6.0
PHCE	PhD	Yes		3.40	550-6.5
PHCL	PhD	Yes		3.40	550-6.5
PHSE	PhD	Yes		3.40	550-6.5
PM	MBA		Yes	3.00	575-7.0
PPA	MPPA	Yes		3.00	600-7.5
PPA	PhD	Yes		3.00 undergraduate/3.38 master's	5 600-7.5
PS	MA			3.00	600-7.5
PSS-Concentrations					
AGN	MS/PhD	Yes/Yes		2.75/3.00	500-5.5/500-5.5
HO	MS/PhD	Yes/Yes		2.75/3.00	500-5.5/500-5.5
WS	MS	Yes		3.00	500-6.5
WS	PhD	Yes		3.00 undergraduate/3.25 graduate	5 550-6.5
PSY	MS	Yes		2.75	550-6.5
SBP	MS			3.00	550-6.5
SEED	MS	Yes		2.75	550-6.5
SO	MS/PhD	Yes/Yes		3.00	550-6.5
ST	MS			2.75	477-5.0
STAR	MATS	Yes		2.75	550-6.5
ТАХ	MTX		Yes	3.00	575-7.0
UNC	No degree				550-6.5
VMS	MS/PhD			3.00	550-6.5
PMNT	MS			3.00	550-6.5
POPM	MS/PhD			3.00	550-6.5
TOXI	MS			3.00	550-6.5
VCBC	MS/PhD			3.00	550-6.5
VIDC	MS/PhD			3.00	550-6.5
VMRC	MS/PhD			3.00	550-6.5
WEL	MS			2.75	550-6.5
WFA	MS	Yes		3.00	550-6.5

"Yes" = required standardized test

Abbreviations

Abbreviation	Description
GPA	Grade Point Average
GMAT	Graduate Management Admission Test
GRE	Graduate Record Examination
IELTS	International English Language Testing Systems
TOEFL	Test of English as a Foreign Language

Degrees and Majors Offered

Graduate Degrees and Majors

Mississippi State University offers the following graduate degrees and majors. University admission and degree completion requirements are located in the Graduate School section of this publication; specific program requirements are found in the respective department/program information.

Degree	Major	Concentration	Thesis	Non-Thesis	Starkville	Meridian	Distance
No Degree	Unclassified	Concentration	110010		X	X	X
Master of Agribusiness Management	Agribusiness Management			Х	x		X
Master of Agriculture	Agriculture	Animal & Dairy Sciences		Х	Х		Х
Master of Arts	Applied Anthropology		Х		Х		
Master of Arts	Economics		Х	Х	Х		
Master of Arts	English		Х	Х	Х		
Master of Arts	Foreign Language		Х	Х	Х		
Master of Arts	History		Х	Х	Х		
Master of Arts	Political Science		Х	Х	Х		
Master of Arts in Teaching	Community College Education			Х	Х	Х	Х
Master of Arts in Teaching-Middle	Middle Level Alternate Route (ADMISSION CURRENTLY SUSPENDED)			Х			X
Master of Arts in Teaching- Secondary	Secondary Teacher Alternate Route			Х		Х	Х
Master of Arts in Teaching - Special	Special Education Alternate Route			Х			Х
Master of Business Administration	Business Administration			Х	Х	Х	Х
Master of Business Administration	Project Management			Х	Х		Х
Master of Engineering	Engineering		Х	Х			Х
Master of Engineering	Engineering	Military Engineering	Х	Х	Х		
Master of Landscape Architecture	Landscape Architecture		Х	Х	Х		
Master of Music Education	Music Education	Choral Music		Х	Х		
Master of Music Education	Music Education	Elementary Music		Х	Х		
Master of Music Education	Music Education	Instrumental Music		Х	Х		
Master of Physician Assistant Studies	Physician Assistant Studies					Х	
Master of Professional Accountancy	Accounting			Х	Х		
Master of Professional Accountancy	Accounting	Systems		Х	Х		

Master of Public Health	Food Science, Nutrition, and Health Promotion	Public Health Nutrition		Х	Х		Х
Master of Public Policy and Administration	Public Policy and Administration			Х	Х		
Master of Science	Aerospace Engineering		Х	Х	Х		Х
Master of Science	Agricultural and Extension Education	Leadership	Х	Х	Х		
Master of Science	Agricultural and Extension Education	Teaching	Х	Х	Х		
Master of Science	Agricultural Life Sciences	Animal Physiology	X	Х	Х		
Master of Science	Agricultural Life Sciences	Biochemistry	Х	Х	Х		
Master of Science	Agricultural Life Sciences	Entomology	Х		Х		
Master of Science	Agricultural Life Sciences	Genetics	Х	Х	Х		
Master of Science	Agricultural Life Sciences	Plant Pathology	Х		Х		
Master of Science	Agriculture	Agricultural Economics	Х	Х	Х		
Master of Science	Agriculture	Animal and Dairy Sciences		Х	Х		Х
Master of Science	Agriculture	Animal Nutrition	Х		Х		
Master of Science	Agriculture	Animal Science	Х	Х	Х		
Master of Science	-	Engineering Technology	Х	Х	Х		
Master of Science	Agriculture	Poultry Science	Х	Х	Х		
Master of Science	Biological Engineering		х		Х		
Master of Science	Biological Sciences		Х		Х		
Master of Science	Biomedical Engineering		Х		Х		
Master of Science	Chemical Engineering		Х	Х	Х		
Master of Science	Chemistry		Х	Х	Х		
Master of Science	Civil Engineering		Х	Х	Х		Х
Master of Science			Х	Х	Х		Х
Master of Science	Computer Science		Х	Х	Х		Х
Master of Science	Counselor Education	Clinical Mental Health		Х	х	Х	
Master of Science	Counselor Education	Rehabilitation Counseling		Х	Х	Х	
Master of Science	Counselor Education	School Counseling		Х	Х	Х	
Master of Science	Cyber Security & Operations	Cyber Defense		Х	Х		Х

Master of Science	Cyber Security & Operations	Cyber Operations		Х	Х		Х
Master of Science	Educational Leadership	School Administration		Х	Х	Х	Х
Master of Science	Educational Leadership	Student Affairs & Higher Education		Х	Х		
Master of Science	Educational Psychology	General Educational Psychology	Х	Х	Х		
Master of Science	Educational Psychology	Psychometry		Х	Х		
Master of Science	Electrical and Computer Engineering		Х	Х	Х		Х
Master of Science	Elementary Education			Х	Х	Х	
Master of Science	Fashion Design & Merchandising	Design & Product Development	Х	Х	Х		
Master of Science	Fashion Design & Merchandising	Merchandising	Х	Х	Х		
Master of Science	Food Science, Nutrition, and Health Promotion	Food Science and Technology	Х		Х		
Master of Science	Food Science, Nutrition, and Health Promotion	Health Promotion	Х	Х	Х		Х
Graduate Certificate: Clinical Health Promotion and Wellness Coaching	Food Science, Nutrition, and Health Promotion	Health Promotion			X		X
Master of Science	Food Science, Nutrition, and Health Promotion	Nutrition	Х		Х		
Master of Science	Forestry		Х	Х	Х		Х
Master of Science	General Biology			Х			Х
Master of Science	Geoscience	Applied Meteorology		Х			Х
Master of Science		Broadcast Meteorology		Х	Х		
Master of Science	Geoscience	Environmental Geoscience		Х	Х		Х
Master of Science	Geoscience	Geography	Х		Х		
Master of Science		Geology	Х		Х		
Master of Science		Geospatial Sciences	Х	Х	Х		
Master of Science		Professional Meteorology/ Climatology	Х		Х		
Master of Science	Geoscience	Teachers in Geosciences		Х			Х
Master of Science	Human Development and Family Science		Х	X	Х		
Master of Science	Industrial Engineering	Human Factors & Ergonomics	Х	Х	Х		Х

Master of Science	Industrial Engineering	Industrial Systems	Х	Х	Х		Х
Master of Science		Management Systems	Х	Х	х		Х
Master of Science		Manufacturing Systems	Х	Х	Х		Х
Master of Science		Operations Research	Х	Х	Х		Х
Master of Science		Exercise Physiology	Х	Х	Х		
Master of Science	Kinesiology	Sport Administration	Х	Х	х		
Master of Science	Kinesiology	Sport Pedagogy	Х	Х	Х		
Master of Science		1 0 00	х	Х	Х		
Master of Science	Mechanical Engineering		Х	Х	Х		Х
Master of Science			х	Х	Х		
Master of Science	Plant & Soil Sciences	Agronomy	Х	Х	Х		
Master of Science	Plant & Soil Sciences	Horticulture	х	Х	Х		
Master of Science	Plant & Soil Sciences	Weed Science	Х	Х	Х		
Master of Science	Secondary Education			Х	Х	Х	Х
Master of Science	Psychology		Х		Х		
Master of Science	Sociology		Х	Х	Х		
Master of Science	Special Education			Х	Х		
Master of Science	Technology (ADMISSION CURRENTLY SUSPENDED)	Endorsements	X	х	х		Х
Master of Science	Technology (ADMISSION CURRENTLY SUSPENDED)	Technology Facilitator/ Administrator	Х	Х	Х		X
Master of Science	Technology (ADMISSION CURRENTLY SUSPENDED)	Improving Instruction Using Technology	Х	Х	Х		Х
Master of Science	Statistics		Х	Х	Х		
Master of Science	Sustainable Bioproducts		Х	Х	Х		
Master of Science	Veterinary Medical Sciences	Computational Biology	Х		Х		
Master of Science	Veterinary Medical Sciences	Infectious Disease	Х		Х		
Master of Science	Veterinary Medical Science	Population Medicine Non- Thesis		Х	Х		
Master of Science	Veterinary Medical Science	Population Medicine	Х		Х		
Master of Science	Veterinary Medical Sciences	Toxicology	Х		Х		
Master of Science		Veterinary Medical Research	Х		Х		

System System<								
and Auguotte Education Master of Solice of Education of Education of System Instructional Technology Name of Solice Education Technology Name of Solice Education Technology <td< td=""><td>Master of Science</td><td></td><td></td><td>Х</td><td></td><td>Х</td><td></td><td></td></td<>	Master of Science			Х		Х		
Education Candencing SystemsEducation SystemsSistemsAAAMasser of Science TechnologyInstructional DesignNameAAAAMasser of Science TechnologyInstructional DesignNameAAAAMasser of Science TechnologyInstructional DesignNameAAAAMasser of Science TechnologyInstructional DesignNameAAAAAMasser of Science TechnologyInstructional DesignNameAAAAAMasser of Science TechnologyInstructional DesignNameAAAAAMasser of Science TechnologyInstructional DecensionalConneclor DecensionalAAAAAAAEducation TechnologyEducation EducationAA	Master of Science				Х	Х		Х
In Information in Instructional	Master of Science	Education			Х			Х
in Instructional Technology Education instructional X X X X X X X X X X X X X X X X X X X	Master of Science in Information Systems				Х	Х		Х
in Instructional Periodicy Residue in Instructional Information of Periodicy	Master of Science in Instructional Technology			Х	Х	Х		Х
in Instructional Second Process Proces	Master of Science in Instructional Technology			Х	Х	Х		Х
TaxationEducational SpecialistCounselor Educational Educational SpecialistCounselor Educational Educational SpecialistShoutanon Educational Educational Educational Educational Educational SpecialistEducation Educational Educational Educational Educational Educational 	Master of Science in Instructional Technology		Multimedia	Х	Х	Х		Х
Specialist Education- Technology Specialist Education- Technology N N Educational Specialist Education Education N N N Educational Specialist Education Education N N N Educational Specialist Education Education N N N Educational Specialist Education School Provideo/UNIC N N N Educational Specialist Education Sciences Sciences N N Doctor of Philosophy Sciences Sciences Sciences N N N Doctor of Philosophy Sciences Agricultural Provideo/UNISCIENC Sciences Science N N Doctor of Philosophy Philosophy Philosophy Philosophy Philosophy Agricultural Provideo/Sciences Sciences N	Master of Taxation	Taxation			Х	Х		
Specialist Technology Educational Elementary X X X Educational Education X X X Educational Education X X X Specialist Education X X X Educational Education School X X Specialist Education School X X Educational Education Secondary X X X Specialist Education Secondary X X X Specialist Education Secondary X X X Specialist Education Agricultural Agricultural X X Specialist Education Agricultural Agricultural X X Doctor of Agricultural Agricultural Selences X X Doctor of Agricultural Animal and Dairy X X X Philosophy Selences Selences X X X <t< td=""><td>Educational Specialist</td><td>Education</td><td></td><td>Х</td><td>Х</td><td>Х</td><td>Х</td><td></td></t<>	Educational Specialist	Education		Х	Х	Х	Х	
Specialist Education School X X X Educational Education School X X X Specialist Education School X X X Specialist Education School X X X Specialist Education Secondary X X X Educational Education Secondary X X X Specialist Education Secondary X X X Specialist Education Agricultural Agricultural X X Specialist Agricultural Agricultural Agricultural X X Doctor of Agricultural Animal and Dairy X X X Philosophy Sciences Sciences X X X Doctor of Agricultural Animal And Dairy X X X Philosophy Sciences Sciences X X X Doctor of Agricultural Philosophy Sci	Educational Specialist	Education		Х	Х	Х		
Specialist Administration Educational Specialist Education Psychology X X X Educational Specialist Education Secondary Educational X X X Educational Specialist Education Secondary Educational X X X Educational Specialist Education Secondary Education X X X Educational Specialist Education Agricultural and Extension Education Agricultural and Extension Education Agricultural Animal and Dairy X X Doctor of Philosophy Sciences Agricultural Science Animal Nutrition Ectucation X X Doctor of Philosophy Sciences Agricultural Science Engineering Ectucation X X Doctor of Philosophy Philosophy Philosophy Philosophy Philosophy Philosophy Philosophy Philosophy Agricultural Science Engineering Ectucation X Doctor of Philosophy P	Educational Specialist	Education		Х	Х	Х	Х	
Specialist Psychology Educational Specialist Education Secondary Education X X X Specialist Education Secondary Education X X X Specialist Education Secondary Education X X X Specialist Education Special Education X X X Doctor of Philosophy Agricultural Sciences Agricultural Education X X X Doctor of Philosophy Agricultural Sciences Animal and Dairy Education X X X Doctor of Philosophy Agricultural Sciences Animal Nutrition X X X Doctor of Philosophy Agricultural Sciences Engineering Technology X X X Doctor of Philosophy Agricultural Sciences Engineering Technology X X X Doctor of Philosophy Agricultural Sciences Cognitive Science X X X Doctor of Philosophy Applied Psychology Cognitive Science X X X Doctor of Philosophy Sciences <t< td=""><td>Educational Specialist</td><td>Education</td><td></td><td></td><td>Х</td><td>Х</td><td>Х</td><td></td></t<>	Educational Specialist	Education			Х	Х	Х	
Specialist Education Educational Specialist Education X X X Doctor of Philosophy Agricultural and Extension Education Agricultural and Extension Education X Doctor of Philosophy Agricultural Sciences Animal and Dairy Sciences X Doctor of Philosophy Agricultural Sciences Animal And Dairy Sciences X Doctor of Philosophy Agricultural Sciences Animal Nutrition X Doctor of Philosophy Agricultural Sciences Engineering Technology X Doctor of Philosophy Agricultural Sciences Engineering Technology X Doctor of Philosophy Agricultural Sciences Engineering Technology X Doctor of Philosophy Apriled Psychology Pourty Science X Doctor of Philosophy Apriled Psychology Clinical Psychology X Doctor of Philosophy Biological Sciences Y X	Educational Specialist	Education			Х	Х		
SpecialistDoctor of PhilosophyAgricultural SciencesAgricultural and Extension EducationXDoctor of PhilosophyAgricultural SciencesAnimal and Dairy SciencesXDoctor of PhilosophyAgricultural SciencesAnimal NutritionXDoctor of PhilosophyAgricultural SciencesEngineering TechnologyXDoctor of PhilosophyAgricultural SciencesEngineering TechnologyXDoctor of PhilosophyAgricultural SciencesPoultry Science TechnologyXDoctor of PhilosophyApplied SciencesCognitive ScienceXDoctor of PhilosophyApplied SciencesCinical PsychologyXDoctor of PhilosophyBiological SciencesXDoctor of PhilosophyB	Educational Specialist	Education	•	Х	Х	Х	Х	
PhilosophySciencesand Extension EducationDoctor of PhilosophyAgricultural SciencesAnimal and Dairy ScienceXDoctor of PhilosophyAgricultural SciencesAnimal NutritionXDoctor of PhilosophyAgricultural SciencesEngineering TechnologyXDoctor of PhilosophyAgricultural SciencesEngineering TechnologyXDoctor of PhilosophyAgricultural SciencesPoultry ScienceXDoctor of PhilosophyApplied PsychologyCognitive ScienceXDoctor of PhilosophyApplied PsychologyCognitive ScienceXDoctor of PhilosophySciencesCinical PsychologyXDoctor of PhilosophyBiological SciencesXDoctor of PhilosophyBusiness AdministrationBiosophyDoctor of Philosophy </td <td>Educational Specialist</td> <td>Education</td> <td>Special Education</td> <td>Х</td> <td>Х</td> <td>Х</td> <td></td> <td></td>	Educational Specialist	Education	Special Education	Х	Х	Х		
PhilosophySciencesScienceDoctor of PhilosophyAgricultural SciencesAnimal NutritionXDoctor of PhilosophyAgricultural SciencesEngineering TechnologyXDoctor of PhilosophyAgricultural SciencesPoultry ScienceXDoctor of PhilosophyApplied PsychologyCognitive SciencesXDoctor of PhilosophyApplied PsychologyCognitive ScienceXDoctor of PhilosophyApplied PsychologyClinical PsychologyXDoctor of PhilosophyBiological SciencesXDoctor of PhilosophyBiomedical EngineeringXDoctor of PhilosophyBiomedical EngineeringXDoctor of PhilosophyBiomedical EngineeringXDoctor of PhilosophyBiomedical EngineeringXDoctor of PhilosophyBusiness AdministrationBusiness InformationX	Doctor of Philosophy	-	and Extension			Х		
PhilosophySciencesDoctor of PhilosophyAgricultural SciencesEngineering TechnologyXDoctor of PhilosophyAgricultural SciencesPoultry ScienceXDoctor of PhilosophyApplied PsychologyCognitive ScienceXDoctor of PhilosophyApplied PsychologyCognitive ScienceXDoctor of PhilosophyApplied PsychologyCognitive ScienceXDoctor of PhilosophyApplied PsychologyClinical PsychologyXDoctor of PhilosophyBiological SciencesXDoctor of PhilosophyBiological SciencesXDoctor of PhilosophyBiomedical EngineeringXDoctor of PhilosophyBiomedical EngineeringXDoctor of PhilosophyBusiness InformationBusiness InformationX	Doctor of Philosophy					Х		
PhilosophySciencesTechnologyDoctor of PhilosophyAgricultural SciencesPoultry ScienceXDoctor of PhilosophyApplied PsychologyCognitive ScienceXDoctor of PhilosophyApplied PsychologyClinical PsychologyXDoctor of PhilosophyBiological SciencesXDoctor of PhilosophyBiological EngineeringXDoctor of PhilosophyBiomedical EngineeringXDoctor of PhilosophyBusiness InformationX	Doctor of Philosophy	-	Animal Nutrition			Х		
PhilosophySciencesDoctor of PhilosophyApplied PsychologyCognitive Science PsychologyXDoctor of PhilosophyApplied PsychologyClinical PsychologyXDoctor of PhilosophyBiological SciencesXDoctor of PhilosophyBiological SciencesXDoctor of PhilosophyBiomedical EngineeringXDoctor of PhilosophyBiomedical EngineeringXDoctor of PhilosophyBusiness InformationMainess Information	Doctor of Philosophy	-				Х		
PhilosophyPsychologyClinicalXDoctor of PhilosophyAppliedClinicalXDoctor of PhilosophyBiological SciencesXDoctor of 	Doctor of Philosophy	-	Poultry Science			Х		
PhilosophyPsychologyPsychologyPsychologyDoctor of PhilosophyBiological SciencesXDoctor of PhilosophyBiomedical 	Doctor of Philosophy		Cognitive Science			Х		
Philosophy Sciences Doctor of Biomedical X Philosophy Engineering X Doctor of Business Business Philosophy Administration Information	Doctor of Philosophy							
Philosophy Engineering Doctor of Business Business Philosophy Administration Information	Doctor of Philosophy	-						
Doctor ofBusinessBusinessXPhilosophyAdministrationInformation	Doctor of Philosophy					Х		
	Doctor of Philosophy	Business	Information			Х		

Doctor of Philosophy	Business Administration	Economics (Currently Suspended)	Х	
Doctor of Philosophy	Business Administration	Finance	Х	
Doctor of Philosophy	Business Administration	Management	Х	
Doctor of Philosophy	Business Administration	Marketing	Х	
Doctor of Philosophy	Chemistry		Х	
Doctor of Philosophy	Counselor Education		Х	
Doctor of Philosophy	Community College Leadership			Х
Doctor of Philosophy	Computational Engineering		Х	Х
Doctor of Philosophy	Computer Science		Х	Х
Doctor of Philosophy	Counselor Education/Studer Counseling and Guidance Services	ıt	X	
Doctor of Philosophy	Curriculum and Instruction	Curriculum & Instruction General Education	X	
Doctor of Philosophy	Curriculum and Instruction	Early Childhood Education	Х	
Doctor of Philosophy	Curriculum and Instruction	Elementary Education	Х	
Doctor of Philosophy	Curriculum and Instruction	Reading Education	Х	
Doctor of Philosophy	Curriculum and Instruction	Secondary Education	Х	
Doctor of Philosophy	Curriculum and Instruction	Special Education	Х	
Doctor of Philosophy	Earth and Atmospheric Sciences		Х	
Doctor of Philosophy	Educational Leadership	Higher Education Leadership	Х	
Doctor of Philosohy	Educational Leadership	P-12 School Leadership	Х	
Doctor of	Educational	General	Х	
Philosophy	Psychology	Educational Psychology		
Doctor of Philosophy	Educational Psychology	School Psychology	Х	
Doctor of Philosophy	Electrical & Computer Engineering		Х	Х
Doctor of Philosophy	Engineering	Aerospace Engineering	Х	Х

Doctor of Philosophy	Engineering	Applied Physics	Х	
Doctor of Philosophy	Engineering	Biological Engineering	Х	
Doctor of Philosophy	Engineeering	Chemical Engineering	Х	
Doctor of Philosophy	Engineering	Civil Engineering	Х	Х
Doctor of Philosophy	Engineering	Engineering Education	Х	
Doctor of Philosophy	Engineering	Mechanical Engineering	Х	Х
Doctor of Philosophy	Environmental Toxicology		Х	
Doctor of Philosophy	Food Science, Nutrition and Health Promotion	Food Science and Technology	Х	
Doctor of Philosophy	Food Science, Nutrition and Health Promotion	Functional Foods, X Nutrition and Health	Х	
Doctor of Philosophy	Food Science, Nutrition and Health Promotion	Nutrition	х	
Doctor of Philosophy	Forest Resources	Forestry	Х	
Doctor of Philosophy	Forest Resources	Sustainable Bioproducts	Х	
Doctor of Philosophy	Forest Resources	Wildlife, Fisheries and Aquaculture	Х	
Doctor of Philosophy	Graduate Applied Economics (NOT ACCEPTING APPLICATIONS UNTIL FURTHER NOTICE)		X	
Doctor of Philosophy	History		Х	
Doctor of Philosophy	Human Development and Family Science		Х	
Doctor of Philosophy	Industrial and Systems Engineering		Х	Х
Doctor of Philosophy	Instructional Systems & Workforce Development		x	
Doctor of Philosophy	Kinesiology	Exercise Science	Х	
Doctor of Philosophy	Kinesiology	Sport Studies	Х	
Doctor of Philosophy	Life Sciences	Animal Physiology	Х	
Doctor of Philosophy	Life Sciences	Biochemistry	Х	
Doctor of Philosophy	Life Sciences	Entomology	X	

Doctor of Philosophy	Life Sciences	Genetics	Х
Doctor of Philosophy	Life Sciences	Plant Pathology	Х
Doctor of Philosophy	Mathematical Sciences		X
Doctor of Philosophy	Molecular Biology	/	Х
Doctor of Philosophy	Physics		Х
Doctor of Philosophy	Plant & Soil Sciences	Agronomy	Х
Doctor of Philosophy	Plant & Soil Sciences	Horticulture	X
Doctor of Philosophy	Plant & Soil Sciences	Weed Science	Х
Doctor of Philosophy	Public Policy and Administration		X
Doctor of Philosophy	Sociology		Х
Doctor of Philosophy	Veterinary Medical Science	Computational Biology	X
Doctor of Philosophy	Veterinary Medical Science	Infectious Disease	Х
Doctor of Philosophy	Veterinary Medical Science	Population Medicine	X
Doctor of Philosophy	Veterinary Medical Science	Veterinary Medical Research	X

Graduate Assistantships

Graduate Assistantships are intended to recruit quality students to graduate study at MSU and to enhance the graduate learning experience. An assistantship is a financial award to a graduate student for part-time work in teaching, research, or administration while pursuing an advanced degree.

Types of Appointments

Graduate research, teaching, and service assistantships are available on an annual or nine-month basis. A graduate assistant's work schedule is a maximum of 20 hours per week.

Graduate Research Assistantship (GRA)

Graduate Research Assistants perform duties in support of University research, which may or may not relate to the student's thesis/dissertation. Many University academic, research, and administrative offices employ GRAs. This opportunity provides an excellent means for students to learn new techniques and methods as well as expand their knowledge by association with research-oriented responsibilities, whether employed within the student's academic discipline or in another department. Duties and stipends vary from program to program and are dependent upon the nature of assigned duties.

Graduate Service Assistantship (GSA)

Graduate Service Assistants aid faculty and staff members with administrative functions, and GSA appointments are available in many academic and non-academic units. Duties vary depending on administrative needs of the unit making the award, and stipends vary according to the nature of assigned duties.

Graduate Teaching Assistantship (GTA)

Graduate Teaching Assistants work under the direct supervision of faculty and staff and are assigned duties related directly to instruction, such as assisting in the preparation of lectures, leading discussion sections, conducting laboratory exercises, grading papers, and maintaining class records. Advanced graduate students who have completed 18 graduate credit hours in their teaching discipline (seminar and research hours excluded) may be given primary responsibility for teaching an undergraduate course, including student assessment and assignment of final grades. GTAs cannot be assigned primary responsibilities for teaching and student assessment in courses approved for graduate credit.

All graduate students planning to serve as Graduate Teaching Assistants must participate in the Graduate Teaching Assistant Certification Program prior to beginning the first teaching assignment at MSU and satisfy all program/evaluation requirements necessary to obtain the level of certification (GTA1, GTA2, GTA3) that corresponds to the duties/responsibilities of the teaching assistantship appointment. Please refer to Graduate Teaching Assistantship Certification Program section below for detailed certification requirements.

Full and Half-Summer Awards

Full-summer awards require an enrollment in a minimum of 6 graduate credit hours in any combination of Maymester, 1st 5-week, 2nd 5-week, or 10-week terms. A maximum of 3 graduate credit hours is allowed for Maymester; a maximum of 13 credit hours is allowed for 1st 5-week, 2nd 5th week, or 10-week terms. Any combination of 1st 5-week, 2nd 5-week, or 10-week terms may be used for the 13-credit hour maximum; however, enrollment in either 5-week term must be a minimum of 3 graduate credit hours and a maximum of 7 credit hours. Additionally, a student holding a half-summer graduate assistantship must be registered for courses scheduled during the term of the assistantship.

Appointment Process

Minimum University Eligibility Requirements

To be eligible for an assistantship a student must be admitted to a specific degree program. A student with "contingent" or "provisional" status must, within the first award enrollment period, satisfy "regular" admission requirements. An assistantship award shall be terminated if these requirements are not met. <u>Unclassified and provisionally admitted students may be eligible and will be limited in the type of funding that can be used for an assistantship.</u>

Application for Graduate Assistantship

An assistantship application must be submitted to the college, department, school, or administrative unit that will provide the support. The department/ unit may provide its own application form or use the Application for Graduate Assistantship. Deadlines and review procedures are established by the supporting departments/units.

Graduate Assistantship Offer/Appointment

Individual academic and administrative departments are responsible for offering an assistantship award, establishing the amount of the stipend, designing the work schedule, and monitoring the performance of the graduate assistant's duties and responsibilities. The student must formally accept or decline the offer in accordance with guidelines outlined in the offer letter. See the Council of Graduate Schools' resolution pertaining to assistantship offers at http://www.cgsnet.org (http://www.cgsnet.org/).

Stipends

Stipends are paid on the fifteenth and the last working day of each month. When employment begins during a pay period, stipends for the first pay period are calculated on a prorated basis. Graduate assistants hired after the beginning of each semester will also be subject to prorated tuition.

Termination of Assistantship

If the assistantship is terminated prior to the specified ending date, the assistant's duties, stipend, and tuition exemption will cease. The student will be required to pay back a prorated portion of the previously applied tuition exemption.

Award Benefits

Tuition Exemption

Graduate Teaching Assistants and Graduate Service Assistants receive a tuition exemption of approximately 71% of the assessed tuition. Graduate Research Assistants receive a tuition exemption of 100% of the assessed tuition.

IRS Code states that the tuition remission of those Graduate Service Assistants whose course of study is specifically related to assistantship duties is not taxable. For a Graduate Service Assistant whose course of study is not specifically related to assistantship duties, tuition remission up to \$5,250.00 per calendar year is not subject to tax; however, tuition remission in excess of \$5,250.00 per calendar year is taxable.

Online Education Courses

A graduate assistant tuition award does not cover the tuition of Online Education or ESL courses when a student is enrolled in more than 9 credit hours. The tuition exemption does not cover the distance fees; only the basic tuition fee is covered. Therefore, the graduate assistant is responsible for payment of any additional per credit hour rate incurred as a result of Online Education or ESL enrollment. The required full-time status must be maintained throughout the entire semester. Consequently, dropping a course is not permitted if the resulting course load is fewer than the required 9 graduate credit hours. No course in the 9-hour load can be audited or converted to audit status.

Stipends

Stipends are paid on the fifteenth and the last working day of each month. When employment begins during a pay period, stipends for the first pay period are calculated on a prorated basis.

Health Insurance Supplement

The University provides a health insurance subsidy for Graduate Assistants who purchase the University-sponsored health insurance plan through the MSU Longest Student Health Center. The insurance subsidy will be deposited into each Graduate Assistant's account in October and in February. The total health insurance subsidy is \$400 per academic year, \$200 for the fall semester and again during the spring/summer semester. To access information about the University-sponsored health insurance plan, visit http://www.health.msstate.edu/healthcenter/insurance_student.php.

Late Start in a Semester

Students may begin a semester late at the discretion of the academic department. Stipends cannot be provided for the time the student is not on campus and enrolled in classes. Students that begin a semester late will be responsible for all tuition, fees, and insurance for the time the student is not on campus. Resident and non-resident tuition will be prorated proportionately for the time the student was not enrolled. *Students should strongly consider if starting a semester late is appropriate given the fees for which the student will be responsible.*

Termination of Assistantship

If the assistantship is terminated prior to the specified ending date, the assistant's duties, stipend, and tuition exemption will cease. The student will be required to pay back a prorated portion of the previously applied tuition exemption.

Students who withdraw from their current semester will be required to pay back a prorated portion of the previously applied tuition exemption.

Responsibilities for Maintaining a Graduate Assistantship

Required Course Load

Graduate assistants must be full-time students (see Full-Time Course Load descriptions in the Academic Policies section of this document). The required full-time status must be maintained throughout the entire semester. Therefore, no course may be dropped if the resulting course load will result in the student not meeting full-time enrollment status, nor may any course in the minimum graduate course load consist of or be converted to audit status.

Undergraduate Courses

The full-time course load may not be composed of undergraduate courses unless the course is a program prerequisite to maintain an assistantship. In such cases, only one undergraduate course will be permitted as part of the full-time load. Some international students are required by the University to take ESL 5323 and/or ESL 5313. Both are considered undergraduate courses and program prerequisites, and a graduate student is permitted to enroll in one of these courses while holding an assistantship. ESL 5323 and ESL 5313 cannot be taken concurrently.

Course Overload

A graduate assistant wishing to schedule more than a full-time course load may, with the approval of his/her major professor, Department Head, Graduate Coordinator and Academic Dean, register for more than 13 hours by submitting an Overload Form to his/her major professor. The Academic Dean's office sends the approved form to the Registrar's Office. Such transmission permits application of additional tuition exemption consistent with existing policy.

Academic Achievement

To retain an assistantship, a student must demonstrate satisfactory progress in the academic program as defined in the Academic Probation and Academic Dismissal sections. Failure to do so shall result in termination of the assistantship. Individual programs have the right to establish their own criteria. If a student is dismissed, his/her assistantship is terminated.

Graduate Teaching Assistant Certification Program

The Graduate Teaching Assistant Certification (GTAC) Workshop is designed to introduce first-time teaching assistants to the techniques and skills necessary to be effective instructors in a university environment and promote excellence in undergraduate education at Mississippi State University. The Teaching Assistant Certification Program consists of the following two components.

- Graduate Teaching Assistant (GTA) Workshop (both for domestic and international students)
- Microteaching Simulation/Classroom Certification Evaluation (for GTA2/GTA3 certification)

Each of these components is held in the Fall or Spring prior to the start of the semester.

Additional information about the Graduate Teaching Assistant Certification Program is available online by visiting http://www.grad.msstate.edu/workshop (http://www.grad.msstate.edu/workshop/).

Graduate Teaching Assistant (GTA) Workshop

The Graduate Teaching Assistant (GTA) Workshop, held prior to the start of the Fall and Spring semesters, introduces students who plan to become new teaching assistants to effective teaching methods and tools and educates them about University policies and resources. The GTA Workshops emphasize the importance of providing high-quality instruction at Mississippi State University. All first-time GTAs, both domestic and international, are required to attend the Workshop.

Failure to complete the GTA Workshop, including partial attendance or tardiness to workshop sessions, will render a student ineligible for the Microteaching/Classroom Certification and a teaching assistantship award.

Microteaching Simulation/Classroom Certification Evaluation

Immediately following the Graduate Teaching Assistant (GTA) Workshop, the Microteaching Simulation/Classroom Certification Evaluation is utilized to determine whether a GTA is equipped with the skills needed to deliver high-quality instruction to undergraduate students at Mississippi State University. Prospective students for GTA2/GTA3 certification prepare a 10-15 minute interactive mini-lesson to present to students as part of an assigned course. The mini-lesson is delivered to a group of graduate faculty members who judge the level of skills using a rubric. Classroom certification is required of all teaching assistants whose responsibilities involve classroom or laboratory teaching of students. A student cannot participate in the Microteaching Simulation/Classroom Certification Evaluation component until all other Teaching Assistant Certification Programs requirements (GTA Workshop) is completed.

Certification Levels for Graduate Teaching Assistants

By participating in the Teaching Assistant Certification Program, graduate students can become certified at one of the three levels that correspond to the duties/responsibilities of the teaching assistantship appointment. A minimum of GTA1 certification is required for ALL graduate teaching assistantship appointments at MSU.

Graduate Teaching Assistant 1 (GTA1)

The graduate student will assist in such tasks as preparing examinations, grading papers, preparing class lectures, maintaining class records, and tutoring students outside formal classes. This position does not require the Microteaching Simulation/Classroom Certification component of the GTAC. A GTA who initially received assignment to a GTA1 level appointment may later complete the Microteaching Simulation/Classroom Certification Evaluation in anticipation of a change in duties/responsibilities that requires classroom or laboratory teaching. A GTA who has already obtained GTA1 level certification is not required to attend the GTA Workshop again.

Graduate Teaching Assistant 2 (GTA2)

This level requires completion of the Microteaching Simulation/Classroom Certification Evaluation of the GTAC. The graduate assistant may have some of the same duties as GTA1. Other responsibilities include making presentations in laboratories/classrooms, conducting lectures, and leading discussion groups. These tasks involve classroom or laboratory teaching of students, but the graduate teaching assistant is not the instructor of record.

Graduate Teaching Assistant 3 (GTA3)

The graduate student will teach for credit as the instructor of record and/or as the person primarily responsible for assigning grades. Mississippi State University Academic Operating Policy and Procedure (AOP) 13.09 *Credentials for Teaching*, states "Graduate teaching assistants may serve as instructors of record only for undergraduate courses. These graduate students must possess a master's degree in the teaching discipline and obtain classroom certification from the Graduate School. Graduate teaching assistants must receive direct supervision by a faculty member experienced in the same teaching discipline, regular in-service training, and planned periodic evaluations. Graduate teaching assistants cannot serve as instructors of record for graduate level courses, regardless of qualifications." Requires Microteaching Simulation/Classroom Certification Evaluation. Additional paperwork may be required for verification of teaching credentials, including submission of transcripts from each institution attended.

Students must satisfy all program/evaluation requirements necessary to obtain the level of certification (GTA1, GTA2, GTA3) corresponding to the duties/responsibilities of the teaching assistantship appointment. Waivers to allow classroom/laboratory teaching (GTA2/GTA3 levels) without successful completion of all applicable Graduate Teaching Assistant Certification Program component requirements WILL NOT be issued.

Academic Policies

Honor Code

The MSU Honor Code, adopted in 2007, states: "As a Mississippi State University student, I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do." The policy, complete with associated definitions, rules, and programs, is available online at www.honorcode.msstate.edu/ (http://www.honorcode.msstate.edu/).

Program of Study Policies

The Graduate School is responsible for the administration of the University graduate academic policy. This section identifies Graduate School policy related to the development of the student's Program of Study during the degree completion process.

Program of Study

Using the *Graduate Catalog* for the academic year of admission, the student must develop, with his/her graduate committee, a program of study consisting of all graduate-level courses required for degree completion according to University-approved program requirements referenced in the Minimum Degree Completion Requirements (see Academic Performance) and those outlined in the respective program description. Changes made to the student's program of study must be approved by the entire committee; the approval should occur prior to the student's registration in course(s), particularly if the course is a substitution for a required program course.

A student may be required to take an English as a Second Language (ESL), Learning Skills (LSK), Cooperative Education (CP), undergraduate course, or audit a course. These courses are not eligible for inclusion in the Program of Study.

A student who has taken a course at the 4000 level at MSU <u>CANNOT</u> enroll in the same course at the 6000 level without explicit permission of the instructor and Graduate Coordinator of the department offering the course, the academic advisory committee, Graduate Coordinator, Department Head, and Academic Dean.

Minor

A minor is a block of approved coursework derived from a current MSU degree program or concentration. The hours used to fulfill the minor are **over** and above the required hours for the major program. The option of a minor is at the discretion of the major area in which the program is offered and must be approved by the student's major professor and/or graduate committee. The minor coursework is designated on the student's program of study.

Up to one-third of the required hours for a minor may be transferred to MSU. Hours transferred toward fulfillment of a minor must be relevant in content to the graduate program when the degree is awarded and must fit within the time-limit requirements for the specific degree.

A minor in a master's or educational specialist program must meet the following requirements:

- At least 9 hours of graduate coursework in the minor field of study;
- Approval of the student's major professor and/or graduate committee;
- Approval of the Graduate Coordinator from the minor area;
- · An MSU Graduate Faculty member from the minor area who serves as minor professor on the student's graduate committee;
- · Fulfillment of any additional requirements as specified by the major and minor areas, and
- A 3.00 or higher GPA on the minor coursework.

A minor in a doctoral program must meet the following requirements:

- At least 12 hours of graduate coursework in the minor field of study:
- Approval of the student's major professor and graduate committee;
- Approval of the Graduate Coordinator from the minor field of study;
- · An MSU Graduate Faculty member from the minor area who serves as minor professor on the student's graduate committee;
- Fulfillment of any additional requirements as specified by the major and minor areas; and
- A 3.00 or higher GPA on the minor coursework.

Shared Credit, Transfer Credit, and Concurrent Degrees

Shared Credit (asynchronous credit)

Shared credits are defined as those credits earned in another graduate program at MSU that are now being applied to an additional graduate degree program at MSU. Note that shared credit is used when a student is not enrolled concurrently (for such cases, please see the concurrent degree section below).

- Master's and Educational Specialist degrees: If the student wishes to share credit hours *from* a degree program *to* a subsequent program at the Master's or Educational Specialist level, he or she may be allowed to share up to 12 hours of graduate credit. If the current program requires more than 36 hours, the committee may approve for a student to share up to 1/3 of the required credit hours toward the current program of enrollment.
- Doctoral degrees: If the student wishes to share credit hours *from* a previous graduate program *to* a subsequent program at the doctoral level at MSU, he or she may be allowed to share up to 50% of the required credit hours of the current program of enrollment. Shared credit hours may not exceed 50% of the coursework requirement, exclusive of dissertation/research credit.

Concurrent Degrees

An applicant may apply and be admitted into more than one degree program concurrently. The programs may exist within the same department, or the student may enroll in two programs in two different departments. In the case of the latter, concurrent degree matriculation requires approval of both departments submitted to Graduate School admissions staff.

- Concurrent degrees at the same level: If the student is approved to pursue two degrees concurrently at MSU at the same level, no more than 12 hours of coursework used in one degree program may be applied toward meeting the requirements for the second degree.
- Concurrent degrees at different levels (not within the same program area): If the student is approved to pursue two degrees concurrently at MSU at different levels, no more than 50% of the coursework requirements from the lower degree may be applied toward meeting the requirements for the higher degree.
- Concurrent degrees at different levels (within the same program area): If the student is approved to pursue two degrees concurrently at MSU at different levels within the same program, students may be permitted to exceed the 50% rule to fulfill the requirements of the higher degree, subject to approval by the graduate committee and Graduate Coordinator.

Transfer Credit

Transferred credits are defined as those credits earned in graduate work at another university, whether or not used to satisfy the requirements of a previously earned degree. Transfer credit hours from other domestic universities, international universities, or military educational programs may be used to fulfill requirements for graduate degrees at MSU, provided they meet the following criteria:

- 1. Where appropriate, credit hours were earned in programs fully accredited by the appropriate regional and national accrediting bodies.
- 2. Credit hours contribute to the current program of graduate study.
- 3. Credit hours approved for transfer are subject to the time limit of the program at the time of approval. However, once credit hours are approved, they are no longer subject to time limits at the completion of the degree.

Only courses in which grades of B or higher were earned are accepted for transfer. Courses with grades of Pass/Fail or S/U are not eligible for transfer.

Master's or Educational Specialist students can transfer up to 12 hours of graduate credit. If a Master's or Educational Specialist program requires more than 36 hours, the committee may approve transfer credit of up to 1/3 of the required credit hours. At the doctoral level, transfer credit cannot exceed 50% of the coursework requirement. Thesis/Dissertation research credit hours cannot be transferred unless there is an MOU in place that governs a particular student's situation.

In all cases, the decision to accept and designate transfer work is rendered by the student's graduate advisor and committee. Once it is determined that the course meets the required criteria, the student must submit a Transfer Approval form containing required signatures and an official transcript to the Graduate School. Transfer courses are denoted using the name that appears on the original transcript and the MSU equivalent or designation of Special Topic (6990/8990) listed of the equivalent MSU course.

Transfer credit cannot be used to satisfy provisional admission requirements. Additional details for domestic, international, and military credit are provided below.

Transfer of Domestic Credit

A student seeking to transfer courses from a domestic university is responsible for submitting transcripts, as well as course descriptions and syllabi as required by the graduate advisor or committee, for review. The committee will determine those courses appropriate for transfer based on assessment of course content. Credits transferred from domestic universities will be included in the calculation of the student's final grade point average.

Transfer of International Credit

A student seeking to transfer courses from universities outside the U.S. is responsible for submitting transcripts, course descriptions, and syllabi in English for review by the relevant academic unit for the course under consideration. Approval is at the sole discretion of the reviewing academic unit which will work with the Graduate School to ensure that the equivalent of a grade of B or higher was earned. The Office of the Registrar will note such courses on the MSU transcript followed by an S grade. These grades will not be included in the calculation of the student's final grade point average but will count towards the required credit hours for the degree.

Transfer of Military Credit

A student seeking to transfer courses from military educational programs is responsible for submitting transcripts, course descriptions, and syllabi for committee review. The committee will determine appropriate courses for transfer based on assessment of course content and will work with the Graduate School to ensure that the equivalent of a grade of B or higher was earned. The Office of the Registrar will note such courses on the MSU transcript followed by an S grade. These grades will not be included in the calculation of the student's final grade point average but will count towards the required credit hours for the degree. Evaluations by the American Council of Education (ACE) may be used by programs in making decisions concerning the transfer of military courses.

Course Retake Policy

A student may retake a course if his/her Request to Retake a Course form is approved by the student's major professor, Graduate Coordinator, Department Head if applicable, and Academic Dean if applicable. If a student does not have a major professor, the academic advisor signs as the major professor. Only one course per degree can be repeated, and this policy applies to any graduate course taken since the beginning of enrollment in the current program. <u>The repeated course (or program approved equivalent) must be taken at MSU, unless otherwise approved by the Graduate Coordinator, Department Head and/or Academic Dean.</u>

If a student retakes a course, the grade earned in the second attempt is included on the student's program of study. Once the course is retaken, the original grade is no longer subject to the University criteria for academic dismissal or degree completion. However, a record of both courses taken will remain on the permanent transcript, and both grades will be included in the computation of the final GPA. No additional program credit hours are generated from a repeated course.

Some courses are approved for repeated enrollment and credit (e.g., internships, special topics, thesis, dissertation, etc.), and additional program credit hours can be generated in these cases.

Incomplete Grades

Assigning and changing incomplete grades is governed by the academic policy AOP12.12 (http://www.policies.msstate.edu/policypdfs/1212.pdf).

Master's Degree Requirements

- Academic departments in the colleges at Mississippi State University offer Master of Arts (M.A.), Master of Science (M.S.), and a number of specialized master's degrees. Refer to Graduate Degrees and Majors Offered (p. 23) for a complete list.
- Check Requirements Quick Reference (p. 15) for admission requirements for specific programs.
- Consult Admissions Information (p. 5) and the specific master's program description in the correct College and Degree Programs (p. 48) section.
- To apply online, please visit the Graduate School (http://www.grad.msstate.edu/) website at https://www.grad.msstate.edu/. (https:// www.grad.msstate.edu/)

Graduate Committee

Please refer to the Graduate Committee Section (p. 47). (p. 47)

Program of Study

Course Requirements

A minimum of 30 credit hours of graduate study is required in all master's degree programs, although some programs require more credits. At the program level, students are encouraged to develop a plan of study in consultation with their major professor and committee at the inception of their program, ideally no later than upon completion of 9-12 credit hours of coursework.

- Thesis-option students must include at least 24 hours of graduate coursework and 6 hours of research/thesis. A minimum of 12 coursework credit hours, exclusive of thesis/research credits, must be at the 8000 level or higher. Enrollment in LIB 9010 during the final semester is mandatory to meet the Graduate School requirements for graduation.
- Non-thesis coursework requirements consist of a minimum of 30 hours of coursework, with at least 15 hours at the 8000 level or higher.
- A maximum of 6 credit hours of Directed Individual Study (DIS) coursework can be taken toward the degree. DIS courses are designated as 7000-level credit hours and may be used to meet the 8000-level course requirement.
- A grade of S for satisfactory or U for unsatisfactory is given for thesis/research credit. A student cannot graduate with a U grade in the final semester; and thesis research hours where a grade of U is earned cannot be used to meet the 6-hour credit requirement.

Comprehensive Examination

A final comprehensive examination is required of all non-thesis degree candidates except those in a prescribed program that was approved without this requirement. Some programs may also require thesis students to complete a comprehensive exam in addition to a thesis defense. The following examination requirements must be met:

- · Master's degree candidates are required to take an oral examination, a written examination, or both.
- A student must be enrolled in at least 1 hour in the semester the exam is administered. A student taking a comprehensive examination during the summer semester can be enrolled in any summer term.
- The examination date must meet the deadline posted on the Graduate Academic Calendar for the semester in which the student plans to graduate.
- A student must have a 3.00 or higher GPA when sitting for the examination.
- The student must be within the last 6 hours or in the terminal semester of coursework excluding internship/practicum courses.

- The candidate's examination should demonstrate the following:
 - a. the candidate's thorough familiarity with the literature in the major field;
 - b. the relation of the special subject to allied subjects; and
 - c. the level of general knowledge and training, including use of oral and written English.
- One negative vote **will not** constitute failure for a student on a preliminary/comprehensive examination. Two negative votes **will** constitute failure for a student on a preliminary/comprehensive examination. In the absence of a committee, one negative vote **will** constitute failure.
- The student's committee must complete and submit the examination results report form no later than one week from the date of the pass/fail decision. This form must be submitted by the deadline stated in the Graduate Academic Calendar for the student to be eligible for graduation. The form must be submitted by a faculty or staff member of the program.
- A student who fails the comprehensive exam can apply to schedule another examination after a period of three months has elapsed from the date of the original exam. Two failures result in the student's removal as a master's degree candidate, unless the program has a more stringent protocol.

Thesis

Thesis Preparation

All candidates for a thesis-option master's degree must submit a thesis. The student's graduate committee must approve the thesis topic and the initial and final submissions. Thesis research may be subject to review and approval by the appropriate University regulatory committee(s) or unit(s) (Office of Research Security, Office or Research Compliance, etc.).

Thesis format guidelines can be accessed at http://library.msstate.edu/thesis/index.asp (http://library.msstate.edu/thesis/). Students are required to prepare their theses following these guidelines and are subject to the review and approval of the Office of Thesis and Dissertation Format Review in the MSU Libraries.

Thesis Defense

Both a public presentation of the thesis research and a thesis defense are required. While the presentation is open to the general public, the defense is open only to members of the Graduate Faculty affiliated with the program (see the program Graduate Faculty (p. 261) listing). The following requirements must be met:

- The student must be enrolled at MSU during the semester of the defense. A student defending during the summer semester can enroll in any summer term.
- The defense must occur by the deadline posted on the Graduate Academic Calendar in the semester in which the student plans to graduate.
- A student in a thesis-option program may be required to take a comprehensive examination in addition to the thesis defense.
- A student must have a 3.00 or higher GPA when sitting for the defense.
- The student must be within the last 6 hours or in the terminal semester of coursework excluding internship/practicum courses to defend.
- Typically, committee members and the Graduate Coordinator are provided a minimum of two weeks to review the final document prior to the defense.
- The student, Graduate Coordinator, or a committee member may request that the Graduate School appoint an outside observer to attend the thesis defense.
- The student's graduate committee will evaluate content of the completed thesis. One negative vote will not constitute failure of a thesis defense. Two negative votes will constitute failure of a thesis defense.
- The student's committee must complete and submit the examination results report form no later than one week from the date of the thesis defense. This form must be submitted by the deadline stated in the Graduate Academic Calendar for the student to be eligible for graduation. The form must be submitted by a faculty or staff member of the program.
- A student who fails to defend his/her thesis successfully can apply to schedule another defense after a period of three months has elapsed from the date of the original defense. Two failures to defend the thesis will result in the student's removal as a master's degree candidate, unless the program has a more stringent protocol.

Thesis Submission

- The student must meet the initial and final submission requirements and deadlines set by the program, college, MSU Libraries, and the Graduate School. Some colleges and/or programs may have deadlines that precede the deadline in the Graduate Academic Calendar.
- The student must be enrolled in at least one graduate credit hour and LIB 9010 at MSU during the semester(s) of both the initial and final submissions to the Library. A student submitting in the summer semester may be enrolled in any summer term.
- The student submits the thesis electronically through CANVAS as part of LIB 9010. The final submission must be in Portable Document Format (PDF) and uploaded to the Library's Institutional Repository (Scholar's Junction) database.
- The committee signature page, complete with required signatures, must be submitted to the Library before the thesis will be reviewed. Signatures represent that the signers are satisfied with the contents of the document and that no further changes will be made to the content. Any subsequent content changes will require a newly signed signature page to allow each member to re-evaluate the document, including the new changes. The Library will retain a copy of the signature page for archival purposes.

The University has an agreement with ProQuest Information and Learning Company (ProQuest) for the archiving of all theses. Under this
agreement, and, if desired, the document will be copyrighted with the copyright in the name of the author. The author is also free to use any other
method available to create physical copies of their approved work. Fees for copyrighting the document can be found on the Thesis/Dissertation page
of the MSU Libraries' website.

Time Limit

Eight years is the time limit for completion of a master's degree. A Request for an Extension of Time form must be used to request an extension for up to two years if needed under well-justified, extenuating circumstances. The request must be approved by the major professor, Graduate Coordinator, Department Head (if applicable), and the Academic Dean and submitted to the Dean of the Graduate School. In the rare circumstance that a second request is made, additional approvals are required, including approval of the Dean of the Graduate School and the Provost. This request must be made using the Request for Additional Extension of Time form.

Educational Specialist Degree Completion Requirements

The Educational Specialist degree, or EdS, is an advanced degree beyond the master's degree and is offered by the College of Education...

- The EdS degree is comprised of a planned program of study, with a minimum of 30 credit hours of graduate study beyond the master's degree, under the direction of a major professor.
- The EdS degree is offered in the following program areas:
 - Counseling
 - Educational/School Psychology
 - Elementary Education
 - Secondary Education
 - Special Education
 - School Administration
 - Teacher Leadership
 - Technology
- Check Requirements Quick Reference (http://catalog.msstate.edu/graduate/admissions-information/requirements-quick-reference/) for GPA
 admission requirements for specific programs.
- To apply online, please go to the Graduate School (http://www.grad.msstate.edu/) website at https://www.grad.msstate.edu/.

Doctoral Degree Requirements

To earn the doctoral degree, a candidate must demonstrate mastery of a particular field of knowledge, of the techniques of research, and of the correlation of his/her specialty with the larger areas of knowledge, especially those directly related to his/her own field of interest.

- Refer to Graduate Degrees and Majors Offered (p. 23) for a complete list of Doctoral programs.
- Check Requirements Quick Reference (p. 15) for admission requirements for specific programs.
- Consult Admissions Information (p. 5) and the specific doctoral program description in the correct College and Degree Programs (p. 48) section.
- To apply online, please go to the Graduate School (http://www.grad.msstate.edu/) website at https://www.grad.msstate.edu/. (https:// www.grad.msstate.edu/).

Program of Study Course Requirements

Completion of a doctoral degree requires substantial academic work beyond the bachelor's level and includes both formal coursework and research (dissertation credit hours). At the program level, students are encouraged to develop a plan of study in consultation with their major professor and committee at the inception of their program, ideally no later than upon completion of 9-12 credit hours of coursework.

- Mississippi State University requires that doctoral students earn at least 54 hours of graduate credit beyond the bachelor's level, which includes a required 20 hours of dissertation credits. Of the 54 hours, at least 24 must be from GPA-graded graduate coursework with a minimum of 12 credit hours at the 8000 level or higher (or equivalent and excluding dissertation research credit), and at least 20 must be dissertation research credits. Course credits earned from another university will be evaluated by the relevant program for equivalency and for fulfillment of degree requirements; transfer rules apply. Courses accepted from international institutions designated with an S grade may count towards the GPA-graded hour requirement. The remaining 10 hours can be earned with coursework credits, dissertation/research credits, or a combination of both. Enrollment in LIB 9010 during the final semester is mandatory to meet the Graduate School requirements for graduation.
- Directed Individual Study (DIS) courses taken at the 7000-level may be used to fulfill 8000-level degree requirements.

- Individual programs may require additional hours, including dissertation credit hours, as well as permit previous graduate degree coursework in the field to contribute to that total.
- Course requirements must be approved by the student's committee.
- Courses taken in previous graduate work that fulfill current degree requirements but are not part of the program must be noted in CAPP to record the student's fulfillment of those requirements.
- A grade of S for satisfactory or U for unsatisfactory is given for dissertation credit. A student cannot graduate with a U grade in the final semester. Dissertation hours in which a student receives a U grade are not eligible for use towards the 20-hour minimum requirement.

Examinations

Qualifying Examination

Some departments require doctoral students to take a qualifying examination. Details for these exams can be found in the program descriptions. Since the Graduate School does not require this examination, qualifying examination results are not sent to the Graduate School.

Preliminary/Comprehensive Examination

The comprehensive exam is required of all doctoral students. This exam can be either written, oral, or both. Additional information is provided below:

- A doctoral student must be enrolled in a graduate course at MSU during the semester the exam is administered. A student taking a comprehensive
 examination during the summer semester can be enrolled in any summer term.
- The student must have a minimum 3.00 GPA when sitting for the examination.
- The student takes the preliminary/comprehensive examination in the terminal semester of coursework or when within 6 hours of coursework completion excluding any internship/practicum courses.
- When the examination is scheduled, the student's CAPP Compliance must be complete and the committee request form submitted to the Graduate School.
- The doctoral student must take the comprehensive examination by the appropriate deadline below:

June 1 for December graduation

November 1 for May graduation

February 1 for August graduation

- The student's graduate committee serves as the examining committee, except for programs where the examining committee is prescribed.
 The student or a committee member may request that the Graduate School appoint an outside observer to attend the comprehensive/ preliminary examination.
- One negative vote **will not** constitute failure for a student on a preliminary/comprehensive examination. Two negative votes **will** constitute failure for a student on a preliminary/comprehensive examination.
- The student's committee must complete and submit the examination results report form no later than one week from the date of the pass/fail decision. This form must be submitted by the deadline stated in the Graduate Academic Calendar (https://www.grad.msstate.edu/calendar/) for the student to be eligible for graduation. The form must be submitted by a faculty or staff member of the program.
- A student who fails this examination can apply to schedule a date for another examination after a period of three months has elapsed from the date of the original examination. Two failures on this examination **will** result in the student being dropped from further consideration as a doctoral candidate, unless the program has a more stringent protocol.

Admission to Candidacy

A doctoral student is admitted to candidacy when he/she successfully passes the comprehensive exam. A student's time frame for completing the degree will begin in the semester following Admission to Candidacy.

Graduate Committee

Please refer to the Graduate Committee Section. (p. 47)

Dissertation

Dissertation Preparation

All candidates for the doctoral degre must submit a dissertation that exhibits mastery of the techniques of research and a distinct contribution to the field under investigation and study. The student's graduate committee must approve the dissertation topic and the initial and final submissions. Dissertation research is subject to review and approval by an appropriate University regulatory committee or unit (Office of Research Security, Office of Research Compliance, etc.). The student must register for at least the minimum number of required dissertation/research hours (20), although some programs require more. These hours may, at the discretion of the student's doctoral committee, include up to 6 credit hours of XXX 9913 Dissertation Seminar, a 3-hour course designed to assist students in starting and/or completing their dissertation. Students can take this course only if their department/program offers the Dissertation Seminar, and they must earn an S grade to use the credit hours toward the dissertation credits requirement.

Dissertation format guidelines can be accessed at <u>http://library.msstate.edu/thesis/index.asp (http://library.msstate.edu/thesis/)</u>. Students ae required to prepare their dissertations following these guidelines and are subject to the review and approval of the Office of Thesis and Dissertation Format Review in the MSU Libraries. (http://library.msstate.edu/thesis/)

Dissertation Final Defense

Both a public presentation of the dissertation research and a dissertation defense are required. The presentation is open to the general public but the defense is open only to members of the Graduate Faculty affiliated with the program (listed on program Graduate Faculty (p. 261)). The following requirements must be met:

- The student must be enrolled at MSU during the semester of the dissertation defense. A student defending during the summer semester can enroll in any summer term.
- The defense must occur by the deadline posted on the Graduate Academic Calendar if the student wishes to graduate during the semester of defense.
- A student must have a 3.00 or higher GPA when sitting for the defense.
- The student must be within the last 6 hours or in the terminal semester of coursework excluding internship/practicum courses to defend.
- Typically, committee members and the Graduate Coordinator are provided a minimum of two weeks to review the final document prior to the defense.
- The student, Graduate Coordinator, or a committee member may request that the Graduate School appoint an outside observer to attend the dissertation defense.
- The student's graduate committee will evaluate content of the completed dissertation. One negative vote will not constitute failure for a student on a dissertation defense. Two negative votes will constitute failure for a student on a dissertation defense.
- The student's committee must complete and submit the examination results report form no later than one week from the date of the dissertation defense. This form must be submitted by the deadline stated in the Graduate Academic Calendar for the student to be eligible for graduation. The form must be submitted by a faculty or staff member of the program.
- A student who fails to defend his/her dissertation successfully can apply to schedule another defense after a period of three months has elapsed from the date of the original. Two failures to defend the dissertation will result in the student's removal from the program, unless the program has a more stringent protocol.

Dissertation Submission

- The student must meet the initial and final submission requirements and deadlines set by the program, college, MSU Libraries, and the Office of the Graduate School. Some colleges and/or programs may have deadlines that precede the deadline in the Graduate Academic Calendar.
- The student must be enrolled in at least one graduate credit hour and LIB 9010 at MSU during the semester(s) of both the initial and final submissions to the Library. A student submitting in the summer semester may be enrolled in any summer term.
- The student submits the dissertation electronically through CANVAS as part of LIB 9010. The final submission must be in Portable Document Format (PDF) and uploaded to the Library's Institutional Repository (Scholar's Junction) database.
- The committee signature page, complete with required signatures, must be submitted to the Library before the dissertation will be reviewed.
 Signatures represent that the signers are satisfied with the contents of the document and that no further changes will be made to content. Any subsequent content changes will require a newly signed signature page to allow for each member to re-evaluate the document including the new changes. For security reasons, signatures should not be scanned for the PDF document; this page will remain absent of signatures for the electronic version. The Library will retain a copy of the signature page for archival purposes.
- The University has an agreement with ProQuest Information and Learning Company (ProQuest) for the archiving of all dissertations. Under this agreement, and if desired, the documented will be copyrighted with the copyright in the name of the author. The author is also free to use any other method available to create physical copies of their approved work. Fees for copyrighting the document can be found on the Thesis/Dissertation webpage of the MSU Libraries website.

Time Limit

A doctoral student must complete the degree program within five years after passing the comprehensive examination. The time limit begins with the semester immediately following that in which the student successfully passed the comprehensive examination. A student may submit a request for a two-year extension of time, using the Request for an Extension Time form under well-justified, extenuating circumstances. The request must be approved by the major professor, Graduate Coordinator, Department Head (if applicable), and Academic Dean before being submitted to the Dean of the Graduate School. In the rare circumstance that a second request is made for a two-year extension, additional approvals are required, including approval of the Dean of the Graduate School and the Provost. This request must be made using the Request for Additional Extension of Time (https:// www.grad.msstate.edu/files/Additional_Extension_of_Time_2018.pdf)form.

Additional Requirements

Language and Research Skills

Foreign language or research skill requirements for the doctoral degree are determined by the major department or program.

Residency Requirement

Departments, schools, and colleges may set degree-specific residency requirements.

Enrollment & Registration

Policies regarding enrollment for graduate students differ significantly from those for undergraduate students. This section defines and details policies and procedures regarding requirements for part-time, full-time, required enrollment, continuous enrollment, and graduate assistantship enrollment.

Continuous Enrollment

Students are required to remain continuously enrolled from the start of their program. Continuous enrollment is defined as enrollment in two of three semester terms (Fall, Spring, or Summer) with Fall enrollment required. Except in cases wherein students secure an official leave of absence, students who fail to meet these requirements will be deemed inactive after the second semester. To be readmitted, students must apply for readmission to the program in which they were enrolled and to the Graduate School. Readmission is not guaranteed and must be approved by the Graduate Coordinator, Department Head (if applicable), Academic Dean, and Dean of the Graduate School. In order to fulfill the continuous enrollment requirement, students who are readmitted must register retroactively and pay tuition and registration fees at current rates for all semesters that have elapsed since they were last enrolled, up to a maximum of two semesters per academic year, and a total of eight. Note: This policy does not apply to select programs in which students only enroll during the summer (e.g., Master of Music Education) or to MSU benefits-eligible employees.

Readmission

Once enrolled in graduate study, a student who fails to meet the continuous enrollment requirement must complete an Application for Readmission to register for classes. If the student has attended another college or university during the absence, the student must submit an official transcript from that institution. Approval for readmission must be obtained from the program Graduate Coordinator, Department Head (if applicable), and Academic Dean. The readmission decision is forwarded to the Graduate School. The Dean of the Graduate School will review these cases and may consult the Academic Dean and program before a final readmission letter is sent to the student. Academic departments may set higher standards for readmission to specific programs. A student seeking readmission to an academic program should contact the Graduate Coordinator for specific departmental requirements prior to completing an application.

Students who have not been enrolled for a period of three years or longer and are in good academic standing, are eligible to reapply to through the Lapsed Student Program. Readmission is not guaranteed and must be approved by the Department Head, Academic Dean, and Dean of the Graduate School. Interested students or academic departments should contact the Graduate School for more information.

Leave of Absence

A student may be granted a leave of absence for medical reasons, family necessity or dependent care, military service, or other approved personal reasons. Students planning to discontinue enrollment for a semester or more must request approval for a leave of absence. Students may petition the Graduate School for a leave of absence for a maximum of twelve months during the entire program by submitting a Leave of Absence form; however, the Graduate School may approve extensions to the twelve month maximum leave of absence (e.g., for military service obligations extending beyond twelve months).

A petition for a leave of absence, signed by the Graduate Coordinator, Department Head (if applicable), and Academic Dean is forwarded to the Graduate School. The Graduate School may request appropriate documentation. The request must be filed and approved before the anticipated absence, unless the event occurs in the course of a semester in which case a student may apply as soon as possible. An approved leave of absence will enable students to re-enter their program without applying for readmission or owing retroactive tuition and registration fees. Students may return to their program prior to the anticipated return date if desired.

A student on a leave of absence is not required to pay fees, but in turn may not use Mississippi State University facilities, resources, or services intended only for enrolled students; receive a graduate assistantship, fellowship or financial aid from the University; or take any MSU courses.

Full-time Course Load

Fall and Spring

A full-time course load in fall and spring semesters is enrollment in 9-13 credit hours. A student may register for additional hours only by submitting to the Registrar's Office a Request for Scheduling Overload Form approved by the student's Graduate Coordinator, Department Head, and Academic Dean and sent to the Registrar for processing. *This form must be sent to the Office of the Registrar and does not require Graduate School approval.*

Summer

A total of 6 credit hours is considered full-time summer enrollment. The maximum summer course load is as follows:

- 3 credit hours for Maymester;
- 7 hours for a 5-week summer session;
- 13 hours for the 10-week term, and;
- a total of 13 hours for the entire summer semester.

Audit hours may not be used to satisfy the full-time enrollment requirement in any semester. Students must be aware of the financial implications of overload status or not being enrolled full-time.

A student holding a half-summer graduate assistantship must be registered for courses scheduled during the term of the assistantship.

Graduate Assistantship

A student holding an assistantship appointment is required to maintain full-time enrollment throughout the full appointment period. A student holding a half-summer graduate assistantship must be registered during the term of the assistantship. <u>Audit hours cannot be used to satisfy the full-time</u> <u>enrollment requirement</u>. See the Graduate Assistantship (p. 31) section of this publication for a description of enrollment and all requirements for holding an assistantship.

Required Enrollment

In addition to meeting continuous enrollment requirements, a graduate student must enroll at MSU for at least one graduate credit hour in the semester that he/she meets any of the following degree requirements:

- Sits for an oral and/or written comprehensive examination;*
- · Defends a thesis/dissertation;*
- · Submits the initial or final thesis/dissertation to the Library; and/or
- Applies for graduation.

A student who holds a graduate assistantship is required to maintain full-time enrollment. Other students may be required to be enrolled full-time for different reasons.

*Academic semesters are defined as the first day of classes through the last day of final examinations for each term. Students defending a thesis or dissertation should review the Graduate Academic Calendar for deadlines. Comprehensive examinations must occur on or prior to the last day of final examinations. Comprehensive exams cannot be scheduled outside of the academic semester time frame (as defined above) and cannot be administered during interim sessions.

GRD 9011

Graduate students who pass the thesis/dissertation defense by the end of a semester (defined as the date/time grades are due to the Registrar's Office) and meet all other graduation requirements except the deadlines for thesis/dissertation submission to the Library may adhere to the following procedure so as to graduate the next term:

- Defend their thesis/dissertation no later than the end of the semester. End of semester is defined as the last day of final examinations. This date is posted each semester of the Graduate Academic Calendar and the University Calendar.
- Ensure that all degree audit documents have been received by the Graduate School. Graduate School staff will verify eligibility for the course, and enter an override to permit qualified students to register.
- Enroll in the one-credit hour course (GRD 9011 Graduate Degree Completion) for the semester following the defense. The course holds an associated fee of \$100. Students are allowed to enroll in the course only one time.
- Students enrolled in the course must meet all of that semester's Library submission and graduation application deadlines.

Registration

When a student is admitted into a degree program or as an Unclassified graduate student, the following steps are followed to register for classes:

- 1. Graduate student admitted to a degree program: the student must confer with his/her advisor or the Graduate Coordinator to determine courses for the subsequent semester and receive a release for online registration.
- Unclassified graduate student: in order to enroll in a course, the student must request permission from the academic department offering the course. If permission is granted, the department will enter a major override in Banner for each approved course and will release the student for registration.

To register, the student accesses the Registration menu on MyBanner for Students and selects "Register for Classes" to enroll.

Registration for Directed Individual Study (DIS) courses requires: (1) approval from a faculty member to offer that course and (2) that the course be developed by the department offering the course before a student can enroll.

When registering for thesis/dissertation hours, students must enroll in the campus and section of their major professor. The research hours <u>must</u> be in their major program area. Students who have not yet selected a major advisor should consult the program Graduate Coordinator for assistance in registering for thesis/dissertation hours.

Obtaining a Registration Release following Non-Registration Semester(s)

An admitted student who began a graduate program but did not meet the definition of continuous enrollment (failure to enroll in Fall and Spring or Summer) will not automatically have a Registration Release. The student's major professor must contact the admissions staff (gradregistration@gradmsstate.edu) in the Graduate School by email to request the student be eligible to be released.

Audit a Course

Upon recommendation from the course instructor, subject to approval by the student's advisor/major professor and the instructor's Dean, and notification of and review by the Registrar, a student may enroll to audit a course. The approval to audit must occur prior to the official enrollment count day (tenth class day for spring and fall semesters; third class day for summer school sessions). A student may not change from credit to audit or audit to credit status after the official enrollment count day. Students auditing a class are not required to take tests and/or examinations or to prepare other written assignments. Otherwise, conformity to regular classroom rules, including attendance requirements, is the same as for students taking the course for credit. At the time the request for audit is approved, the course instructor will inform the student auditing the class of attendance expectations. Failure to meet any or all of these requirements may result in an auditor being administratively dropped from the class roll. No audited course may be counted as part of the required hours of any degree or program requirements.

A student who must be enrolled full-time **cannot** count an audited course as part of full-time enrollment. This is especially important for students holding a graduate assistantship.

Add/Drop

Consult the Registrar's Calendar or the Graduate Academic Calendar for add/drop dates for each term.

Withdrawal (Drop entire current semester schedule)

To drop an entire current semester schedule, the student accesses the Withdrawal Request found on the MyBanner for Students Registration Menu. See the dates for withdrawal with tuition and fee charges at https://www.registrar.msstate.edu/students/withdrawal-from-the-university/. <u>Unless the student CANCELS THEIR SCHEDULE BEFORE THE FIRST DAY OF CLASSES, they will follow the prorated refund schedule as outlined at the link above</u>. By completing this process, the student avoids the automatic assignment of grades of F. Following the outlined procedure also avoids future difficulties in obtaining transcripts or reentering the University. Note: for the purposes of the withdrawal schedule, class days refer to the number of days any class is held (5 in a typical week), not the number of class meetings for a particular course.

A summer semester student uses the Withdrawal Request when dropping the entire schedule for Maymester or either of the 5-week terms or the full summer term. Withdrawing from one summer term (e.g., Maymester) does not affect the student's schedule for another summer term (e.g., 2nd 5-week).

The withdrawal approval date will be effective the date the student submits the withdrawal request, except in documented cases of serious illness or extreme hardship, in which case an earlier withdrawal date may be approved by the student's Academic Dean. It is the student's responsibility to provide that documentation to the Dean.

Retroactive Withdrawal (Drop entire prior semester schedule)

In rare and unusual circumstances, a student may request a retroactive withdrawal for a previous semester by submitting a completed petition. A copy of the Petition for Retroactive Withdrawal (https://www.provost.msstate.edu/resources/students/forms/2016/Petition_for_retroactive_withdrawal.pdf) form can be obtained online on the Office of the Provost and Executive Vice President's webpage. The student must also submit all required documentation. The student's Major Professor/Advisor, Department Head, Academic Dean, and the Provost must approve the request for retroactive withdrawal. Financial implications for a retroactive withdrawal will be handled on a case-by-case basis.

Academic Performance

Minimum Degree Completion Requirements

To graduate, the student must complete all University and degree program requirements listed in the *Graduate Catalog* under which he/she began the program. A graduate student cannot graduate under any of the following circumstances. Students *must* refer to their program description for additional degree completion requirements.

- 1. A GPA lower than 3.00 for all courses attempted for graduate credit after admission to the degree program or
- 2. A grade of D or lower for any courses attempted for graduate credit after admission to the degree program or
- 3. A grade of I (Incomplete) on his/her transcript.

No graduate courses with pass/fail credit are accepted as part of a graduate program. Grades of pass/fail are not awarded at MSU and cannot be transferred to MSU.

A GPA of 3.00 on the minor coursework is required for students completing a minor.

Provisional Students

The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 or higher GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C unless one course retake is approved per the Graduate Course Retake Policy). The first 9 hours of graduate courses must be within the student's Program of Study. Courses with an S grade or transfer credits cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the Graduate Coordinator for the program's specific requirements. *While in provisional status, a student may be limited in the type of funding that can be used for a graduate assistantship (eg, positions that are state funded)*. Colleges and/or departments make these funding decisions following the rules of the Institutions of Higher Learning (IHL).

Academic Probation

A graduate student should be placed on probation by the department when academic deficiencies occur but the student can potentially meet all degree requirements successfully. Examples of these situations include but are not limited to the following:

- GPA falls below 3.00 required by the University;
- Receives a third course grade lower than a B (one of these courses must be retaken and the student must earn a grade of B or higher); or
- Fails to meet a departmental requirement.

A student may also be placed on academic probation if he or she falls short of any other standards for satisfactory academic performance established by their academic unit. Specific information relative to retaking of courses or completing remedial work will be established by the appropriate academic advisor, graduate committee, and Graduate Coordinator and shall be documented in written form. This remediation plan must specify a required date of completion. If the student intends to pursue the academic appeal process relating to the reason for being placed on probation, he or she must do so during the first probationary semester. If, at the end of the probationary period, the student has not met the requirements outlined in the remediation plan, she or he shall be dismissed.

A student cannot take a comprehensive examination or defend/submit a thesis or dissertation during the probationary period without prior approval from the Academic Dean.

Academic Dismissal

A graduate student shall be dismissed from the University if one or more of the following conditions occur:

- He or she receives a second course grade of D or lower;
- · He or she receives a fourth course grade of C or lower;
- He or she is found to be responsible for violating the Student Honor Code for a second time;
- He or she was placed on academic probation and failed to meet the requirements for release from probationary status;
- He or she failed a comprehensive examination or final thesis/dissertation defense two times in pursuit of an academic degree, unless the academic program has a different requirement; or
- He or she falls short of any standards established by his or her academic unit, and the department recommends dismissal with approval of the Department Head (if applicable) and the Academic Dean.

A student shall be dismissed by the Graduate School for failure to meet University requirements as stated above after the academic unit confirms that there are no extenuating circumstances. A student can also be dismissed if the student's academic department recommends dismissal by submitting a Recommendation for Academic Dismissal form (a letter may be attached) from the Graduate Coordinator, approved by the Department Head (if applicable) and the Academic Dean, clearly stating the departmental requirements the student failed to meet.

Upon review and approval of the reason(s) for dismissal, an official academic dismissal letter from the Dean of the Graduate School is sent to the student via email to the student's MSU account. The letter informs the student that any schedule of classes for the following semester(s) will be dropped, and the Graduate School places an academic dismissal hold on the student's record to prevent further enrollment. The student may refer to the *Graduate Catalog* for information regarding the appeals process (see Academic Dismissal Appeal Procedure). A student who has been dismissed from a graduate program and has not been reinstated via the appeal process cannot apply for readmission into that program, except by meeting the conditions necessary to request Academic Amnesty (see Academic Amnesty).

Grade Appeal

A graduate student who wishes to appeal a grade should refer to the MSU Grade Appeals Policy, Academic Operating Procedure (AOP) 13.14.

Graduate Appeal Procedure

The following section outlines the graduate student appeal process and should be followed for any appeal a student wishes to make (e.g., dismissal, probationary status). Students should also note AOP 12.37 Graduate Student Academic Grievance Procedures for issues not related to academic performance or standing within a program. A graduate student wishing to appeal a decision of dismissal must begin the process within 15 business days. The entire appeal process consists of up to three stages. If the entire appeal process is used, all levels of appeal should be normally completed within 60 business days of the initial appeal. At each level, decisions will be promptly rendered by the appropriate administrator.

- The appeal to the Department Head is submitted by letter along with relevant support documentation. The Department Head informs the Graduate Coordinator and Academic Dean when an appeal is received. In rendering a decision, the Department Head may convene an existing or *ad hoc* departmental committee to review the appeal and offer a recommendation to the Department Head. The Department Head may or may not choose to adhere to the recommendation of the appeals committee. The Department Head will render a decision in writing to the student and copy the notification to the Graduate Coordinator and Academic Dean.
- 2. If the appeal is denied at the departmental level, the student may appeal the departmental decision by submitting a written request with all relevant supporting documentation to the Academic Dean within 15 days of the receipt of the Department Head's decision. The Academic Dean informs the Graduate Coordinator and Department Head when an appeal is received. In rendering a decision, the Academic Dean may convene an existing or *ad hoc* college committee to review the appeal and offer a recommendation to the Dean. The Academic Dean may or may not choose to adhere to the recommendation of the appeals committee. The Academic Dean will render a decision in writing to the student and copy the notification to the Graduate Coordinator, Department Head, and the Dean of the Graduate School.
- 3. If the student is not satisfied with the decision of the Academic Dean, the student may submit a final appeal to the Provost. The appeal to the Office of the Provost is submitted by letter along with relevant supporting documentation within 15 days of receipt of the Academic Dean's decision. The Provost will inform the Dean of the Graduate School when an appeal is received. In rendering a decision, the Provost may request that the Dean of the Graduate School convene a subcommittee consisting of three voting members of the Graduate Council who do not have a conflict of interest with the graduate student or the student's department to review the appeal and offer a recommendation to the Provost. A subcommittee chair will be named by the Dean of the Graduate School. Relevant supporting documents submitted by the student, department, and/or the Graduate School will be assembled by the Graduate School and delivered electronically to the subcommittee for review. The subcommittee may choose to deliberate via email or in a face-to-face meeting. The recommendation of the subcommittee will be conveyed to the Provost in writing and copied to the Dean of the Graduate School. The Provost may or may not choose to adhere to the recommendation of the appeals subcommittee. The Provost will render a decision in writing to the student and copy the notification to the Department Head, Academic Dean, and the Dean of the Graduate School. Recourse to the Provost is the final stage of appeal. All correspondence will remain confidential.

If the appeal is successful, a new application to the degree program is not required.

Academic Amnesty for Graduate Students (AOP 12.18)

Academic amnesty is designed to provide those graduate students previously enrolled at Mississippi State University the opportunity to have up to 9 hours of previously completed graduate courses eliminated from the computation of his or her grade point average.

- To be eligible for the program, an individual cannot have been enrolled as a graduate student at MSU for at least three years.
- · Students must contact the Graduate Coordinator (or Department Head) to request consideration for academic amnesty
- If the request is approved by the program, the student then applies and will be admitted provisionally.
- Upon successful completion of at least 9 credit hours with a 3.00 or higher GPA, provisional admission is removed.
- The student submits the 'Academic Amnesty' form prior to the end of the semester preceding that in which the student intends to graduate.

With notification from the Dean of the Graduate School, the Registrar's Office will segment the student's academic record showing all courses and grades to be included in academic amnesty and recalculate the graduate GPA accordingly. Academic amnesty will be applied to the student's record only once and the new grade point average will be noted on the transcript at the end of the semester during which the request was approved.

The student is permitted to retake a course that was included as part of the 9 hours of coursework eliminated under the academic amnesty, if permitted by the academic program. All courses and grades attempted at MSU will remain a part of the student's academic record. A notation will appear on the transcript indicating the student was approved from academic amnesty. Those courses approved for academic amnesty and then granted cannot be applied toward the completion of another graduate degree.

Students must be advised that academic amnesty pertains only to and may not be honored by other institutions of higher learning (AOP 12.18).

Graduate Committee

Committee Membership

An advisory committee should be selected by the student upon enrollment by consulting the major professor and department/program head or chair. The advisory committee is responsible for developing the student's Program of Study and conducting the preliminary/comprehensive exam(s) and the final defense, if applicable. A completed committee request form must be submitted to the Graduate School. This form should be submitted no later than the semester in which the student plans to graduate for Master's and Educational Specialist students and no later than the semester in which either the defense or the comprehensive exam is scheduled for Doctoral students, as appropriate.

For Master's or Educational Specialist students:

- A committee consists of a minimum of three members. One member may be a minor professor, if the student has a minor program.
- The major professor is chair of the committee and must be from the student's major department/program. At least one other member must be from the student's major department/program.
- Greater than 50% of the master's committee members must hold a Graduate Faculty appointment. The decision regarding the qualifications of a Non-Graduate Faculty member to serve on a master's degree committee will be determined by the program/college.
- A Non-Graduate Faculty committee member cannot serve as a major professor or committee chair.
- A Non-Graduate Faculty committee member can direct the thesis research.

A student in a non-thesis program with no variation in Program of Study and/or with standardized examinations are not required to have committees.

For Doctoral students:

- A committee consists of a minimum of four members. If the student has a minor, the committee will be composed of at least five members, with one member being from the minor program area.
- The chair and at least one other committee member must be from the student's major department/program.
- Greater than 50% of the doctoral committee members must hold a Graduate Faculty appointment. The decision regarding the qualifications of a Non-Graduate Faculty member to serve on a doctoral degree committee will be determined by the program/college.
- A Non-Graduate Faculty committee member cannot serve as a major professor or committee chair.
- A Non-Graduate Faculty committee member can serve as dissertation director.

If a student experiences a problem concerning committee membership, he or she should follow the academic appeal procedure outlined in the Graduate Student Academic Grievance Procedure (AOP 12.37).

MSU Graduate Faculty Committee Members

Within *Principles of Accreditation: Foundations for Quality Enhancement*, the Southern Association of Colleges and Schools' Commission on Colleges, the following statement concerning faculty appears.

The institution employs competent faculty members qualified to accomplish the mission and goals of the institution. When determining acceptable qualifications of its faculty, an institution gives primary consideration to the highest earned degree in the discipline. The institution also considers competence, effectiveness, and capacity, including, as appropriate, undergraduate and graduate degrees, related work experiences in the field, professional licensure and certifications, honors and awards, continuous documented excellence in teaching, or other demonstrated competencies and achievements that contribute to effective teaching and student learning outcomes. For all cases, the institution is responsible for justifying and documenting the qualifications of its faculty. (Comprehensive Standard 3.7.1, December 2008)

With the approval of the Academic Dean, each department offering graduate programs will determine procedures for handling recommendations or appeals concerning Graduate Faculty appointments or changes of membership status. The criteria and procedures set by the department and/or the college must be consistent with the qualifications and responsibilities outlined below, but may be more restrictive.

MSU Graduate Faculty members are full-time employees of Mississippi State University. Other criteria for holding as MSU Graduate Faculty appointment follow:

- have an earned terminal degree (highest degree awarded in the discipline) in or related to the faculty member's discipline;
- be a full-time employee of Mississippi State University, holding the rank of assistant professor, assistant research professor, assistant extension professor, or assistant clinical professor or higher without any qualifying designations such as "visiting," "emeritus," or "adjunct"; and
- have demonstrated and maintained noteworthy accomplishments in research and/or creative achievement, as defined in the Faculty handbook.

Government affiliates embedded in the University may be considered MSU Graduate Faculty by agreement.

MSU Graduate Faculty may:

- teach graduate-level courses in each field of specialization if the individual meets all requirements outlined in AOP 13.09, Credentials for Teaching;
- serve as members of doctoral and Master's/Educational Specialist committees within or outside the Department/Program of appointment; and
- serve as a chair of doctoral, Master's, or Educational Specialist committees and may serve as the director of thesis and dissertation research within the faculty member's area of graduate responsibility.

Graduate Faculty members are appointed through submission of the Application to Graduate Faculty form, which is approved by the Department Head and Academic Dean. Reappointment to the Graduate Faculty is not required as long as the faculty member remains full-time faculty (as descried in the second bullet under Graduate Faculty qualifications of Mississippi State University) and remains affiliated with an academic program. Removal of a faculty member from the Graduate Faculty is at the discretion of the Department Head, Academic Dean, and Graduate School Dean.

MSU Graduate Faculty members are listed by college/department in this Catalog.

Non-Graduate Faculty Committee Members

At minimum, greater than 50% of the committee members must be members of the Graduate Faculty. A Non-Graduate Faculty member is anyone external to Mississippi State University or Mississippi State employees who are not Graduate Faculty. Non-Graduate Faculty committee members are expected to have a graduate degree or commensurate expertise in the field of study. The decision of whether or not Non-Graduate Faculty members are qualified to serve on a thesis or dissertation committee is determined by the program/college.

If a Non-Graduate Faculty committee member serves as director of the research, it is expected that the individual will have education and research expertise commensurate with the Graduate Faculty.

Thesis/Dissertation Director

A thesis/dissertation director is the individual primarily responsible for providing oversight for a Master's, Educational Specialist, or Doctoral student's research. Any member of a student's graduate committee may be designated as the thesis/dissertation director on the committee request form. Typically, the major professor serves in this role. In the rare case when the thesis/dissertation director is not the major professor, then coordination between the thesis/dissertation director will be primarily responsible for academic advising and ensuring the student meets all the programmatic requirements for the degree.

Committee Membership Changes

Committee membership changes are submitted to the Graduate School on the Request for Change of Committee Members form. The new committee member(s), student, Major Professor, Graduate Coordinator and Department Head must sign the form. If a student's request to remove a member of the graduate committee is not approved, the student may appeal the decision using the Graduate Appeals Process. All decisions will be provided in writing to the student, committee member(s), Major Professor, Graduate Coordinator, and Department Head if applicable. Faculty may appeal removal from a student's committee using the Faculty Grievance Procedures (AOP 13.05).

Colleges and Degree Programs

Mississippi State University is a comprehensive, doctoral-degree-granting university offering to a diverse and capable student body a wide range of academic opportunities. The University has eight colleges that offer graduate courses and/or programs. These courses and/or programs are offered on the main campus in Starkville, at the Meridian campus, and/or online via the Center for Distance Learning. While the University has approved policies and requirements that affect all graduate courses and programs, each college and department may have additional approved requirements. Please refer to each academic program for details.

Accelerated Program

A number of academic departments have approved programs permitting highly qualified MSU undergraduates to earn up to 15 hours of graduate-level coursework after completing a minimum number of coursework hours. Students in an Accelerated Program take graduate-level courses and earn both undergraduate credit and graduate credit simultaneously. Students need to consult with a potential graduate advisor to ensure graduate credit could be applied to a program of study for the graduate degree. Applications to these programs are submitted in the junior year (i.e., after completion of 60 or more hours of graded undergraduate courses).

Requirements for admission into the Accelerated Program requires the following:

- A GPA of 3.00 or higher on a 4.00 system for all undergraduate work
- A minimum of 60 hours toward the Bachelor's degree

For students enrolled in an Accelerated Program, the MSU Graduate Council has established the following guidelines in cooperation with the Office of the Registrar:

• Once the student is accepted into the Accelerated Program, the student and the advisor may select up to 15 hours that will satisfy both undergraduate and graduate requirements. These courses may be split-level (i.e., 4000-6000) or 8000 level classes. The student must enroll in the courses for graduate credit (i.e., 6000-level or higher).

- The student should use the Undergraduate Enrollment in Accelerated Degree Program form to (i) receive from the Graduate School a level override that enables the student to enroll in the graduate course(s) and (ii) activate a process with the Registrar's Office to obtain both undergraduate and graduate credit for the course. After successfully completing the graduate-level class(es), the Registrar will grant credit for the undergraduate course with the same grade as received for the graduate course. For a split-level class, the transcript will show credit for both the 4000- and 6000-level on the transcript. In the case of an 8000 level class, a special topics undergraduate course of the same title will be entered on the transcript to allow dual credit.
- Students are permitted to opt out of the Accelerated Program at any time, at which point they would complete only the undergraduate portion of the program. No additional dual counting of courses would occur after the student opted out of the accelerated degree program.
- Students are expected to apply to the graduate degree program during the last semester in which they are enrolled in the bachelor's program. Application to the graduate degree program would be made through the standard application process via The Graduate School. Students will receive the bachelor's degree once the requirements for the bachelor's degree are met. Students will be required to complete all of the requirements for both the bachelor's and graduate degrees in order to receive both degrees and those requirements will be identical to the requirements for students enrolled in traditional bachelor's and graduate degree programs. Students will be classified as undergraduates until they fulfill all the requirements for the undergraduate degree. At that time, upon admission to graduate school, they will be classified as graduate students and will be subject to all the guidelines pertaining to the graduate degree.

An Accelerated Program is offered by the academic departments listed below. In addition to the above-listed requirements, departments may have additional requirements such as the completion of specific courses or a statement of professional interests and goals. See the Accelerated Program section for the department of interest.

College of Agriculture and Life Sciences

- Agricultural and Extension Education (Leadership)
- Agribusiness Management
- Animal and Dairy Science
- Biochemistry
- Fashion Design and Merchandising
- Human Development and Family Sciences
- Landscape Architecture
- · Plant and Soil Sciences
- Poultry Science

College of Arts and Sciences

- · Anthropology and Middle Eastern Cultures
- · Biological Sciences
- History
- Mathematics and Statistics
- Public Policy & Administration

College of Business

• Management and Information Systems

College of Education

- General Education Psychology
- Instructional Systems and Workforce Development

Bagley College of Engineering

- Aerospace Engineering
- Biological Engineering
- Biomedical Engineering
- Swalm School of Chemical Engineering
- Computer Science and Engineering
- · Electrical and Computer Engineering
- Industrial and Systems Engineering
- Master of Engineering
- Mechanical Engineering

Bagley College of Engineering/College of Business

• Industrial and Systems Engineering/Master of Business Administration

College of Forest Resources

- Forestry
- Sustainable Bioproducts
- Wildlife, Fisheries, and Aquaculture

College of Veterinary and Biomedical Sciences

• Veterinary Medical Science

Office of Academic Affairs

3501 Lee Hall P.O. Box BQ Mississippi State, MS 39762

Four academic programs are housed in the Office of Academic Affairs:

- · Geospatial and Remote Sensing Minor on the Starkville Campus
- · Master's Program in Physician Assistant Studies on the Meridian Campus
- · Computational Biology
- Data Science

Complete information on both programs is found in this section of the Graduate Catalog.

Department	Degree and Major	Concentration	Thesis	Non-Thesis	Starkville	Meridian	Distance
Academic Affairs	Minor in Remote Sensing				Х		
Academic Affairs	Master of Physician Assistant Studies			Х		Х	
Academic Affairs	Master of Science - Computational Biology		Х		Х		Х
Academic Affairs	Master of Science - Data Science			Х	Х		Х

Master of Science in Data Science

The interdisciplinary Master of Science in Data Science degree program will provide students with a broad training in managing, processing, and extracting value from a giant and diverse data sets and allow them to communicate their findings. The program will prepare students for professional employment in industry, government, and NGOs and at the same time obtain sufficient skills to continue into more advanced degree programs. Admission to the Master's program in Data Science is open to graduates from all disciplines with a strong quantitative background and computational skills. The program of study is a blend of statistical and optimization methodology laced with data management and computational skills, and it provides graduate students with the opportunity to participate in data analytics projects. For more information, please contact either Dr. Rahimi (rahimi@cse.msstate.edu) (rahimi@cse.msstate.edu) or Dr. Razzaghi (razzaghi@math.msstate.edu). (razzaghi@math.msstate.edu)

Geospatial and Remote Sensing Minor

Director: Dr. John Rodgers

Department of Geosciences 355 Lee Blvd, 108 Hilbun Hall Mississippi State University, MS 39762 Telephone: 662-325-3915 E-mail: jcr100@msstate.edu Mailstop: 9537 The Geospatial and Remote Sensing (GRS) minor is a cross-disciplinary program that allows students from any major to develop and enhance their geospatial skills. Students will learn important theoretical concepts associated with geographic information systems and remote sensing sciences, and they will acquire the ability to use these methods to solve spatial problems. Graduate students must complete a minimum of 12 hours of GRS coursework at Mississippi State University with a grade of C or higher from a list of approved courses. A 3.00 GPA is required. An MSU Graduate Faculty member with geospatial expertise must serve as minor professor on the student's graduate committee.

A student who chooses this minor must have the approval of his or her graduate committee and graduate coordinator in the major field. The minor coursework is then included on the student's program of study and is approved by the minor graduate coordinator.

GIS requirement: Choose one of the following. 3 FO 6471 and FO 6472 GR 6303 Principles of GIS WFA 6253 Application of Spatial Technologies to Wildlife and Fisheries Management Remote Sensing: Choose one of the following. 3 FO 6453 **Remote Sensing Applications** GR 6333 Remote Sensing of the Physical Environment ECE 6423 Introduction to Remote Sensing Technologies or ABE /PSS 6483 Introduction to Remote Sensing Technologies Advanced Geospatial Coursework: Choose one of the following. 3 FO 6313 Spatial Technologies in Natural Resources Management FO 8313 Spatial Statistics for Natural Resources FO 8353 Ecological Modeling in Natural Resources FO 8173 Advanced Spatial Technologies GR 6313 Advanced GIS GR 6343 Advanced Remote Sensing in Geosciences GR 8303 Advanced Geodatabase Systems Geospatial Applications : Choose one of the following. Courses must be different from the ones taken from the above categories. A 3 course may not be used to satisfy more than one requirement. ECE 6413 **Digital Signal Processing** ECE 8401 Current Topics in Remote Sensing ECE 8473 **Digital Image Processing** Cartographic Sciences GR 6323 GR 6353 Geodatabase Design GR 6363 Geographic Information Systems Programming GR 6411 Remote Sensing Seminar or PSS /ECE /FO 6411 Remote Sensing Seminar PSS 6373 Geospatial Agronomic Management The following courses listed in the categories above can also meet this requirement if not used in another category. FO 8173 Advanced Spatial Technologies FO 8313 Spatial Statistics for Natural Resources FO 8353 Ecological Modeling in Natural Resources GR 6313 Advanced GIS GR 6343 Advanced Remote Sensing ST 4313 Spatial Statistics

Total Hours

Master of Physician Assistant Studies

Program Director: Dr. Rick Kilgore (Interim) MSU-Meridian Riley Campus 2214 5th Street Meridian, MS 39301 Telephone: 601-696-2320

Fax: 601-696-2350

E-mail: PA@meridian.mssta (PA@meridian.msstate.edu)<u>te.edu</u> Website: https://www.meridian.msstate.edu/academics/physician-assistant/

Mississippi State University-Meridian initiated the development of the Master of Physician Assistant Studies Program after several years of needs assessment and after community support was determined to be strong. Located on the Meridian Campus, the program has access to several highly esteemed Mississippi medical systems. In 2017 The Board of Trustees of Institutions of Higher Learning designated MSU-Meridian as the home of the first state-supported Master of Physician Assistant Studies Program in Mississippi.

Mission

The Mississippi State University-Meridian Master of Physician Assistant Studies Program will educate highly qualified, competent, healthcare providers who will increase access to care and provide primary care services to the diverse citizens of Mississippi.

Preparation

Students seeking a career as a Physician Assistant (PA) should acquire a sound foundation in the biological sciences and knowledge of the behavioral and social sciences in high school and college. Because of the increasing use of information technology in medicine, students are strongly encouraged to acquire familiarity with computers. They must have a demonstrated aptitude for scientific study, and, in addition, hands-on experience in healthcare. An awareness of the requirements and characteristics of the practice of medicine as a PA is desirable in reaching a mature decision to pursue a career as a PA.

Accreditation

Mississippi State University-Meridian has applied for Accreditation - Provisional from the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA). MSU-Meridian anticipates matriculating its first class in January 2020, pending achievement of Accreditation - Provisional status at the September 2019 ARC-PA meeting.

Accreditation - Provisional is an accreditation status granted when the plans and resource allocation, if fully implemented as planned, of a proposed program that has not yet enrolled students appear to demonstrate the program's ability to meet the ARC-PA Standards or when a program holding Accreditation - Provisional status appears to demonstrate continued progress in complying with the Standards as it prepares for the graduation of the first class (cohort) of students.

The program will not commence in the event Accreditation - Provisional is not granted. For more information on the developing Master of Physician Assistant Studies Program, please see the program website at https://www.meridian.msstate.edu/academics/physician-assistant/ or contact PA@meridian.msstate.edu. (PA@meridian.msstate.edu)

The program anticipates matriculating its first class in January 2020. Applications are accepted through CASPA, the online Centralized Application Service for Physician Assistant programs at https://caspa.liaisoncas.com/applicant-ux/#/login.

The Master of Physician Assistant Studies Program of Study is a prescribed 108 credit-hour program.

PAS 6016	Human Anatomy and Physiology for the Physician Assistant	6
PAS 6013	Introduction to the Physician Assistant Profession	3
PAS 6026	Patient Assessment for the Physician Assistant	6
PAS 6023	Clinical Diagnostic Methods for the Physician Assistant	3
PAS 6012	The Art of Medicine for the Physician Assistant	2
PAS 6022	Clinical Genetics for the Physician Assistant	2
PAS 6107	Clinical Medicine I for the Physician Assistant	7
PAS 6102	Clinical Skills for the Physician Assistant	2
PAS 6103	Clinical Decision Making for the Physician Assistant	3
PAS 6113	Health Promotion and Disease Prevention for the Physician Assistant	3
PAS 6104	Pathophysiology for the Physician Assistant	4
PAS 6112	Research Methods I for the Physician Assistant	2
PAS 6208	Clinical Medicine II for the Physician Assistant	8
PAS 6204	Principles of Pharmacology for the Physician Assistant	4
PAS 6203	Clinical Practice Issues for the Physician Assistant	3
PAS 6213	Behavioral Medicine for the Physician Assistant	3
PAS 6223	Clinical Specialties for the Physician Assistant	3
PAS 6202	Research Methods II for the Physician Assistant	2
PAS 8302	Clinical Transitions for the Physician Assistant	2

Total Hours		108
PAS 8403	Preceptorship Rotation for the Physician Assistant	3
PAS 8363	Elective Clinical Rotation for the Physician Assistant	3
PAS 8333	Internal Medicine Rotation for the Physician Assistant	3
PAS 8332	Seminar III for the Physician Assistant	2
PAS 8322	Capstone Project for the Physician Assistant	2
PAS 8321	Seminar II for the Physician Assistant	1
PAS 8301	Seminar I for the Physician Assistant	1
PAS 8312	Summative Experience for the Physician Assistant	2
PAS 8353	Emergency Medicine for the Physician Assistant	3
PAS 8343	Behavioral Medicine Rotation for the Physician Assistant	3
PAS 8323	General Surgery Rotation for the Physician Assistant	3
PAS 8313	Women's Health Rotation for the Physician Assistant	3
PAS 8303	Pediatric Rotation for the Physician Assistant	3
PAS 8308	Family Medicine Rotation for the Physician Assistant	8

College of Agriculture and Life Sciences

Dean: Dr. Scott Willard Associate Dean: Dr. Darrell Sparks, Jr. Director of Graduate Advising: Jessica Graves 201 Bost Extension Building Box 9760 Mississippi State, MS 39762 Telephone: 662-325-2110 Fax: 662-325-8580 E-mail: jessica.graves@msstate.edu (emily.shaw@msstate.edu) Website: http://www.cals.msstate.edu (http://www.cals.msstate.edu/)

Degree and Certificate Programs

Department	Degree and Major	Concentration	Thesis	Non-Thesis	Starkville	Meridian	Distance
Agricultural and Biological Engineering	Precision Agriculture Certificate				Х		
Agricultural Economics	Master of Agribusiness Management - Agribusiness Management			x	X		X
Agricultural Economics	Master of Science - Agriculture	Agricultural Economics	Х	Х	Х		
Animal and Dairy Sciences	Master of Agriculture - Agriculture	Animal and Dairy Sciences		Х	Х		Х
Animal and Dairy Sciences	Master of Science - Agriculture	Animal Science	Х	Х	Х		
Animal and Dairy Sciences	Doctor of Philosophy - Agricultural Sciences	Animal and Dairy Science	Х		X		
Biochemistry, Molecular Biology Entomology, and Plant Pathology	Master of , Agriculture - Agriculture	Entomology		Х	Х		

Biochemistry, Molecular Biology, Entomology, and Plant Pathology	-	Plant Pathology		X	X	
Biochemistry, Molecular Biology, Entomology, and Plant Pathology	-	Biochemistry	X	X	X	
Biochemistry, Molecular Biology, Entomology, and Plant Pathology	-	Entomology	X		X	
Biochemistry, Molecular Biology, Entomology, and Plant Pathology	-	Plant Pathology	Х		X	
Biochemistry, Molecular Biology, Entomology, and Plant Pathology		Biochemistry	Х		X	
Biochemistry, Molecular Biology, Entomology, and Plant Pathology		Entomology	X		X	
Biochemistry, Molecular Biology, Entomology, and Plant Pathology		Plant Pathology	X		X	
Biochemistry, Molecular Biology, Entomology, and Plant Pathology	Doctor of Philosophy - Molecular Biology		Х		X	
Food Science, Nutrition and Health Promotion	- Food Science,	Food Science and Technology	X		X	
Food Science, Nutrition and Health Promotion	- Food Science,	Health Promotion	Х	X	X	
Food Science, Nutrition and Health Promotion	Graduate Certificate: Clinical Health Promotion and Wellness Coaching	Health Promotion			X	X
Food Science, Nutrition and Health Promotion	Master of Science, - Food Science, Nutrition and Health Promotion	Nutrition	Х		X	
Food Science, Nutrition and Health Promotion	Master of Public Health	Public Health Nutrition		Х	X	Х
Food Science, Nutrition and Health Promotion	Doctor of Philosophy - Food Science, Nutrition and Health Promotion	Food Science and Technology	X		X	

Food Science,	Doctor of	Functional Foods,	Х		Х
Nutrition and Health Promotion	Philosophy-	Nutrition and Health	~		
Food Science, Nutrition and Health Promotion	Doctor of Philosophy - Food Science, Nutrition and Health Promotion	Nutrition	X		X
Human Sciences, School of	Master of Science - Agricultural and Extension Education	Leadership	X	X	X
Human Sciences, School of	Master of Science - Agricultural and Extension Education	Teaching	X	X	X
Human Sciences, School of	Master of Science - Early Intervention			Х	X
Human Sciences, School of	Master of Science - Fashion Design & Merchandising		Х	Х	X
Human Sciences, School of	Master of Science - Fashion Design & Merchandising	Merchandising	Х	Х	X
Human Sciences, School of	Master of Science - Human Development and Family Science		х	х	X
Human Sciences, School of	Doctor of Philosophy - Agricultural Sciences	Agricultural and Extension Education	х		X
Human Sciences, School of	Doctor of Philosophy - Human Development and Family Science		X		X
Human Sciences, School of	Gerontology Certificate				
Landscape Architecture	Master of Landscape Architecture - Landscape Architecture		x	x	X
Plant and Soil Sciences	Precision Agriculture Certificate				X
Plant and Soil Sciences	Master of Science - Plant & Soil Sciences	Agronomy	Х	Х	X
Plant and Soil Sciences	Master of Science - Plant & Soil Sciences	Horticulture	Х	Х	X
Plant and Soil Sciences	Master of Science - Plant & Soil Sciences	Weed Science	Х	Х	X

56 Graduate Catalog

Plant and Soil Sciences	Doctor of Philosophy - Plant & Soil Sciences	Agronomy	Х	Х	X
Plant and Soil Sciences	Doctor of Philosophy - Plant & Soil Sciences	Horticulture	Х	Х	X
Plant and Soil Sciences	Doctor of Philosophy - Plant & Soil Sciences	Weed Science	Х	Х	X
Poultry Science	Master of Agriculture - Agriculture	Poultry Science		Х	X
Poultry Science	Master of Science - Agriculture	Poultry Science	Х	Х	X
Poultry Science	Doctor of Philosophy - Agricultural Sciences	Poultry Science	х		X
Interdisciplinary Program	Master of Science - Agricultural Life Sciences	Animal Physiology	×Χ	Х	X
Interdisciplinary Program	Master of Science - Agricultural Life Sciences	Genetics	Х	Х	X
Interdisciplinary Program	Master of Science - Agriculture	Animal Nutrition	Х		Х
Interdisciplinary Program	Master of Science - Agriculture	Engineering Technology	Х	Х	X
Interdisciplinary Program	Doctor of Philosophy - Agricultural Sciences	Animal Nutrition	Х		X
Interdisciplinary Program	Doctor of Philosophy - Agricultural Sciences	Engineering Technology	X		X
Interdisciplinary Program	Doctor of Philosophy - Life Sciences	Animal Physiology	×Χ		X
Interdisciplinary Program	Doctor of Philosophy - Life Sciences	Genetics	Х		X

Interdisciplinary Curricula

These programs are based on course offerings from several departments and colleges, including but not limited to the following:

- Agricultural and Biological Engineering
- Agricultural Economics
- Animal and Dairy Sciences
- Basic Science (College of Veterinary Medicine)
- Biochemistry
- Molecular Biology
- Biological Sciences (College of Arts and Sciences)
- Entomology and Plant Pathology
- Poultry Science

- Wildlife, Fisheries and Aquaculture (College of Forest Resources)
- College of Business

The College of Agriculture and Life Sciences provides premier programs in agriculture, life sciences, and human ecology. Graduate students work with issues such as global food supply and safety, biotechnology, and improved standards of living and education in rural communities. New graduate programs are available in Human Development and Family Studies. Graduate education is also available in Landscape Architecture (one of a few programs in the nation). A master's degree with a concentration in health promotion is available through distance learning and is designed for professionals interested in enhancing their skills in designing, implementation, and evaluation of disease prevention and health promotions.

Agribusiness Management

Department Head: Dr. Ardian Harri (Interim) Graduate Coordinator: Dr. Matthew Interis 101 Lloyd Ricks Watson Box 5187 Mississippi State, MS 39762 Telephone: 662-325-2750 Website: www.agecon.msstate.edu (http://www.agecon.msstate.edu/)

An Interdisciplinary Program

The Master of Agribusiness Management (M.A.B.M.) program is an interdisciplinary degree between the College of Agriculture and Life Sciences and the College of Business, and is administered by the Department of Agricultural Economics. The program is designed to prepare students for employment in the management of agribusiness. Graduate coursework for the Starkville campus program may begin only during the Summer semester, while coursework for the online program may begin during the Fall, Spring, or Summer semester. Research assistantships are not available for students in the M.A.B.M. program. Additional information is found at the department's website, www.agecon.msstate.edu (http://www.agecon.msstate.edu/).

Admission Criteria

An applicant for admission to graduate study must hold a bachelor's degree from a fully recognized four-year educational institution that has unconditional accreditation with appropriate regional accrediting agencies. He/she must meet the admission requirements of the Graduate School and the Master of Agribusiness Management Program. Admission is based primarily on past performance, letters of recommendation, and the Graduate Record Examination (GRE) or Graduate Management Admission Test (GMAT) scores. Regular admission to graduate study in the M.A.B.M. program requires a minimum grade point average (last four semesters of undergraduate work) of 3.00/4.00. When a student is deficient in one of the criteria cited, the student's application, nevertheless, may be considered for admission based on the strength of other materials contained in the student's application. However, reasonable minimum levels of performance must be achieved in both the applicant's GPA and GRE or GMAT scores. International applicants not holding degrees from U.S. institutions must submit a TOEFL (Test of English as a Foreign Language) report of 575 PBT (84 iBT) or an IELTS (International English Language Testing Systems) score of 7.0 or higher to be considered for admission.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship**.

Academic Performance

Proroquisitos

Unsatisfactory performance may be defined as the failure to maintain a B average in graduate courses attempted after admission to the program, a grade of U, D, or F in any course, more than two grades below a B, or any other failure of a required component of one's program of study. Any one of these, or any combination of these, may constitute the basis for the termination of a student's graduate study in the program.

Master of Agribusiness Management

i leiequisites.		
ACC 2203	Survey of Accounting	3
or ACC 2013	Principles of Financial Accounting	
BQA 8443	Statistical Analysis for Business Decision-making	3
or BQA 2113	Business Statistical Methods I	
& BQA 3123	and Business Statistical Methods II	

Total Hours		15
MGT 8063	Survey of Management	3
FIN 3123	Financial Management	3
EC 4043	Survey of Economics	3

Total Hours

The foundation portion of the program consists of 15 hours that may be satisfied in part or total by prior undergraduate or graduate preparation. In addition, ACC, BQA, and FIN foundation requirements can be satisfied during the MBAMath week offered prior to the beginning of the Summer 1 term.

Total Hours		30
Approved Electives ²		9
AEC Graduate Courses ¹		9
MKT 8153	Strategic Marketing Management	3
FIN 8113	Corporate Finance	3
AEC 6530	Agribusiness Management Internship	3
ACC 8213	Financial Statement and Management Accounting Report Analysis for Decision Making	3
Core Requirements		

Total Hours

1 The student must receive credit for AEC 6113 and AEC 6223 if credit was not earned for these or equivalent courses at the undergraduate level.

2 The student must receive credit for EC 8103 if credit was not earned for EC 3123 or an equivalent course at the undergraduate level.

Program of Study/Completion Requirements

The Master of Agribusiness Management degree program requires a minimum of 31 hours of coursework which includes an internship. M.A.B.M. students must also successfully complete a comprehensive oral examination. At least 15 of the total course credit hours must be at the 8000 level.

Agricultural Economics

Department Head: Dr. Ardian Harri (Interim) Graduate Coordinator: Dr. Matthew Interis 101 Lloyds Ricks Watson Box 5187 Mississippi State, MS 39762 Telephone: 662-325-2750 Website: www.agecon.msstate.edu (http://www.agecon.msstate.edu/)

The Department of Agricultural Economics offers a degree program leading to the Master of Science in Agriculture with a concentration in Agricultural Economics. This program stresses thorough mastery of advanced economic theory, methods of quantitative analysis, and the applications of these methods to the problems of agriculture. The broad program of economic research conducted by the department affords a wide selection of areas from which the student may choose a specific problem for research.

The Master of Science in Agriculture with a concentration in Agricultural Economics program is designed for the student to begin graduate coursework in a fall semester; thus, the student must submit application materials prior to July 1. However, graduate research assistantship decisions are usually made in March, and admission to the program must be obtained before an assistantship may be granted. Students are encouraged to apply no later than February. For additional program information, please visit the department's website at www.agecon.msstate.edu (http://www.agecon.msstate.edu/).

Admission Criteria

To obtain regular admission status to the M.S. program, an applicant must meet all University-wide graduate admission requirements and must achieve acceptable scores on each section of the GRE. A minimum TOEFL (Test of English as a Foreign Language) report of 575 PBT (84 iBT) or an IELTS (International English Language Testing Systems) score of 7.0 or higher is required for all international students affected by this policy.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student shall be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. While in the provisional status, a student is not eligible to hold a graduate assistantship.

An Agricultural Economics student who initially obtains provisional admission status must receive a 3.00 GPA on the following courses that are to be taken in the first fall semester in order to achieve regular admission status:

AEC 6713	Quantitative Economics	3
AEC 6733	Econometric Analysis in Agriculture Economics	3
AEC 8163	Consumers, Producers, and Markets	3

Academic Performance

A student may be dismissed from the M.S. program for making more than two grades below a B on courses on the student's program of study. A student may appeal a dismissal decision by following normal appeal procedures outlined in this publication.

Prerequisite and Core Courses

A student must have previously completed the following undergraduate courses (or their equivalents) with a grade of C or higher before beginning the required graduate course sequence:

EC 3113	Intermediate Macroeconomics	3
EC 3123	Intermediate Microeconomics	3
MA 1613	Calculus for Business and Life Sciences I	3
ST 2113	Introduction to Statistics	3

The student admitted to the program enrolls in a rigorous core curriculum composed of courses in microeconomic theory, quantitative techniques, and research methods. The student is required to follow a "lock-step" curriculum as specified below:

Master of Science in Agriculture with Agricultural Economics Concentration - Non-Thesis

First Year, Fall Semester

Total Hours		32-37
Electives, if required to complete the 32	-hour program of study	5
AEC 7000	Directed Individual Study in Agricultural Economics and Agribusiness	1-6
AEC 8843	Survey Design and Experimental Economics	3
AEC 8233	Applied Welfare and Environmental Economics	3
Other Requirements		
AEC 8403	Game Theory	3
AEC 8123	Analysis of Agricultural Markets.	3
AEC 8143	Agricultural Production Economics	3
AEC 8621	Research Seminar II	1
First Year, Spring Semester		
AEC 8163	Consumers, Producers, and Markets	3
AEC 6733	Econometric Analysis in Agriculture Economics	3
AEC 6713	Quantitative Economics	3
AEC 8611	Research Seminar I	1

The curriculum is designed as a lock-step sequence of 26 hours of core coursework. The non-thesis student must take from 1 to 6 Directed Individual Study hours toward a research paper. Approved electives can be used to meet the 32-hour requirement. A minimum of 15 hours at the 8000-level is required.

Master of Science in Agriculture with Agricultural Economics Concentration - Thesis

First Year, Fall Semester

•		
AEC 8611	Research Seminar I	1
AEC 6713	Quantitative Economics	3
AEC 6733	Econometric Analysis in Agriculture Economics	3
AEC 8163	Consumers, Producers, and Markets	3
First Year, Spring Semester		
AEC 8403	Game Theory	3
AEC 8621	Research Seminar II	1

Total Hours		32
AEC 8000	Thesis Research/ Thesis in Agricultural Economics and Agribusiness	6
AEC 8843	Survey Design and Experimental Economics	3
AEC 8233	Applied Welfare and Environmental Economics	3
Other Requirements		
AEC 8123	Analysis of Agricultural Markets.	3
AEC 8143	Agricultural Production Economics	3

The curriculum is designed as a lock-step sequence of 26 hours of core coursework. The thesis student must take at least 6 hours of AEC 8000 Thesis/ Research. At least 12 hours of coursework, exclusive of the thesis credits, must be 8000-level courses.

The thesis is completed under the supervision of the student's graduate committee. Completion of the degree requires students to present and defend their research to the satisfaction of the Agricultural Economics faculty.

Agricultural and Biological Engineering

Department Head: Dr. Alex Thomasson Graduate Coordinator: Dr. Steve Elder 150 Agricultural Engineering Building Box 9632 Mississippi State, MS 39762 Telephone: 662-325-3282

E-mail: abe_head@abe.msstate.edu (abe%20head@abe.msstate.edu)

Graduate study is offered in the Department of Agricultural and Biological Engineering leading to the degree of Master of Science in Agriculture with a concentration in Engineering Technology or a Doctor of Philosophy in Agricultural Sciences with a concentration in Engineering Technology. A Precision Agriculture Certificate is also offered.

Precision Agriculture Certificate

There is a need to train students in the broad array of precision agriculture technologies. This certificate program complements majors taught across College of Agriculture and Life Sciences (CALS) departments. This certificate features emerging technologies in decision-based agricultural planning and implementation. The certificate requires a minimum of 16 hours with at least 10 credit hours specific to Precision Agriculture coursework and 6 additional hours of electives or optional courses. Graduate requirements: PSS/ABE 2543 may be required as a leveling course and graduates may need a combination of Option 1 and Option 3 (below) to meet graduate credit requirements.

To obtain a Precision Agriculture Certificate, students are required to complete the following 16 hours.

· · · · · · · · · · · · · · · · · · ·	,	
PSS 2543	Precision Agriculture I	3
or ABE 2543	Precision Agriculture I	
PSS 4543	Precision Agriculture II (or PSS 6543 or ABE 4543/6543)	3
ECE 4411	Remote Sensing Seminar (or ECE 6411 or FO 4411/6411 or GR 4411/6411 or PSS 4411/6411)	1
ABE 4000	Directed Individual Study in Agricultural and Biological Engineering (or ABE 7000 or PSS 4000/7000)	3
Option 1: Choose from the following.		6-8
ABE 6483/4483	Introduction to Remote Sensing Technologies	
or PSS 6483/4483	Introduction to Remote Sensing Technologies	
or ECE 6423/4423	Introduction to Remote Sensing Technologies	
ABE 3513	The Global Positional System and Geographic Information Systems in Agriculture and Engineering	
FO 4471/6471	(and GIS for Natural Resource Management)	
FO 4472/6472		
PSS 4373/6373	Geospatial Agronomic Management	
GR 4303/6303	Principles of GIS	
GR 3303	Survey of Geospatial Technologies	
Option 2 (Community/Junior College AGT of	ourses) : Any TWO transfer courses from the following in a Precision Agriculture Technology	6-8

Concentration with the Postsecondary Agriculture Business and Management Technology program

AGT 1163 Introduction to Spatial Information Systems

AGT 2154 Geographic Information Syste	ms I	
AGT 1254 GPS Data Collection		
AGT 2164 Variable Rate Technology		
AGT 1354 Remote Sensing		
AGT 2474 Site Specific Pest Manageme	nt	
OR Completion of the UAV Training Progra	m courseork at Hinds Community College	
Option 3: Discipline Specific Electives		6-8
ABE 3413	Bioinstrumentation I	
ABE 4163	Agricultural and Off-Road Machinery Management	
or ABE 6163	Machinery Management for Agro-Ecosystems	
ABE 4263/6263	Soil and Water Management	
ABE 4844/6844		
ABE 6423	Bioinstrumentation II	
AEC 3413	Introduction to Food Marketing	
AEC 3513	Economics of Food and Fiber Production	
AEC 4113/6113	Agribusiness Firm Management	
AEC 4133/6133	Analysis of Food Markets and Prices	
AEC 4343/6343	Advanced Farm Management	
BIO 4214	General Plant Physiology	
EPP 3124	Forest Pest Management	
EPP 4163/6163	Plant Disease Management	
EPP 4214/6214	Diseases of Crops	
EPP 4234/6234	Field Crop Insects	
EPP 4263/6263	Principles of Insect Pest Management	
FIN 3123	Financial Management	
PSS 3301	Soils Laboratory	
PSS 3303	Soils	
PSS 3133	Introduction to Weed Science	
PSS 4113/6113	Agricultural Crop Physiology	
PSS 4313/6313	Soil Fertility and Fertilizers	
PSS 4333/6333	Soil Conservation and Land Use	
PSS 4343/6343	Controlled Environment Agriculture	
PSS 4813/6813	Herbicide Technology	
PSS 4823/6823	Turfgrass Weed Management	

Admission Criteria

Prerequisites for admission into the graduate program include all the general requirements of the Graduate School, completion of the GRE general test and the submission of scores, and identification of a departmental professor who is willing to serve as research director for the master's or Ph.D. project. International students must obtain a TOEFL score of 550 PBT (79 iBT) or an IELTS (International English Language Testing Systems) score of 6.5 or higher. Exceptions to these requirements are considered on a case-by-case basis and require approval of the Department Chair.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Performance

Unsatisfactory performance in the graduate program in Agricultural and Biological Engineering is defined as any of the following:

- · Failure to maintain a 3.00 average GPA in attempted graduate courses after admission to the program
- A grade of U, D, I, or F in any one course
- · More than two courses not exceeding 8 credit hours with a grade of C
- · Failure of the research defense
- · Unsatisfactory evaluation of a thesis
- · Or failure of a required component of the program of study

Any one of these, or a combination of these, will constitute the basis for review for possible dismissal. The graduate coordinator will review the record, along with the student's graduate committee, and take a final course of action which will be immediate dismissal or the establishment of a probationary period in which corrective action must take place. Appeal of dismissal can be made by submitting a written appeal statement to the department head. If the dismissal is upheld by the department upon the student's appeal, the student can then submit a written appeal to the dean of the College of Agriculture and Life Sciences.

The Department of Agricultural and Biological Engineering also offers the Master of Science degree in Biological Engineering and Doctor of Philosophy degree in Engineering; both programs are housed in the College of Engineering. See program information in the James Worth Bagley College of Engineering section of this publication.

Accelerated Program

The goal of the accelerated B.S./M.S. Program in the Department of Agricultural & Biological Engineering (ABE) is to enable highly qualified students to earn up to 12 hours of graduate course credit during their final year of undergraduate studies. Students will complete graduate level courses (6000-level) and receive dual credit for the equivalent undergraduate course (4000-level). Students must apply and be admitted to an accelerated program prior to enrolling in the graduate level classes. Interested students must consult with the Graduate Coordinator to ensure graduate credit could be applied to a program of study for the graduate degree.

For admission, the student must:

- 1.) Be enrolled at Mississippi State University in Biological or Biomedical Engineering.
- 2.) Have completed a minimum of 90 credit hours of undergraduate coursework
- 3.) Have an overall GPA of 3.5 or higher for all undergraduate work

Students interested in applying to the Accelerated Program should contact their academic advisors or undergraduate coordinator.

Master of Science in Agriculture with Engineering Technology Concentration - Thesis

Total Hours		30
ABE 8000	Thesis Research/ Thesis in Agricultural and Biological Engineering	6
Graduate-level coursework		7
ABE 8XXX	Minimum of 12 hours in 8000-level or higher courses	12
ABE 8921	Agriculturual and Bio Engineering Seminar	
ABE 8911	Agricultural and Biological Engineering Seminar	
Select one of the following:		1
ST 8114	Statistical Methods	4

Total Hours

The Master of Science degree in Agriculture with a concentration in Engineering Technology requires a minimum of 24 credit hours of coursework beyond the baccalaureate degree. A thesis and an oral comprehensive examination in defense of the thesis are required. Once the student's research plan has been established, the student is required to present his/her research plan to the faculty in the form of a departmental seminar.

Master of Science in Agriculture with Engineering Technology Concentration - Non-Thesis

ST 8114 Statistical Methods 4 Select one of the following: 1 ABE 8911 Agricultural and Biological Engineering Seminar ABE 8921 Agriculturual and Bio Engineering Seminar Graduate-level coursework 25	Total Hours		30
Select one of the following: 1 ABE 8911 Agricultural and Biological Engineering Seminar	Graduate-level coursework		25
Select one of the following: 1	ABE 8921	Agriculturual and Bio Engineering Seminar	
	ABE 8911	Agricultural and Biological Engineering Seminar	
ST 8114 Statistical Methods 4	Select one of the following:		1
	ST 8114	Statistical Methods	4

Total Hours

The non-thesis option for the Master of Science in Agriculture with a concentration in Engineering Technology requires a minimum of 30 credit hours of coursework with at least 15 hours at the 8000-level. The major professor and graduate committee will determine specific course requirements for the student's program. The student must submit a research paper.

2

Doctor of Philosophy in Agricultural Sciences with Engineering Technology Concentration

One of the	following	Sominare	takon	twico	for 2	houre	crodit.
One of the	lonowing	Seminars	lanen	INNICE	101 2	nouis	creuit.

Total Hours		68
ABE 9000	Dissertation Research/ Dissertation in Agricultural and Biological Engineering	20
Other graduate coursework (8000-level: at least 50% of 48 hours)	36
ST 8114	Statistical Methods	4
ABE 7000 or other ABE grad	uate courses	6
ABE 8921	Agriculturual and Bio Engineering Seminar	
ABE 8911	Agricultural and Biological Engineering Seminar	
One of the following Seminars taken twice for 2 hours credit.		

Doctoral students are required to complete a minimum of 68 degree program hours including 20 hours of research beyond the baccalaureate degree. A preliminary examination, a dissertation, and an oral examination in defense of the dissertation are required. Once the student's research plan has been established, the student is required to present his/her research plan to the faculty in the form of a departmental seminar.

Animal Nutrition

Graduate Coordinator: Dr. Jamie Larson 4024 Wise Center Box 9815 Mississippi State, MS 39762 Telephone: 662-325-0040 E-mail: j.larson@msstate.edu

An Interdisciplinary Curriculum

The graduate program in Animal Nutrition is an interdepartmental curriculum leading to a Master of Science in Agriculture with a concentration in Animal Nutrition or a Doctor of Philosophy in Agricultural Sciences with a concentration in Animal Nutrition. The student selects course offerings from Animal and Dairy Sciences; Poultry Science; Food Science, Nutrition, and Health Promotion; Wildlife, Fisheries and Aquaculture; and Biochemistry.

Master of Science in Agriculture with Concentration in Animal Nutrition

Admission Criteria

Prerequisites for admission include a bachelor's degree in Animal, Dairy or Poultry Sciences; Food Science, Nutrition, and Health Promotion; Fisheries or Aquatic Science; Biological or Physical Science with an adequate background in chemistry. A minimum of 3.00 quality point average on a 4.00 scale is required. The quality point average can be based on either overall undergraduate degree work or the last two years (60 semester hours) of undergraduate work. Any request for Graduate Record Examination (GRE) test scores is dependent upon the faculty member who will serve as the thesis director (major professor), but the GRE score is not an Animal Nutrition graduate program requirement. A statement of purpose and letters of recommendation are required of all applicants.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Doctor of Philosophy in Agricultural Sciences with Concentration in Animal Nutrition

Admission Criteria

Prerequisites for admission include a master's degree. A minimum of 3.00 quality point average on a 4.00 scale is required for all post-baccalaureate courses. Any request for Graduate Record Examination (GRE) scores is dependent upon the faculty member who will serve as the thesis director (major professor), but the GRE score is not an Animal Nutrition graduate program requirement. A statement of purpose and letters of recommendation are required of all applicants.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University and the graduate program for Animal Nutrition for admission to graduate study may be granted admission as a degree-seeking graduate student with provisional status. The student must have as his or her initial objective advancement to regular status. A provisional student must receive a 3.00 GPA for the first 9 hours of graduate-level courses on his or her program of study taken at Mississippi State University (courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement) in order to achieve regular status. If a 3.00 is not attained, the provisional student shall be dismissed from graduate study.

Master of Science in Agriculture with Animal Nutrition Concentration

Total Hours		30
Graduate-level coursework		10
Research/thesis		6
ST 8214	Design and Analysis of Experiments	4
ST 8114	Statistical Methods	4
BCH 6613	General Biochemistry II	3
BCH 6603	General Biochemistry I	3

At least 12 hours of coursework must be at the 8000-level.

The Master of Science degree requires a thesis defense. The Animal Nutrition program does not offer a non-thesis M.S. degree.

A minor is not required but, if selected, an additional 12 hours of credit and a committee member from the minor area are required. A graduate program of study should be submitted and approved by the student's graduate committee and graduate coordinator by the end of the first semester of graduate study. The graduate committee should be composed of the major professor and at least two committee members, one of whom should be a member of the Animal Nutrition graduate faculty. Additional committee members may be included at the discretion of the major professor.

Doctor of Philosophy in Agricultural Sciences with Animal Nutrition Concentration

The doctoral program in Agricultural Sciences/Animal Nutrition has no course requirements; however, BCH 6603, BCH 6613, ST 8114, and ST 8214 are required if they were not completed during the student's master's degree. Additionally, a language or research skill requirement, a preliminary/ comprehensive examination, and a final dissertation defense are required. The research skill requirement requires the student to demonstrate a technical proficiency in a research skill not directly or routinely related to his or her research area. This proficiency may be demonstrated by successful completion of six hours of credit (examples include 6 hours of statistics excluding ST 8114 and ST 8214; 6 hours in computer science; 6 hours in a research area excluding minor or required courses; directed individual study courses) approved by the student's graduate committee and is not part of the program of study. A minor is not required, but if a minor is selected it must consist of a minimum of 12 hours of graduate credit, and a committee member from the minor area is required. A graduate program of study should be submitted and approved by the student's graduate committee and graduate coordinator by the end of the first semester of graduate study. The graduate committee should be composed of at least four members including the major professor who must be a full member of the graduate Animal Nutrition faculty, one other member of the graduate Animal Nutrition faculty, and two additional members, one of whom must be from the minor field if a minor is selected. The other may be from outside the major area.

Animal Physiology

Graduate Coordinator: Dr. Carrie Vance 201 Bost Box 9760 Mississippi State, MS 39762 Telephone: 662-325-0233

Email: swillard@cals.msstate.edu

An Interdisciplinary Program

The graduate program in Animal Physiology is an interdisciplinary curriculum leading to a Master of Science in Agricultural Life Sciences with a concentration in Animal Physiology and/or Doctor of Philosophy degree in Life Sciences with a concentration in Animal Physiology. Course offerings are from several departments including, but not exclusively, Animal and Dairy Sciences; Basic Science (College of Veterinary Medicine); Biochemistry and Molecular Biology; Biological Sciences; Entomology and Plant Pathology; Poultry Science; and Wildlife, Fisheries and Aquaculture. The program of study is developed by the student and his/her major professor with the approval of the student's graduate program committee. Specific courses vary depending on the needs of the student. A limited number of assistantships are available to qualified applicants.

2

Admission Criteria

Prerequisites for admission include a bachelor's or master's degree in animal, dairy or poultry science; human sciences; wildlife; fisheries or aquatic science; biological or physical science; or a doctor of medicine or veterinary medicine degree with an adequate background in chemistry. A minimum 3.00 overall grade point average (GPA) on a 4.00 scale is required. A student who has not fully met the requirements stipulated by the University and the program for admission (i.e., students with 2.50 to 2.99 GPA) may be granted admission to the Animal Physiology program with provisional status. The Graduate Record Exam (GRE) is not required for admission, but applicants are required to attempt the GRE. A paper-based (PBT) TOEFL (Test of English as a Foreign Language) of 575 (84 iBT) or an IELTS (International English Language Testing Systems) score of 7.0 or better is required of all international applicants. Letters of recommendation are required of all applicants.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Performance and Continuous Enrollment

An overall GPA of 3.00 is required for graduation. To be eligible for the preliminary/comprehensive examination, a graduate student must maintain an overall B average in all graduate courses attempted after admission to the program. Continuous enrollment in the Animal Physiology program is dependent upon satisfactory evaluation of academic performance and progress toward the completion of the respective research degrees. A student will be recommended for dismissal if he/she receives more than two grades of C or any grade below a C in courses taken for credit.

Master of Science in Agricultural Life Sciences with Animal Physiology Concentration

Two hours from the following:

Total Hours		30
Additional graduate-level coursework		10
PHY 8000	Thesis Research/ Thesis in Animal Physiology	6
8000-level coursework		12
PHY 8841	Animal Physiology Seminar	
PHY 8811	Animal Physiology Seminar	
r wo hours norn the following.		۷. ۲

A thesis defense is required.

M.S. candidates are required by the Animal Physiology program to submit a written proposal of the intended research area during the first year of the graduate program, in addition to the submission of an annual progress report of research, teaching, and/or extension and service activities of the thesis work.

The Animal Physiology program does not offer a non-thesis M.S. degree.

Other course requirements may include BCH 6603 and/or BCH 6613 and ST 8114 or equivalents.

A minor is not required but if selected an additional 9 hours of credit is required and a committee member from the minor area is required.

A graduate program of study should be submitted and approved by the student's graduate committee and graduate coordinator by the end of the first semester of graduate study. The graduate committee should be composed of the major professor and two committee members, one of whom should be a member of the Animal Physiology graduate faculty and the other may be a minor professor. Additional committee members may be included at the discretion of the major professor.

Doctor of Philosophy in Life Sciences with Animal Physiology Concentration

The Ph.D. in Animal Physiology requires a minimum of three academic years beyond the B.S. degree; the number of hours will vary as determined by the student and major professor. The student is required to take at least 3 hours of PHY 8811 and PHY 8841.

Ph.D. candidates are required by the Animal Physiology program to submit a written proposal of the intended research area during the first year of the graduate program, in addition to the submission of an annual progress report of research, teaching, and/or extension and service activities of the dissertation work. For a Ph.D. candidate, a written and oral preliminary/comprehensive examination will be administered by the student's graduate committee in accordance with Graduate School guidelines prior to the submission of defense of dissertation research.

The preliminary/comprehensive examination must be attempted by the end of the fifth semester of the program.

Other course requirements may include BCH 6603, BCH 6613, ST 8114, and ST 8214 or equivalents.

A minor is not required, but if a minor is selected an additional 12 hours of graduate credit is required and a committee member from the minor area is required.

A program of study should be submitted and approved by the student's graduate committee and graduate coordinator by the end of the first semester of graduate study. If a minor is selected, the graduate committee should be composed of at least five members including the major professor, who must be a full member of the Animal Physiology graduate faculty; at least two additional members of the Animal Physiology graduate faculty; at least two additional members of the Animal Physiology graduate faculty and two additional members, one of whom must be from the minor field; the other may be from outside the major area. Additional committee members may be included at the discretion of the major professor.

Animal and Dairy Sciences

Department Head: Dr. Jane Parish (Interim) Graduate Coordinator: Dr. Jamie Larson 4025 Wise Center Box 9815 Mississippi State, MS 39762 Telephone: 662-325-0040 E-mail: j.larson@msstate.edu

The Animal and Dairy Sciences program offers graduate study toward the Master of Science (thesis) in Agriculture with a concentration in Animal Science; the Master of Agriculture with a concentration in Animal and Dairy Sciences (non-thesis); and Doctor of Philosophy in Agricultural Sciences with a concentration in Animal Science, Master of Agriculture (non-thesis option), and a Doctor of Philosophy in Agricultural Sciences with a concentration in Animal and Dairy Sciences.

Admission Criteria

A minimum of 3.00 GPA is required for all programs (Master of Science, Master of Agriculture, and Doctor of Philosophy). Individual faculty serving as major professors may have additional requirements for students they advise. Therefore, it is advisable that a prospective student contact faculty with whom he/she is interested in working to determine if they have additional admission requirements. An international applicant is required to have a TOEFL (Test of English as a Foreign Language) score of 575 PBT (84 iBT) or an IELTS (International English Language Testing Systems) score of 7.0 or higher to be considered for admission.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. See Provisional Admission Requirements in this *Catalog*.

Academic Performance

The Department of Animal and Dairy Sciences adheres to the academic performance standards of the Graduate School and CALS. Students are referred to these criteria for provisional admission, contingent admission, academic performance, and dismissal policies.

To graduate, the student must complete all University and degree program requirements listed in the *Graduate Catalog* under which he/she began the program. A graduate student cannot graduate under any of the following circumstances.

- 1. A GPA lower than 3.00 for all courses attempted for graduate credit after admission to the degree program or
- 2. A grade of D or lower on the program of study or
- 3. More than two courses (not exceeding 9 credit hours) with a grade of C or lower earned for all courses since admission into the program,k including those outside the program of study* or
- 4. A U grade in thesis or dissertation research credit in the final semester or
- 5. A grade of I (Incomplete) on his/her transcript.

*NOTE: The original grade for a course that is retaken will not be included in the 8 hours. However the original grade is included as part of the calculation of the GPA. See the Course Course Retake Policy section for additional details.

No graduate courses with pass/fail credit are accepted as part of a graduate program. Grades of pass/fail are not awarded at MSU and cannot be transferred to MSU.

A GPA of 3.00 on the minor coursework is required for students completing a minor.

2

Stipends

Students who have not met the requirements for full admission to their degree program are not eligible to receive an assistantship. Students with a GPA less than 3.00 or who have been admitted on a provisional/probationary status are not eligible to receive an assistantship. Graduate assistantships provide students a salary for 20 hours of work per week which is NOT part of their own research. These 20 hours per week may be spent on research, teaching, and/or service. The student is also expected to complete work toward their his or her own research IN ADDITION TO their assistantship duties.

Master of Science in Agriculture with Animal Sciences Concentration - Thesis

The program of study is developed by the student and his/her major professor with approval by the student's graduate committee in accordance with Graduate School policy and must include core courses as specified below. In addition to the Graduate School requirements for a master's graduate committee, the department requires that at least two committee members must be from the Department of Animal and Dairy Sciences.

For the master's degree in Agriculture with a concentration in Animal Science, the student must have completed or will be required to complete in addition to the graduate coursework, 9 credit hours of animal/dairy sciences courses. All students are expected to demonstrate a working knowledge of the Animal and Dairy Sciences field. Opportunities to meet this expectation include: audit additional animal sciences courses (below 4000 level), serve as a teaching assistant for Introduction to Animal Science, or attend departmental journal clubs. Students not holding a degree in Animal or Dairy Sciences (or related field) will be required to do at least one of the above, as directed by the major advisor.

Graduate Seminar		2
(ADS 8111, ADS 8121, o	r ADS 8131 are suggested courses.)	
Statistics		8
(ST 8114 and ST 8214 ar	re suggested courses.)	
Biochemistry		3
(ADS 8333, BCH 6013, B	CH 6603, or BCH 6613 are suggested courses.)	
ADS 8000	Thesis Research/ Thesis in Animal and Dairy Sciences	6
Graduate level coursework	1	11
Total Hours		30

At least 12 hours of coursework must be taken at the 8000 level.

M.S. thesis candidates are required by the Department of Animal and Dairy Sciences to submit an annual progress report of research, teaching, extension and service activities, and a final written and oral presentation of the thesis work.

Master of Agriculture with Animal and Dairy Sciences Concentration - Non-Thesis

The Master of Agriculture degree is a non-thesis advanced degree designed to prepare graduates for careers or professional schools. A concentration is selected and students develop a program of study with approval by the student's graduate committee in accordance with Graduate School policy and course requirements for the concentration. Students are required to complete 30 hours of coursework as approved by the graduate committee. Some Directed Individual Study courses, numbered at the 7000 level, may be approved to meet the 8000-level requirement. Not more than 6 hours of graduate credit may be earned in Direct Individual Study courses. Students will also have to complete a scholarly activity, participate in research projects, and develop a scholarly document focused on subject area. The program is offered on the Starkville Campus and through the Center for Distance Education.

Graduate Seminar

1

Total Hours	30
Graduate-level coursework ¹	14
Directed Individual Study	3
(ADS 8333, BCH 6013, BCH 6603, or BCH 6613 are suggested courses.)	
Biochemistry	3
(ST 8114, ADS 8004, or ST 8124 are suggested courses.)	
Statistics	8
(ADS 8111 [repeatable] is suggested course.)	

¹ At least 15 hours of coursework must be taken at the 8000 level.

Doctor of Philosophy in Agricultural Sciences with Animal and Dairy Science Concentration

The program of study is developed by the student and his/her major professor with approval by the student's graduate committee in accordance with Graduate School policy and must include core courses as specified below. In addition to the Graduate School requirements for a Ph.D.'s graduate committee, the department requires that at least two committee members be from the Department of Animal and Dairy Sciences.

Completion of a Ph.D. requires substantial academic work in the field or program of interest beyond the bachelor's level and includes both formal coursework and research (dissertation credit hours). Mississippi State University requires doctoral students earn at least 54 hours of graduate credit beyond the bachelor's level, which includes a required 20 hours of dissertation credits. Of the 54 hours, at least 24 must be from GPA-graded graduate coursework with a minimum of 12 credit hours at the 8000 level or higher (excluding dissertation research credits), and at least 20 dissertation research credits. The remaining 10 hours can be earned with coursework credits, dissertation/research credits, or a combination of both. A student could be required to take additional hours, including dissertation credit hours, as well as permit previous graduate degree coursework in the field to contribute to that total. Program of study courses must be approved by the student's committee. A student may be required to take an ESL, LSK, or undergraduate course, but these courses or audited courses cannot be included on a program.

For the Ph.D. degree in Agriculture with a concentration Animal and Dairy Sciences, the student must have completed or will be required to complete in addition to the graduate coursework, 9 credit hours (4000 level or above) of animal/dairy sciences courses. These 9 credit hours must include at least one course in breeding, nutrition, or reproduction and at least one course in a species-specific production system. All students are expected to demonstrate a working knowledge of the Animal and Dairy Sciences field. Opportunities to meet this expectation include: audit additional animal sciences courses (below 4000 level), serve as a teaching assistant for Introduction to Animal Science, or attend departmental journal clubs. Students not holding a degree in Animal or Dairy Sciences (or related field) will be required to do at least one of the above, as directed by the major advisor.

Ph.D. candidates are required by the Department of Animal and Dairy Sciences to submit a written proposal of the intended research area during the first year of the graduate program, in addition to the submission of an annual progress report of research, teaching, extension and service activities, and a final written and oral presentation of the dissertation work.

For a Ph.D. candidate, an oral and written preliminary/comprehensive examination will be administered by the student's graduate committee in accordance with Graduate School policy prior to the submission or defense of dissertation research.

Total Hours		54
(Can be graded coursework	and/or dissertation credits)	
Electives ¹		10
GPA-graded graduate coursework at at least 12 hours at the 8000 level or higher ¹		21
ADS 9000	Dissertation Research/ Dissertation in Animal and Dairy Sciences	20
(ADS 8111, ADS 8121, or A	DS 8131 are suggested courses.)	
Graduate Seminar		3

¹ Beyond the B.S. degree

Biochemistry, Molecular Biology, Entomology, and Plant Pathology

Department Head: Dr. Jeffrey Dean Graduate Coordinator: Dr. Natraj Krishnan 133 Clay Lyle Building Box 9775 Mississippi State, MS 39762 Telephone: 662-325-2978 E-mail: nkrishnan@entomology.msstate.edu; nk260@msstate.edu

The department offers graduate study leading to the following degrees:

- Master of Science in Agricultural Life Sciences with a concentration in Biochemistry, Entomology, or Plant Pathology
- Master of Agriculture in Agriculture with a concentration in Entomology or Plant Pathology
- Doctor of Philosophy in Molecular Biology
- · Doctor of Philosophy in Life Sciences with a concentration in Biochemistry, Entomology, or Plant Pathology

The department also participates in interdisciplinary programs leading to the following degrees:

- Master of Science in Agricultural Life Sciences with a concentration in Animal Physiology or Genetics
- Master of Science in Agriculture with a concentration in Animal Nutrition

- · Doctor of Philosophy in Life Sciences with concentrations in Animal Physiology or Genetics
- Doctor of Philosophy in Agricultural Sciences with a concentration in Animal Nutrition

Admission Criteria

Prerequisites for admission include a bachelor's or master's degree in a physical or life science with a strong background in the program discipline of interest (biochemistry, molecular biology, entomology, or plant pathology). A graduate screening committee, composed of members of the Biochemistry, Molecular Biology, Entomology, and Plant Pathology faculty, screens all applicants. Final acceptance into a graduate program is contingent upon the availability of a suitable major professor. A minimum 2.75 overall grade point average on a 4.00 scale is required for admission. Test scores from the Graduate Record Examination (GRE) are **not** a required component of a completed application, but may be submitted for consideration if a candidate feels they may help offset another component of the application, such as a low GPA. International students are required to have a TOEFL (Test of English as a Foreign Language) score of 500 PBT (61 iBT) or an IELTS (International English Language Testing Systems) score of 5.5 (non-English speaking international students).

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Performance

Maintenance of an overall GPA of 3.00 or greater is expected for students enrolled in M.S. or Ph.D. programs in the department. The student is allowed only two Cs. Any third C or the first grade below C (a D or F) is grounds for dismissal.

Approved "Programs of Study" are provided below. Students should develop programs of study with their major professor and graduate committee as Graduate Coordinator consent. If substitutions are made for required courses, these must be documented on the program of study form.

Master of Science in Agricultural Life Sciences with Biochemistry Concentration -Thesis

Total Hours		30
BCH 8000	Thesis Research/ Thesis in Biochemistry, Molecular Biology, Entomology and Plant Pathology	6
Graduate-level coursework		4
BCH 8101	Seminar ²	2
BCH 8654	Intermediary Metabolism ¹	4
BCH 6804	Molecular Biology Methods ¹	4
BCH 6414	Protein Methods	4
BCH 6613	General Biochemistry II (prerequisite)	3
BCH 6603	General Biochemistry I (prerequisite)	3

Total Hours

¹ Students completing the split-level BCH core courses at MSU at the 4000-level are exempt from these classes and other approved courses will be substituted in consultation with the major professor and the student's graduate committee, and a final oral examination.

² All students are required to present two seminars; the first usually in the second semester in residence (e.g., proposal topic) and one on the final research results.

At least 12 hours of coursework must be taken at the 8000 level.

Master of Science in Agricultural Life Sciences with Biochemistry Concentration - Non-Thesis

BCH 6603	General Biochemistry I (prerequisite)	3
BCH 6613	General Biochemistry II (prerequisite)	3
BCH 6414	Protein Methods	4
BCH 6804	Molecular Biology Methods ¹	4
BCH 8654	Intermediary Metabolism ¹	4

Total Hours		33
BCH 7000	Directed Individual Study in Biochemistry, Molecular Biology, Entomology and Plant Pathology 3	3
Graduate-level coursework		10
BCH 8101	Seminar ²	2

Total Hours

- 1 Students completing the split-level BCH core courses at MSU at the 4000-level are exempt from these classes and other approved courses will be substituted in consultation with the major professor and the student's graduate committee, and a final oral examination.
- 2 All students are required to present two seminars; the first usually in the second semester in residence (e.g., proposal topic) and one on the final research project.
- 3 The research paper will be the equivalent of a research literature review and will be reviewed by the student's committee.

At least 15 hours of coursework must be taken at the 8000 level.

Master of Science in Agricultural Life Sciences with Entomology or Plant Pathology **Concentration - Thesis**

EPP 8000	Thesis Research/ Thesis in Entomology and Plant Pathology	6
EPP 8121	Seminar	1
EPP 8111	Seminar	1
Other graduate-level coursework		10
Coursework at 8000-level or higher		12

Master of Agriculture in Agriculture with Entomology Concentration - Non-Thesis

Total Hours	30
Other graduate-level coursework	10
Graduate-level coursework at the 8000 level or higher	12
(EPP 7000 or BCH 7000)	
Directed Individual Study	6
(EPP 8111, EPP 8121, or BCH 8101)	
Graduate Seminar	2

Students are required to complete 30 hours of coursework as approved by his/her graduate committee. Some Directed Individual Study courses, numbered at the 7000 level, may be approved to meet the 8000-level course requirement. Students will also have to complete a scholarly activity, participate in research projects, and develop a scholarly document focused on subject area.

Master of Agriculture in Agriculture with Plant Pathology Concentration - Non-Thesis

Graduate Seminar	2
(EPP 8111, EPP 8121, or BCH 8101)	
Directed Individual Study	6
(EPP 7000 or BCH 7000)	
Graduate-level coursework at the 8000 level or higher	12
Other graduate-level coursework	10
Total Hours	30

Students are required to complete 30 hours of coursework as approved by his/her graduate committee. Some Directed Individual Study courses, numbered at the 7000 level, may be approved to meet the 8000-level course requirement. Students will also have to complete a scholarly activity, participate in research projects, and develop a scholarly document focused on subject area.

Doctor of Philosophy in Life Sciences with Biochemistry Concentration

Baccalaureate Degree to Ph.D.

BCH 6603	General Biochemistry I (prerequisite)	3
BCH 6613	General Biochemistry II (prerequisite)	3
Select one of the following:		3-4

Total Hours		60
Additional graduate-level courses		12-13
Enrichment courses ³		12
BCH 9000	Dissertation Research/ Dissertation in Biochemistry,Molecular Biology,Entomology and Plant Pathology	20
BCH 8101	Seminar ²	2
or BCH 6804	Molecular Biology Methods	
BCH 8654	Intermediary Metabolism ¹	4
BCH 8633	Enzymes	
BCH 6623	Biochemistry of Specialized Tissues	
BCH 6414	Protein Methods	

Total Hours

- 1 Or equivalent BCH or Life Science-related coursework; students completing the split-level BCH core courses at MSU at the 4000-level are exempt from these classes, and other approved courses will be substituted in consultation with the major professor and the student's graduate committee.
- 2 The first formal seminar should be within the first 1.5 years the student is in residence. The final seminar will be a presentation of the final research results of the student.
- 3 It is recommended that the doctoral program include enrichment courses to be approved by the graduate committee. The enrichment program would consist of 12 course credits or equivalent special projects or directed individual study related to the specific interests and needs of the student.

This program requires a minimum of 40 credit hours of coursework and at least 20 research hours above the baccalaureate degree (60 hours total) for students entering with only a baccalaureate degree.

Doctor of Philosophy in Life Sciences with Biochemistry Concentration

Master of Science Degree to Ph.D.

Total Hours		47
Enrichment courses ³		12
BCH 9000	Dissertation Research/ Dissertation in Biochemistry,Molecular Biology,Entomology and Plant Pathology	20
BCH 8101	Seminar ²	2
or BCH 6804	Molecular Biology Methods	
BCH 8654	Intermediary Metabolism ¹	4
BCH 8633	Enzymes	
BCH 6623	Biochemistry of Specialized Tissues	
BCH 6414	Protein Methods	
Select one of the following:		3-4
BCH 6613	General Biochemistry II (prerequisite)	3
BCH 6603	General Biochemistry I (prerequisite)	3

Total Hours

- 1 Or equivalent BCH or Life Science-related coursework; students completing the split-level BCH core courses at MSU at the 4000-level are exempt from these classes, and other approved courses will be substituted in consultation with the major professor and the student's graduate committee.
- 2 The first formal seminar should be within the first 1.5 years the student is in residence. The final seminar will be a presentation of the final research results of the student.
- 3 It is recommended that the doctoral program include enrichment courses to be approved by the graduate committee. The enrichment program would consist of 12 course credits or equivalent special projects or directed individual study related to the specific interests and needs of the student.

Students entering the program with an M.S. degree have a required minimum of 40 hours past that degree utilizing a combination of coursework and research hours (with a minimum of 20 hours of research/dissertation).

Doctor of Philosophy in Molecular Biology

Baccalaureate Degree to Ph.D.

BCH 6603	General Biochemistry I (prerequisite) ¹	3
BCH 6613	General Biochemistry II (prerequisite) ¹	3
Select one of the following: ²		3-4
BCH 6414	Protein Methods	
BCH 6713	Molecular Biology	
BCH 8643	Molecular Genetics	
BCH 8654	Intermediary Metabolism ²	4
BCH 8101	Seminar ³	2
BCH 9000	Dissertation Research/ Dissertation in Biochemistry,Molecular Biology,Entomology and Plant Pathology	30
Enrichment Courses ⁴		12

Total Hours

- ¹ Or equivalent.
- ² Or equivalent BCH or Life Science-related coursework; students completing the split-level BCH core courses at MSU at the 4000-level are exempt from these classes, and other approved courses would be substituted in consultation with the major professor and the student's graduate committee.
- ³ The first formal seminar should be within the first 1.5 years the student is in residence. The final seminar will be a presentation of the final research results of the student.
- ⁴ It is recommended that the doctoral program include enrichment courses to be approved by the graduate committee. The enrichment program would consist of 12 course credits or equivalent special projects or directed individual study related to the specific interests and needs of the student. Such enrichment courses or technical proficiencies could include (but are not limited to) statistics, biocomputing, electron microscopy, plant transformation, tissue culture, production of monoclonal antibodies, etc.

The Molecular Biology Ph.D. degree is primarily a research degree. However, a minimum of 30-40 hours of coursework and 30 hours of research beyond the B.S. degree are required. A student entering the program with a master's degree will be required to take 30-40 hours past that degree. The courses shall come from the offerings of the department and from supporting programs. If the student desires a specific minor, 12 hours should be in that field. The selection of courses is left to the student in consultation with the major professor and graduate committee.

The student's Ph.D. graduate committee will consist of a total of at least five members with at least three of these members from the department faculty. The student will submit a research proposal to the committee. No time limit is imposed, but it is suggested that the proposal be submitted within the first 1.5 years. The student will have yearly reviews with the graduate committee. The student is expected to produce publishable research.

The student must pass written and oral preliminary examinations dealing with his/her program of study. A student not passing the preliminary exams on a second attempt will be given the option of completing the research required for an M.S. (provided the coursework is also adequate). The student must pass a final oral defense of the dissertation upon completion of the research program.

Doctor of Philosophy in Molecular Biology

Master of Science Degree to Ph.D.

A student entering the program with a master's degree will be required to take 30-40 hours past that degree. The courses shall come from the offerings of the department and from supporting programs. If the student desires a specific minor, 12 hours should be in that field. The selection of courses is left to the student in consultation with the major professor and graduate committee.

The student must pass written and oral preliminary examinations dealing with his/her program of study. A student not passing the preliminary exams on a second attempt will be given the option of completing the research required for an M.S. (provided the coursework is also adequate). The student must pass a final oral defense of the dissertation upon completion of the research program.

Doctor of Philosophy in Life Sciences with Entomology Concentration

Total Hours		03
Additional graduate-level coursework		46
Enrichment courses ¹		12
EPP 8121	Seminar	1
EPP 8111	Seminar	1

Total Hours

57-58

¹ It is recommended that the doctoral program include enrichment courses to be approved by the graduate committee. The enrichment program would consist of 12 course credits or equivalent special projects or study areas related to the specific interests and needs of the student.

This program requires 60 credit hours of coursework above the baccalaureate degree.

The student's Ph.D. graduate committee will consist of a total of at least five members with at least three of these members from the department faculty. The student will submit a research proposal to the committee.

The student must pass written and oral preliminary examinations dealing with his/her program of study. A student not passing the preliminary exams on a second attempt will be given the option of completing the research required for an M.S. (provided the coursework is also adequate). The student must pass a final oral defense of the dissertation upon completion of the research program.

Doctor of Philosophy in Life Sciences with Plant Pathology Concentration

Total Hours		6(<u> </u>
Additional graduate-level coursework		46	3
Enrichment courses ¹		12	2
EPP 8121	Seminar	1	1
EPP 8111	Seminar	1	I

Total Hours

¹ It is recommended that the doctoral program include enrichment courses to be approved by the graduate committee. The enrichment program would consist of 12 course credits or equivalent special projects or study areas related to the specific interests and needs of the student.

This program requires 60 credit hours of coursework above the baccalaureate degree.

The student's Ph.D. graduate committee will consist of a total of at least five members with at least three of these members from the department faculty. The student will submit a research proposal to the committee.

The student must pass written and oral preliminary examinations dealing with his/her program of study. A student not passing the preliminary exams on a second attempt will be given the option of completing the research required for an M.S. (provided the coursework is also adequate). The student must pass a final oral defense of the dissertation upon completion of the research program.

Food Science, Nutrition, and Health Promotion

Department Head: Dr. Ashli Brown-Johnson (Interim) Graduate Coordinator: Dr. Wen-Hsing Cheng 105 Herzer Building Box 9805 Mississippi State, MS 39762 Telephone: 662-325-4002 Fax: 662-325-8728 E-mail: Department Head: ab506@msstate.edu E-mail: Graduate Coordinator: wc523@msstate.edu Website: http://www.fsnhp.msstate.edu/

Graduate study is offered in the Department of Food Science, Nutrition and Health Promotion leading to a Master of Science degree in Food Science, Nutrition and Health Promotion with concentrations in Food Science and Technology; Nutrition; or Health Promotion. The Doctor of Philosophy degree in Food Science, Nutrition and Health Promotion is also offered through this department with concentrations in Food Science and Technology or Nutrition.

Graduate assistantships may be available. For information, contact the graduate coordinator at the address above or visit the departmental website.

Admission Criteria

General regular admission requirements for the department are as follows:

1. Baccalaureate (four-year degree) for entry into the M.S. program and 60 credit hours beyond a baccalaureate degree for admission to the Ph.D. program if a master's degree has not been earned.

- Nutrition concentrations require an overall 3.00 GPA in undergraduate study for entry into the M.S. degree program and a 3.00 GPA for all master's coursework if applying to the Ph.D. program.
- Food Science and Technology concentrations require a 2.75 GPA but a 3.00 is preferred. Typically, a 2.75 GPA requires provisional admittance.
- The Health Promotion concentration requires a 2.75 GPA but a 3.00 is preferred. Grad point averages between 2.50 and 2.75 may be considered for provisional admission at the discretion of program faculty.

2. Standardized testing is required:

- The Graduate Record Examination (GRE) must be taken prior to acceptance, and the scores will be accepted for up to five years from the date of the examination. Retaking the exam may be required if this time period has lapsed.
- English proficiency is required for non-English speakers. Some international students may be exempt based on country of origin.

TOEFL Paper-based score: 550 or better TOEFL Internet-based (iBT): 79 or better IELTS: 6.5 or better

3. Contingent admission may be granted on the recommendation of the Graduate Faculty and Graduate Coordinator. The following criteria apply:

- Contingent admission may be allowed when an applicant meets the regular admission requirements but scores less than the minimum on any English proficiency tests. Contingency is dependent upon taking one semester of English as a Second Language (ESL course) followed by a technical writing course at Mississippi State University. Successful completion of both will result in regular admission status once proof is received by the Graduate School.
- Contingent admission may be allowed when an applicant has a borderline academic background that may require leveling courses to strengthen the overall academic foundation of the applicant.

4. Provisional admission may be granted to an applicant who has not fully met the GPA requirement stipulated by the University for regular admission. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's Program of Study, as prescribed by advisor. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. While in the provisional status, a student is not eligible to hold a graduate assistantship.

Master of Science in Food Science, Nutrition and Health Promotion

Food Science and Technology Concentration

In 1983 the Board of Trustees of Institutions of Higher Learning designated Mississippi State University (MSU) as the flagship university for a food science program in the state of Mississippi. The designation basically stated that MSU would be the only university in the state with such a program. A student may work toward a Master of Science in Food Science, Nutrition and Health Promotion with a concentration in Food Science and Technology by selecting courses from Food Science, Nutrition and Health Promotion and allied areas such as biochemistry, microbiology, animal and dairy sciences, and other disciplines. Faculty, staff members, and facilities of the cooperating departments are utilized. A Bachelor of Science in Food Technology, Food Science, or related areas will be considered to meet the prerequisites for study toward an advanced degree. Students from other disciplines may be required to take leveling courses generally not to exceed 15 semester hours.

Nutrition Concentration

A Master of Science degree in Food Science, Nutrition and Health Promotion with a concentration in Nutrition is offered by selecting courses in Food Science, Nutrition and Health Promotion; Statistics; and Biochemistry.

The Dietetic Internship is an innovative, post-baccalaureate program designed to prepare interns for rewarding careers in traditional and non-traditional roles. Interns complete the requirements for the Dietetic Internship and 6 hours of coursework in Food Science, Nutrition and Health Promotion with an emphasis in nutrition. The MSU Dietetic Internship Program provides hands-on experience in various clinical research, food service management, community nutrition, and nutrition education activities that registered dietitians encounter. Interns work with faculty, site coordinators, and preceptors in outpatient clinics, various inpatient settings, community settings, classrooms, and other locations as they build skills and broaden their understanding of modern dietetics. Upon completion of the internship, a graduate is prepared for the Registration Examination of the Commission on Dietetic Registration and successful entry-level practice. Students may also pursue a M.S. degree at the same time.

The Mississippi State University Dietetic Internship Program is currently granted accreditation by:

The Commission on Accreditation for Dietetics Education of the American Dietetic Association 120 South Riverside Plaza, Suite 2000 Chicago, IL 60606-6995 (312) 899-0040, ext. 5400

Dietetic interns must be admitted to graduate studies at MSU. For additional information contact the Dietetic Internship Program Director, Box 9805, Mississippi State, MS 39762-9805 or visit the departmental website: http://www.fsnhp.msstate.edu/.

Health Promotion Concentration

A Master of Science degree in Food Science, Nutrition and Health Promotion with a concentration in Health Promotion is available. This program is designed to equip students for careers as public health educators, health promotion specialists, and health scientists. Graduates from this program will

be trained for careers in school health, public health, worksite, and/or violence and injury prevention. Graduates can sit for the Certified Health Education Specialists exam, offered by the National Commission on Health Education Credentialing (http://www.nchec.org/health-education-credentialing/).

Master of Public Health

The Master of Public Health program will prepare students with a professional degree in the field of public health nutrition. The program requires 42/44 credit hours, including core courses of 21/22 hours in public health and 18 hours in nutrition and foods, as well as an elective course (3 hours except EPY 8214). For programmatic accreditation, it requires applied public health practicum and integrative experience, which are part of the core curriculum.

Admission Criteria

A minimum of a 2.75 GPA (undergraduate work) is required for graduate work if accrued over a four-year average. If accrued over a two-year period, a 3.00 GPA is required. Applicants must take the Graduate Record Examination (GRE). International students are required to have a minimum TOEFL (Test of English as a Foreign Language) score of 550 PBT (79 iBT) or an IELTS (International English Language Testing Systems) score of 6.5.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study, as prescribed by advisor. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Doctor of Philosophy in Food Science, Nutrition and Health Promotion

A Doctor of Philosophy degree is offered within the Department of Food Science, Nutrition and Health Promotion with concentrations in Food Science and Technology, Functional Foods, Nutrition and Health, or Nutrition. Graduate assistantships may be available. To secure additional information, please contact the Graduate Coordinator.

Food Science and Technology Concentration

A student pursuing the Ph.D. degree in Food Science, Nutrition and Health Promotion with a concentration in Food Science and Technology selects courses from Food Science, Nutrition and Health Promotion and allied areas such as biochemistry, microbiology, animal and dairy sciences, and other disciplines. Faculty, staff members, and facilities of the cooperating departments are utilized. A Master of Science in Food Technology, Food Science, or related areas will be considered to meet the prerequisites for study towards a doctorate. Students from other disciplines may be required to take leveling courses generally not to exceed 15 semester hours.

Functional Foods, Nutrition and Health Concentration

A student pursuing the Ph.D. in Food Science, Nutrition and Health Promotion with a concentration in Functional Foods, Nutrition and Health must complete 18 credit hours in the concentration. Required courses are: FNH 4663/6663 Principles of Functional Foods, Nutrition and Health; FNH 8293 Molecular Nutrition; FNH 8773 The Gut, Microbiome in Health and Disease; FNH 8783 Plants and Nutraceuticals-Food as Medicine; FNH 8793 Functional Nutrition in Chronic Disease Prevention and Management; and FNH 8263 Nutritional Genomics. A Master of Science in either nutrition, food sciences, or a health discipline will be considered to meet the prerequisites for study towards a doctorate. A student from another discipline may be required to take leveling courses generally not to exceed 15 semester hours.

Nutrition Concentration

A student pursuing the Ph.D. degree in Food Science, Nutrition and Health Promotion with a concentration in Nutrition selects courses in Food Science, Nutrition and Health Promotion and in Biochemistry and Statistics. A Master of Science in Nutrition or Health Promotion will be considered to meet the prerequisites for study towards a doctorate. A student from other disciplines may be required to take leveling courses generally not to exceed 15 semester hours.

Admission Criteria

For regular admission into the Ph.D. program in Food Science, Nutrition and Health Promotion, an applicant must have a minimum grade point average of 2.75 (undergraduate) if accrued over a four-year average. If accrued over a two-year period, a 3.00 grade point average is required. An applicant must have a minimum grade point average of 3.00 on M.S. work. In addition, the applicant must submit Graduate Record Examination (GRE) verbal, quantitative, and writing scores. International students are required to have a minimum TOEFL (Test of English as a Foreign Language) score of 550 PBT (79 iBT) or an IELTS (International English Language Testing Systems) score of 6.5.

Master's General Requirements

If a minor is approved, at least 9 hours of coursework in the area are required. The program of study should be submitted and approved by the student's graduate committee and graduate coordinator by the end of the first semester of graduate study.

The graduate committee should be composed of the major professor and at least two other committee members. The committee must be composed of a majority in the student's concentration (FST, NTR, HP). A committee member from the minor area (if a minor is sought) is required.

A degree candidate must be thoroughly familiar with the literature in the field of major interest, must show the relation of the special subject to allied subjects, and the level of general knowledge and training, including the use of oral and written communication. At the conclusion of research (if required in that concentration), the student will present her/his research work in the form of a seminar to an open audience and the committee as part of the examination requirements.

Master of Science in Food Science, Nutrition and Health Promotion with Food Science and Technology Concentration - Thesis

Total Hours		30
FNH 8000	Thesis Research/Thesis in Food Science, Nutrition and Health Promotion	6
Food Preservation (FNH 6583) ¹		
Food Microbiology (FNH 6414)		
Food Chemistry (FNH 6243) ¹		
Seminar		
Statistics		
Biochemistry		
Graduate-level coursework		24

¹ Courses required unless taken in the undergraduate program.

The Master of Science in Food Science, Nutrition and Health Promotion with a Food Science and Technology concentration requires a minimum of 30 hours of graduate credit (Including 6 hours of research/thesis), a research thesis, and a final defense. At least 12 hours of coursework must be taken at the 8000-level.

The courses are to be determined by the major professor and graduate committee and approved by the committee and the graduate coordinator. Applicants with knowledge in one or more of these areas may be exempt from some course requirements if their academic record confirms successful previous work.

Master of Science in Food Science, Nutrition and Health Promotion with Nutrition Concentration - Thesis

BCH XXXX	Two graduate-level Biochemistry courses ¹	6
Graduate-level statistics course ²		3-4
Other graduate-level coursework		15
FNH 8000	Thesis Research/Thesis in Food Science, Nutrition and Health Promotion	6
Total Hours		30-31

¹ BCH 6603 is one example of a course that fulfills this requirement.

² ST 8114, KI 8313, EPY 6214, and AELC 9583 are examples of courses that fulfill this requirement.

The Master of Science in Food Science, Nutrition and Health Promotion with a Nutrition concentration requires a minimum of 30 hours of graduate credit (including 6 hours of research/thesis), a research thesis, and a final defense. At least 12 hours of coursework must be taken at the 8000-level.

A graduate program of study should be submitted and approved by the student's graduate committee and graduate coordinator by the end of the first semester of graduate study. The graduate committee should be composed of the major professor and at least two committee members.

Master of Science in Food Science, Nutrition and Health Promotion with Health Promotion Concentration - Thesis

FNH 8513	Theory and Practice of Health Education	3
FNH 8523	Health Promotion Techniques	3
FNH 8553	Behavioral Epidemiology	3
FNH 8613	Design and Administration of Health Promotion Programs	3

0
6
12
3

Total Hours

The Master of Science degree in Food Science, Nutrition and Health Promotion with a Health Promotion concentration requires a minimum of 33 hours of graduate credit. At least 12 hours of coursework must be taken at the 8000-level.

A thesis committee, consisting of the student's major professor and two other graduate faculty members, must be established.

Master of Science in Food Science, Nutrition and Health Promotion with Health Promotion **Concentration - Non-Thesis**

FNH 8513Theory and Practice of Health EducationFNH 8523Health Promotion TechniquesFNH 8553Behavioral EpidemiologyFNH 8613Design and Administration of Health Promotion ProgramsFNH 8653Implementation and Evaluation of Health Promotion ProgramsFNH 8563Principles of Epidemiology and Health Science ResearchKI 8313Interpretation of Data in Kinesiology (or equivalent) 1FNH 8673Applied Projects for Certified Health Education Specialists 2Graduate-level electivesFormation and Evaluation of Specialists 2	33
FNH 8523Health Promotion TechniquesFNH 8553Behavioral EpidemiologyFNH 8613Design and Administration of Health Promotion ProgramsFNH 8653Implementation and Evaluation of Health Promotion ProgramsFNH 8563Principles of Epidemiology and Health Science ResearchKI 8313Interpretation of Data in Kinesiology (or equivalent) 1	9
FNH 8523Health Promotion TechniquesFNH 8553Behavioral EpidemiologyFNH 8613Design and Administration of Health Promotion ProgramsFNH 8653Implementation and Evaluation of Health Promotion ProgramsFNH 8563Principles of Epidemiology and Health Science Research	3
FNH 8523Health Promotion TechniquesFNH 8553Behavioral EpidemiologyFNH 8613Design and Administration of Health Promotion ProgramsFNH 8653Implementation and Evaluation of Health Promotion Programs	3
FNH 8523Health Promotion TechniquesFNH 8553Behavioral EpidemiologyFNH 8613Design and Administration of Health Promotion Programs	3
FNH 8523Health Promotion TechniquesFNH 8553Behavioral Epidemiology	3
FNH 8523 Health Promotion Techniques	3
	3
FNH 8513 Theory and Practice of Health Education	3
	3

1 EPY 6214 is an example of an equivalent course.

2 Designed to help future practitioners develop program assessment, development, implementation and evaluation skills consistent with those required by the Certified Health Education Specialist (CHES) exam and licensure.

The Master of Science degree in Food Science, Nutrition and Health Promotion with a Health Promotion concentration requires a minimum of 33 hours of graduate credit. At least 15 hours of coursework must be taken at the 8000-level.

The student develops, in cooperation with his/her major professor, a program of study during the first semester. All students must successfully complete comprehensive examinations before being awarded the degree of Master of Science in Food Science, Nutrition and Health Promotion with a Health Promotion concentration. The student must be within 6 hours of graduation, have completed all core courses, and have a 3.00 GPA after admission to the program to apply for comprehensive examinations.

Master of Public Health

T (111		
Please see Graduate Coordinate	or for list of acceptable electives	
Electives		3/4
FNH 8743	Nutrition Policy	3
FNH 8753	Nutritional Epidemiology	3
FNH 6373	Nutrition Education and Counseling Skills	3
FNH 8243	Community Nutrition	3
FNH 6353	Nutrition Throughout the Life Cycle	3
FNH 6123	Nutrition and Chronic Disease	3
Required Nutrition Courses		
FNH 8723	Integrative Experience	3
FNH 8713	Applied Public Health Practicum	3
FNH 8563	Principles of Epidemiology and Health Science Research	3
FNH 8733	Policy in Public Health and Health Care System	3
FNH 6773	Introduction to Environmental Health	3
KI 8313, *EPY 6214 or CVM 850	03 Biostatistics	
FNH 8553	Behavioral Epidemiology	3
Required Public Health Courses		

Graduate Certificate in Clinical Health Promotion and Wellness Coaching

FNH 6393	Prevention and Control of Disease	3
FNH 8513	Theory and Practice of Health Education	3
FNH 8523	Health Promotion Techniques	3
FNH 8553	Behavioral Epidemiology	3
FNH 8443	Health Center Practicum ¹	3
FNH 8556	Clinical Health Promotion and Wellness Coaching Internship ¹	6
Total Hours		21

Total H

1

Health Center Practicum and Clinical Internship in Health Promotion and Wellness Coaching requires all four health promotion courses as prerequisites and approval of the primary advisor.

The Graduate Certificate in Clinical Health Promotion and Wellness Coaching requires successful completion of 21 hours in Health Promotion graduate studies including the Health Center Practicum and Clinical Internship. Those not completing the entire M.S. degree in Health Promotion as part of this process will be advised of possibly having to choose other electives, should they pursue the M.S. degree later, due to application of initial course credits.

Doctor of Philosophy General Requirements

The minimum number of coursework hours for a Ph.D. student varies according to the specific requirements of the department and the student's needs but usually requires a minimum of 60 hours of coursework beyond the B.S. degree. In establishing the Ph.D. candidate's program, the graduate committee assists the student in arranging his/her major and may specify a minor as well. When required, a minor in a doctoral program requires at least 12 hours of graduate coursework in the chosen discipline. A committee member from the minor area is required.

Doctor of Philosophy in Food Science, Nutrition and Health Promotion, Food Science and Technology Concentration

Students must demonstrate competence in at least, but not limited to, the following areas: Food Microbiology, Food Chemistry, Nutrition, Food Processing, Statistics (beyond Statistical Methods), and Biochemistry (decided by graduate committee).

Doctor of Philosophy in Food Science, Nutrition and Health Promotion, Functional Foods, Nutrition and Health Concentration

Students must demonstrate competence in the areas of Food Science, Nutrition and Health Promotion and in the required core courses (FNH 4663/6663 Principles of Functional Foods, Nutrition and Health; FNH 8293 Molecular Nutrition; FNH 8773 The Gut, Microbiome in Health and Disease; FNH 8783 Plants and Nutraceuticals-Food as Medicine; FNH 8793 Functional Nutrition in Chronic Disease Prevention and Management; and FNH 8263 Nutritional Genomics).

Great reliance is placed on the student's graduate committee, and especially on the major professor, to develop a program of study commensurate with the goals and background of the student while maintaining the standards of the department.

A Ph.D. candidate must demonstrate mastery of a particular field of knowledge, the techniques of research, and of the correlation of his/her specialty with the larger areas of knowledge, especially those directly related to his/her own field of interest. At the conclusion of the dissertation research, the student will present his/her research in the form of a seminar to an open audience and to the committee as part of the examination requirement.

Doctor of Philosophy in Food Science, Nutrition and Health Promotion, Nutrition Concentration

Students must demonstrate competence in at least but not limited to the following areas: Nutrition, Nutritional Assessment, Biochemistry, Statistics, and Research Methods.

Great reliance is placed on the student's graduate committee and especially the major professor to develop a program of study commensurate with the goals and background of the student while maintaining the standards of the department.

A Ph.D. candidate must demonstrate mastery of a particular field of knowledge, the techniques of research, and of the correlation of his/her specialty with the larger areas of knowledge, especially those directly related to his/her own field of interest. At the conclusion of the dissertation research, the student will present his/her research in the form of a seminar to an open audience and to the committee as part of the examination requirement.

Genetics

Graduate Coordinator: Dr. Carrie Vance 201 Bost Box 9760 Mississippi State, MS 39762 Telephone: 662-325-0233 E-mail: swillard@cals.msstate.edu

An Interdisciplinary Curriculum

An opportunity is offered to the student who wishes to work toward a degree in Genetics. MSU offers a Master of Science degree in Agricultural Life Sciences with a concentration in Genetics and a Doctor of Philosophy in Life Sciences with a concentration in Genetics. The Genetics program is an interdisciplinary curriculum which utilizes the staff and facilities available in the various departments and colleges. A wide array of plant and animal material is available for genetic investigation. The student's complete program will be formulated in the department of his/her choice. Courses contributing to the major in genetics are listed below.

Admission

Minimum required TOEFL (Test of English as a Foreign Language) score of 500 PBT (61 iBT) or an IELTS (International English Language Testing Systems) score of 5.5. A written cooperative agreement with a major advisor prior to admission is essential.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Performance

A candidate for a degree must average B or higher on all courses attempted for graduate credit after admission to the program. No grade under C will be accepted for graduate credit; thus, a student will be terminated if he or she obtains more than two grades below a C in courses taken for graduate credit or fails to obtain a C or better in any repeated course. With the approval of the graduate coordinator and the college dean, a student may retake one course per degree except for those approved for repeated credit (e.g. internships, special topics, individual studies, thesis, dissertation, etc.). Both courses will remain on the permanent transcript and both grades will be computed in final averages. This policy applies to all courses (even those not on the program of study) taken as a graduate student related to a specific program. Repeated courses must be taken at Mississippi State University. No additional program credit hours will be generated from a repeated course.

Prerequisite

Individuals with a Bachelor of Science in the biological or physical sciences will be considered.

The students planning a major or minor in genetics should select the GNS prefix for each course when applicable.

Master of Science in Agricultural Life Science with Genetics Concentration - Thesis

Graduate-level coursework with at least 12 credits at the 8000-level	24
Thesis	6
Total Hours	30

A comprehensive exam in addition to the coursework and thesis is required for completion of this degree.

Master of Science in Agricultural Life Science with Genetics Concentration - Non-Thesis

A comprehensive exam and 30 total hours of coursework are required for the non-thesis degree. with at least 15 hours at the 8000-level. Specific courses and a graduate seminar class may be required as part of the 6 additional course credits in the non-thesis option as specified by the graduate committee.

Doctor of Philosophy in Life Sciences with Genetics Concentration

Written preliminary and oral comprehensive examinations, a dissertation, and coursework designated by the student's graduate committee, including 20 Research/Dissertation hours, are required for the doctor's degree.

School of Human Sciences

Director: Dr. Michael Newman

120 Lloyd Ricks Box 9745 Mississippi State, MS 39762 Telephone: 662-325-2950 E-mail: humansci@humansci.msstate.edu

The School of Human Sciences offers graduate degrees in the following programs and also offers a Gerontology Certificate.

- Agricultural Education with a concentration in Leadership or Communication (M.S.)
- Agricultural Sciences with a concentration in Agricultural Extension Education (Ph.D.)
- Early Intervention (M.S.)
- Fashion Design and Merchandising with a concentration in Design & Product Development or Merchandising (M.S.)
- Human Development & Family Science (M.S. and Ph.D.)

Agricultural and Extension Education

Department Head: Dr. Michael Newman

Graduate Coordinator: Dr. Kirk Swortzel 120 Lloyd-Ricks-Watson Building Box 9745 Mississippi State, MS 39762 Telephone: 662-325-7837 E-mail: kirk.swortzel@msstate.edu

The Agricultural Education, Leadership, and Communication program in the School of Human Sciences offers graduate programs leading to the following degrees.

- 1. Master of Science in Agricultural and Extension Education with a concentration in Teacher Licensure or Community and Extension Education
- 2. Doctor of Philosophy in Agricultural Science with a concentration in Agricultural and Extension Education

Admission Criteria - Master of Science Degree

To obtain admission to the master's program, the applicant must meet all the general requirements of the Office of the Graduate School. Specifically, an applicant must:

- · Meet all MSU Graduate School requirements for admission.
- · Complete the Graduate Record Examination (GRE), with scores competitive with other applicants (recommended).
- Have an upper-division undergraduate grade point average of 2.75 (approximately last 60 undergraduate hours).
- Provide the names and e-mail addresses of three individuals who can provide a letter of recommendation. These letters of recommendation will attest to the applicant's academic performance and potential ability to successfully complete graduate degree requirements.
- Write a statement of purpose (500-1,000 words) describing the applicant's purpose for undertaking graduate study, including professional plans and career goals.
- International non-native speakers of English must submit TOEFL or IELTS scores indicative of ability to successfully complete graduate work (see International Admission requirements in this catalog).

A student applying to the Master of Science degree in Agricultural and Extension Education in the teacher certification concentration must have an undergraduate degree in an agriculturally related field and submit GRE scores. The student must qualify for admission to teacher education by presenting an ACT score of 21 (SAT equivalent of 860) or by obtaining at least the following scores:

Pre-Professional Skills Test (PPST)

Subject	Score
Reading	156
Writing	162
Mathematics	150

Admission Criteria - Doctor of Philosophy

To obtain admission to the master's program, the applicant must meet all the general requirements of the Office of the Graduate School. Specifically, an applicant must:

- · Meet all MSU Graduate School requirements for admission.
- · Complete the Graduate Record Examination (GRE), with scores competitive with other applicants.
- Have earned a bachelor's, master's, or doctoral degree from an accredited college or university.
- · Have at least a 3.00 grade point average on previous graduate coursework.
- · Provide the names and e-mail addresses of three individuals who can provide a letter of recommendation. These letters of recommendation will attest to the applicant's academic performance and potential ability to successfully complete graduate degree requirements.
- Write a statement of purpose (500-1,000 words) describing the applicant's purpose for undertaking graduate study, including professional plans and career goals.
- International non-native speakers of English must submit TOEFL or IELTS scores indicative of ability to successfully complete graduate work (see International Admission requirements in this catalog).

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student shall be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. While in the provisional status, a student is not eligible to hold a graduate assistantship.

Academic Performance

Unsatisfactory performance may be defined as the failure to maintain a "B" average in graduate courses attempted after admission to the program; a grade of "U," "D," or "F" in any course; more than two grades below a "B"; failure of the comprehensive examination or of the thesis/dissertation defense. Any one of these or a combination of these may constitute the basis for the termination of a student's graduate study in a degree program. To be eligible for the comprehensive examination, a graduate student must have a 3.00 GPA on all graduate courses taken after being admitted to the degree program.

Upon the recommendation of the major professor or the graduate coordinator, a student whose academic work is unsatisfactory at any period during a given semester or term may be forced to withdraw from a graduate program. A student forced to withdraw can appeal to department faculty and, if upheld by the faculty, the student can then submit a written appeal to the Director of the School of Human Sciences. If upheld there, the student may appeal the Dean of the College of Agriculture and Life Sciences.

For those completing the thesis option, students must complete a minimum of 12 hours of coursework at the 8000-level. And those completing the nonthesis option, students must complete a minimum of 15 hours of coursework at the 8000-level. All students must either complete a thesis (AELC 8000) or a creative component (AELC 8100) for a minimum of 6 credit hours to meet degree requirements.

A student who chooses to complete a thesis must pass a final thesis defense and submit the thesis to complete degree requirements. A student who chooses to complete a creative component must pass the final defense of the creative component and complete an oral comprehensive examination over all course work completed. A minimum of 33 hours of coursework in a planned program of study must be completed for all concentrations.

Master of Science in Agricultural and Extension Education with Community and **Extension Education Concentration - Thesis**

Core Courses		21
Major Required Courses		
AELC 8243	Administration and Supervision in Agricultural and Extension Education	
AELC 8503	Program Planning and Development in Agricultural and Extension Education	
AELC 8703	Evaluation of Agricultural and Extension Education Programs	
AELC 8803	Applying Research Methods to Agricultural and Extension Education	
AELC 8853	Statistics for Social and Life Sciences in Agriculture	
AELC 6103	Principles and Practices of Extension Education	
AELC 8203	Advanced Communications in Agricultural and Extension Education	
Thesis Hours		6
AELC 8000	Thesis Research/Thesis in Agricultural and Extension Education	
Electives		6
Total Hours		33

Master of Science in Agricultural and Extension Education with Community and **Extension Education Concentration - Non-Thesis**

Core Courses

Total Hours		33
Electives		6
AELC 8100	Creative Component Project in Agricultural and Extension Education	
Creative Component		6
AELC 8203	Advanced Communications in Agricultural and Extension Education	
AELC 6103	Principles and Practices of Extension Education	
AELC 8853	Statistics for Social and Life Sciences in Agriculture	
AELC 8803	Applying Research Methods to Agricultural and Extension Education	
AELC 8703	Evaluation of Agricultural and Extension Education Programs	
AELC 8503	Program Planning and Development in Agricultural and Extension Education	
AELC 8243	Administration and Supervision in Agricultural and Extension Education	
Major Required Courses		

21

The Community and Extension Education Concentration prepares future employees and administrators for careers in extension and community/nonformal educational settings. These students will focus on basic foundational principles in agricultural and extension education and enhance their skills in program planning, teaching methods, evaluation methods, and communication technologies. The required courses for the Community and Extension Education Concentration are AELC 6103, AELC 8203, AELC 8243, AELC 8503, AELC 8703, AELC 8803, AELC 8853, and either AELC 8000 or AELC 8100 (minimum of 6 credit hours). The remaining courses (6 hours) in the Community and Extension Education Concentration may be a combination of approved electives or courses being used for a minor in another department. Students who want to earn a minor will be expected to exceed the minimum requirements (33 hours) for the degree. If a student selects to earn a minor, a faculty member from the minor area should also be a member of the student's graduate committee.

Master of Science in Agricultural and Extension Education with Teaching and Learning **Concentration - Thesis**

Total Hours		33
AELC 8000	Thesis Research/Thesis in Agricultural and Extension Education	
Thesis Hours		6
Agriculture Electives		6
AELC or Education Courses		6
AELC 8203	Advanced Communications in Agricultural and Extension Education	
AELC 8853	Statistics for Social and Life Sciences in Agriculture	
AELC 8803	Applying Research Methods to Agricultural and Extension Education	
AELC 8703	Evaluation of Agricultural and Extension Education Programs	
AELC 8503	Program Planning and Development in Agricultural and Extension Education	
Major Required Courses		
Core Courses		15

Total Hours

Master of Science in Agricultural and Extension Education with Teaching and Learning **Concentration - Non-Thesis**

Core Courses		15
Major Required Courses		
AELC 8503	Program Planning and Development in Agricultural and Extension Education	
AELC 8703	Evaluation of Agricultural and Extension Education Programs	
AELC 8803	Applying Research Methods to Agricultural and Extension Education	
AELC 8853	Statistics for Social and Life Sciences in Agriculture	
AELC 8203	Advanced Communications in Agricultural and Extension Education	
AELC or Education Courses		6
Agriculture Electives		6
Creative Component		6

AELC 8000

Thesis Research/Thesis in Agricultural and Extension Education

Total Hours

The Teaching and Learning Concentration enhances the careers of those employed in agricultural education professions, such as public-school teaching; community college instruction; or training and development positions in industry. Students will complete coursework to gain valuable knowledge and experience in designing, implementing, and evaluating educational programs. The required courses for the Teaching and Learning Concentration are AELC 8203, AELC 8503, AELC 8703, AELC 8803, AELC 8853, and either AELC 8000 or AELC 8100 (minimum of 6 credit hours). The remaining credits in this concentration will include 6 hours of AELC or education coursework and 6 hours of agriculture coursework. Students may choose to earn a minor from another department but will be expected to exceed the minimum requirements (33 hours) for the degree. If a student selects to earn a minor, a faculty member from the minor area should also be a member of the student's graduate committee.

Master of Science in Agricultural and Extension Education with Agriculture Teacher **Licensure Concentration - Thesis**

Core Courses 27 Major Required Courses AELC 6403 **Development of Youth Programs** AELC 6613 **Teaching Agricultural Mechanics** AELC 6723 Pedagogy of AgriScience Programs AELC 6873 (Professional Seminar in Agricultural Education) **AELC 8403** Directing Learning Experience in Agricultural and Extension Education AELC 8603 Teaching Internship in AEE I Teaching Internship in AEE II AELC 8613 AELC 8693 Philosophical Foundations of Agricultural and Extension Education EDX 8173 Special Education in the Regular Classroom **Thesis Hours** AELC 8000 Thesis Research/Thesis in Agricultural and Extension Education 33

Total Hours

Master of Science in Agricultural and Extension Education with Agriculture Teacher **Licensure Concentration - Non-Thesis**

Core Courses 27 Major Required Courses AELC 6403 **Development of Youth Programs** AELC 6613 **Teaching Agricultural Mechanics** AELC 6723 Pedagogy of AgriScience Programs AELC 6873 (Professional Seminar in Agricultural Education) AELC 8403 Directing Learning Experience in Agricultural and Extension Education AELC 8603 Teaching Internship in AEE I AELC 8613 Teaching Internship in AEE II AELC 8693 Philosophical Foundations of Agricultural and Extension Education EDX 8173 Special Education in the Regular Classroom **Creative Component** 6 AELC 8100 Creative Component Project in Agricultural and Extension Education

Total Hours

Students in the Agriculture Teacher Licensure Concentration are required to complete a minimum of 33 hours of coursework. The required courses for the Agriculture Teacher Licensure Concentration are AELC 6403, AELC 6613, AELC 6723, AELC 6873, AELC 8403, AELC 8603, AELC 8613, AELC 8693, EDX 8173, and either AELC 8000 or AELC 8100 (minimum of 6 credit hours). Students who have completed AELC/HDFS 4424 as an undergraduate may complete 3 hours of an approved elective in place of AELC 8403. Depending on the student's undergraduate major, the student may be required to complete undergraduate coursework to meet deficiencies required for teacher licensure. Furthermore, a student must have earned at least a 3.00 GPA on coursework taken in the program to be eligible to enroll in AELC 8603 and AELC 8613 (teaching internship). An Application for Admission to Student Teaching form must be submitted to the AEE Graduate Coordinator one semester prior to student teaching. The student must submit the minimum Praxis II - Principles of Learning and Teaching: Grades 7-12 (PLT) score as required by the Mississippi Department of Education to

33

33

meet graduation requirements and to obtain licensure. To be eligible for graduation, students must have a 3.00 GPA after completion of all coursework and internships.

To secure a Mississippi Educator's License, the student must request that ETS send a copy of their score on the Principles of Learning and Teaching (PLT) to Mississippi State University (Code R1480). It is imperative that the student retains originals of test scores in a safe place.

In accordance with statutory provisions, the Mississippi Department of Education, Jackson, Mississippi, has adopted the rules and regulations on issuing and renewing teaching licenses, which are set forth in *Guidelines for Mississippi Educator Licensure K-12*, July 2020. The licensure program is applicable to all teacher licenses. Satisfactory completion of the Teacher Licensure Concentration offered by the AEE Graduate Program will enable the graduate to apply for teaching licensure in Mississippi, but this institution can neither waive any licensure requirements nor authorize substitutions for mandatory courses. Mississippi State University has submitted and received approval for its programs. Since teacher licenses are issued by the Mississippi Department of Education only, and not by the teacher education institutions, applications for licensure and original test scores must be filed with the Mississippi Department of Education by the applicant. Information concerning teacher licensure can be obtained from the AEE Graduate Coordinator.

Doctor of Philosophy in Agricultural Sciences, Agricultural and Extension Education Concentration

Agricultural and Extension Education

Total Hours		62
AELC 9000	Dissertation Research/Dissertation in Agricultural and Extension Education	
Dissertation		20
Graduate-Level Coursewor	K	
Cognate or Minor Area		12
Qualitative: EDF 9463 (Qua	litative Data Collection) and EDF 9473 (Qualitative Data Analysis)	
	pplied Multivariate Analysis in Agricultural Science) or EPY 9213 (Multivariate Analysis in Educational (Analysis and Interpretation of Data in AEE)	
Choose from either Quantita	tive or Qualitative Methods Series	6
EPY 9453	(Introduction to Qualitative Research)	
AELC 8853	Statistics for Social and Life Sciences in Agriculture	
AELC 8833	Instrumentation and Data Collection Procedures in Social Science Research	
AELC 8703	Evaluation of Agricultural and Extension Education Programs	
AELC 8803	Applying Research Methods to Agricultural and Extension Education	
Research, Evaluation, and S	tatistics	15
AELC 8413	Methods of Planned Change in Agricultural and Extension Education	
AELC 8693	Philosophical Foundations of Agricultural and Extension Education	
AELC 8593	Historical Foundations of Agricultural and Extension Education	
Major Core Courses		9

The minimum requirement for the Doctor of Philosophy (Ph.D.) degree in Agricultural Science with a concentration in Agricultural and Extension Education is the completion of 62 semester hours beyond a master's degree. Required courses for the Ph.D. include 9 semester hours of core classes in Agricultural and Extension Education (AELC 8413, AELC 8593, and AELC 8693); a 12-hour cognate or minor in an appropriate department or discipline; 21 semester hours in Research, Evaluation, and Statistics classes (AELC 8703, AELC 8803, AELC 8833, AELC 8853, and EDF 9453 are required with the remaining 6 semester hours in either Quantitative or Qualitative Methods), and 20 semester hours of dissertation research. Students who enter the Ph.D. program with a master's degree outside the AEE discipline may need to complete additional coursework to fulfill degree requirements. Students should consult the AEE Graduate Coordinator for specific degree requirement inquires.

Students must pass a written and oral comprehensive examination in the major area. Students who declare an official minor must also pass a written and oral examination in the minor area as well. In addition, students must also pass the final dissertation defense. The student's graduate committee supervises the dissertation and examinations.

Health Promotion Emphasis

Ph.D. students in Agricultural and Extension Education may select an emphasis in health promotion by taking courses in the Food Science, Nutrition, and Health Promotion Department's Health Promotion curriculum. These courses must be approved by the Health Promotion graduate coordinator. This program is designed to equip students for careers as public health educators, health promotion specialists, and health scientists. Students in this emphasis may sit for the Certified Health Education Specialist exam offered by the National Commission on Health Education Credentialing (www.nchec.org) when they have successfully completed at least 25 hours in the Health Promotion area.

Fashion Design and Merchandising

Department Head: Dr. Michael Newman Graduate Coordinator: Dr. Charles Freeman 118 Lloyd-Ricks Watson Building Box 9745 Mississippi State, MS 39762 Telephone: 662-325-2950 Email: cf617@msstate.edu

The graduate degree (M.S.) in Fashion Design and Merchandising (FDM) will be offered through the School of Human Sciences with two concentrations: (1) Design & Product Development and (2) Merchandising. FDM is based on an interdisciplinary approach to understand design, product development, fashion businesses, consumer behavior, and related industries in the context of fashion culture in society. Graduates will become future leaders in the textile, apparel, and retail industries to promote the economic development of industry sectors that increase the quality of life for people around the world. They will also advance research and policy in areas related to the fashion industry to broaden the effects of academic application of research in practice, as well as governmental actions on the fashion complex. This degree is designed to provide students with an in-depth understanding of the fashion and retail industry, consumer behavior, product development, business principles, and technology applications. Students select a concentration in one of two areas: Design and Product Development or Merchandising.

Admission Requirements

An individual must have a valid admission status in The Graduate School to secure enrollment. Admission to graduate study is limited to the pursuit of requirements for the degree and the field of study as specified in the student's application and statement of purpose. Qualified applications for the FDM graduate program are expected to have interests and goals that are consistent with the department's faculty expertise and interests, as well as course offerings. Once all application materials have been submitted, applicants should contact the FDM graduate coordinator at 662-325-2950 to schedule an interview with members of the FDM graduate faculty. To accommodate international applicants, interviews can be conducted using distance technology. Admission decisions are based on a holistic consideration of the applicant's credentials.

For international, non-native speakers of English, a TOEFL score indicative of ability to successfully complete graduate work is required. See English Language Test Score Requirements in the MSU *Graduate Catalog* for more information.

Master's Admission Requirements

- Meet all MSU Graduate School requirements for admission
- Have earned a baccalaureate degree in FDM or a related field
- · Submit Graduate Record Examination (GRE) scores competitive with other applicants
- Submit three letters of recommendation, with at least two of the letters coming from individuals familiar with the applicant's academic work
- Current resume or CV
- Submit a personal statement (500-1,000 words) describing the applicant's purpose for undertaking graduate study, statement of commitment to concentration area (merchandising or design and product development), professional plans, career goals, and detailed research interests

For those applicants not possessing a B.S. in Fashion Design and merchandising, admission will be considered on a case-by-case basis. If accepted, those students will be required to complete leveling courses from the FDM undergraduate core curriculum.

Design and Product Development:

- FDM 1533 Basic Apparel Construction
- FDM 2524 Textiles for Apparel
- FDM 2593 Product Development II
- FDM 4343 Patternmaking and Design

Merchandising:

- FDM 2333 Intro to Buying and Management
- FDM 2524 Textiles for Apparel
- FDM 3553 Fashion Retail Pricing
- FDM 4533 Merchandise Planning and Buying

Coursework

The master's degree in FDM requires 38 hours of coursework and has a thesis and a non-thesis option. A specialization will require 12 hours of coursework completed in one of the areas at the master's level.

Financing Your Graduate Education

Although the School of Human Sciences does have a limited number of assistantship opportunities, students are responsible for making their own arrangements for financing their graduate studies. For information about financial aid options and/or to complete a Free Application for Federal Student Aid (FAFSA), visit http://www.sfa.msstate.edu.

Master of Science in Fashion Design and Merchandising

Required Courses		
AELC 8803	Applying Research Methods to Agricultural and Extension Education	3
EPY 6214	Educational and Psychological Statistics	4
FDM 6424	Teaching Methods in Agricultural and Human Sciences	3-4
or AELC 8403	Directing Learning Experience in Agricultural and Extension Education	
FDM 6613	Research in Fashion Consumer Behavior	3
HDFS 8813	Seminar in Human Development and Family Science	3
FDM 8000	Thesis Research/ Thesis in Fashion Design and Merchandising (Thesis Option)	9
FDM 8100	Creative Component Project in Fashion Design and Merchandising (Non-Thesis Option)	
Concentration (Choose One)		12
Merchandising Concentration Co	ourses	
FDM 6683	Research and Application in Fashion Entrepreneurship	
FDM 6793	Research and Application in Digital Fashion Retailing	
Restricted Electives (6) - With a	pproval of major professor and committee	
Design and Product Developme	nt Concentration (Select 4)	
FDM 6443	Advanced Patternmaking and Design	
FDM 6563	Advanced Draping	
FDM 6783	Experimental Fashion Design	
Restricted Electives (3) - With a	pproval of major professor and committee	
Tatal Hauna		27.20

Total Hours

Gerontology Certificate

Graduate Coordinator: Dr. Joe Wilmoth 220-B Lloyd-Ricks-Watson Building Box 9745 Mississippi State, MS 39762 Telephone: 662-325-1799 E-mail: jwilmoth@humansci.msstate.edu

An Interdisciplinary Program

The graduate-level Gerontology certificate is a multidisciplinary approach to provide students with current factual and theoretical data relating to aging. The program is available both to degree and non-degree graduate students. A certificate is awarded upon the completion of 9 hours of specified coursework, 6 hours of approved electives, and 3 hours of research or directed individual study. For those students earning the certification in conjunction with an advanced degree in such disciplines as sociology, psychology, counseling, etc., the program would also constitute a gerontology concentration within the respective discipline.

For further information, contact Dr. Joe Wilmoth (p. 86).

Gerontology Certificate

HDFS 6403	Introduction to Gerontology	3
Directed individual study/readings course in	n gerontology	1-3
Select three of the following:		9
PSY 6983	Psychology of Aging	
SO 6413	Aging and Retirement in American Society	
HDFS 6813	Adult Development: The Middle Years	
COE 6713	Issues in Aging	
COE 8813	Counseling Elderly Clients	

37-38

SO 6433

Total Hours

13-15

Human Development and Family Science

Department Head: Dr. Michael Newman Graduate Coordinator: Dr. Lori Elmore-Staton Graduate Coordinator for El Program: Dr. Julie Parker 201B Lloyd Ricks Watson Building Box 9745 Mississippi State, MS 39762 Telephone: 662-325-0655 E-mail: JParker@humansci.msstate.edu

The School of Human Sciences offers both the Master of Science and the Doctor of Philosophy in Human Development and Family Science (HDFS) and a Master of Science in Early Intervention (EI). Students in the M.S. program in HDFS may select either the thesis or non-thesis option. The M.S. in El is non-thesis only. Non-thesis students take a comprehensive oral exam in lieu of the thesis. Doctoral students must complete a research dissertation. Contact the Graduate Coordinator for more information regarding admission requirements and curriculum. Human Development and Family Science is an interdisciplinary approach to the study of individual and family development in a variety of contexts across the lifespan, from conception to later life.

Master of Science in Human Development & Family Science

Admission Requirements

An applicant for the Master of Science in Human Development & Family Science degree must meet the following requirements:

- Meet all MSU Graduate School requirements for admission
- · Have earned a baccalaureate degree in HDFS or a related field
- · Submit a Graduate Record Examination (GRE) score competitive with other applicants
- · Submit three letters of recommendation, with at least two letters from individuals familiar with applicant's academic work
- · Submit a sole-authored writing sample (see instructions below)
- Submit a personal statement (500-1,000 words) describing the applicant's purpose for undertaking graduate study, including professional plans, career goals, and detailed research interests

For international, non-native speakers of English, a TOEFL or IELTS score indicative of ability to successfully complete graduate work is required. See English-Language Requirements in the Admission section of this publication for more information.

An overall undergraduate grade point average of 3.00 is preferred. Students admitted provisionally must fulfill Graduate School provisional admission requirements found in this publication. Qualified applicants for the HDFS grade program are expected to have interests and goals that are consistent with the department's faculty expertise and interests, as well as course offerings. Admission decisions are based on a holistic consideration of the applicant's credentials.

Instructions for Writing Sample: Applicants to the master's program are asked to submit a sole-authored writing sample in English so that the admissions committee may assess the candidate's ability as a writer, potential success in the master's program, and ability to do research and present it in written form. The minimum length of the sample is five pages, but the same should not exceed 25 pages. The sample should be presented in APA style (title page, headers, references, etc.). Examples of possible writing samples include, but are not limited to, papers from past courses, journal articles, or some written work product, such as a manual or technical report.

Master of Science in Early Intervention

The Master of Science in Early Intervention is framed by developmental, ecological, and family systems theories and evidence-based practices that emphasize the interactive nature of child development. The program will produce personnel with highly specialized skills and knowledge about critical assessment, intervention, and instructional programming, addressing the unique needs of infants, toddlers, and preschool children with disabilities or atrisk conditions and their families. The program will draw upon a range of approaches that acknowledge the central role of the family in a child's life with services provided in natural environments, i.e., home and community-based settings.

Admission Requirements

An applicant for the Master of Science in Early Intervention degree must meet the following requirements.

- · Meet all MSU Graduate School requirements for admission
- · Have earned a baccalaureate degree in HDFS or a related field
- · Submit a Graduate Record Examination (GRE) score competitive with other applicants or hold a MS teacher's license

- Preferably have an undergraduate grade point average of 3.00
- Submit three letters of recommendation, with at least two coming from individuals familiar with applicant's academic work; letters should address the applicant's potential for successfully completing graduate work
- A personal statement (500-1,000 words) describing the applicant's purpose for undertaking graduate study, including professional plans and career goals
- Submit TOEFL scores that meet MSU requirements of international, non-native speakers of English and are indicative of ability to successfully
 complete graduate work
- Submit a sole-authored writing sample (see instructions below)

Instructions for Writing Sample: Applicants to the Master's program in Early Intervention are asked to submit a sole-authored writing sample in English so that the admissions committee may assess the candidate's ability as a writer, potential success in the master's program, and ability to do research and present it in written form. The minimum length of the sample is three pages, but the sample should not exceed 10 pages. The writing sample should be presented in APA style (title page, headers, references, etc.) and should address a topic related to early intervention, early childhood, or child development. Examples of possible writing samples include, but are not limited to, papers from past courses, journal articles, or some written work product, such as a manual or technical report.

Doctor of Philosophy in Human Development & Family Science

Admission Requirements

An applicant for the Doctor of Philosophy degree must meet the following requirements.

- Meet all MSU Graduate School requirements for admission
- Have earned a baccalaureate degree in HDFS or a related field
- · Have completed the following courses or their equivalents
- Meet all MSU Graduate School requirements for admission
- · Have earned a Master's degree in HDFS or a related field
- Have completed the following courses or their equivalents: AIS 8803 Research Methods; HS 8823 Advanced Theories of Human Development and Family Relations; 3 hours of graduate-level statistics; and HS 8813 Seminar in HDFS (contingent acceptance may be granted for students to complete requires courses within one calendar year)
- Have earned a grade point average of 3.00 on all previous graduate coursework
- · Submit a Graduate Record Examination (GRE) score competitive with other applicants
- Submit three letters of recommendation, with at least two of the letters coming from individuals familiar with the applicant's academic work
- Submit a sole-authored writing sample (see instructions below)
- Submit a personal statement (500-1,000 words) describing the applicant's purpose for undertaking graduate study, professional plans, career goals, and detailed research interests
- · Complete an interview with members of the HDFS graduate faculty

For international, non-native speakers of English, a TOEFL score indicative of ability to successfully complete graduate work is required. See English Language Test Score Requirements in the Admission section of this publication for more information.

Qualified applicants for the HDFS graduate program are expected to have interests and goals that are consistent with the department's faculty expertise and interests as well as course offerings. Once all application materials have been submitted, applicants should contact the HDFS graduate coordinator at 662-325-0655 or tom.phillips@msstate.edu to schedule an interview with members of the HDFS graduate faculty. To accommodate international applicants, interviews can be conducted using distance technology. Admission decisions are based on a holistic consideration of the applicant's credentials.

Admission to the master's program does not automatically mean that a student will enter the doctoral program; a student completing the master's degree must reapply through the Graduate School for admission to the doctoral program.

Instructions for Writing Sample: Applicants to the doctoral program are required to submit a sole-authored writing sample in English so that the admissions committee may assess the candidate's ability as a writer, potential success in the doctoral program, and ability to do research and present it in written form. The minimum length of the writing sample is five pages, but the sample should not exceed 25 pages. The sample should be presented in APA style (title page, headers, references, etc.). Examples of possible writing samples include, but are not limited to, papers from past courses, journal articles, or some written work product, such as a manual or technical report.

Master of Science in Human Development & Family Science - Thesis

Core Required Courses

HDFS 8813	Seminar in Human Development and Family Science
HDFS 8823	Advanced Theories of Human Development and Family Relations

EPY 6214	Educational and Psychological Statistics	4
AELC 8803	Applying Research Methods to Agricultural and Extension Education	3
AELC 8000	Thesis Research/Thesis in Agricultural and Extension Education	6
12 hours of approved electives		12
Total Hours		31

A thesis committee, consisting of the student's major professor and two other graduate faculty members, must be established. A thesis defense before the committee is required.

Note: A majority of electives must be HDFS courses. At least one-half of the course work in the degree program, exclusive of thesis credits, must be at the 8000 level. Students may transfer up to 9 semester hours of courses from other accredited degree programs.

Master of Science in Human Development & Family Science - Non-Thesis

Total Hours		31
15 hours of approved electives		15
or AELC 8703	Evaluation of Agricultural and Extension Education Programs	
AELC 8803	Applying Research Methods to Agricultural and Extension Education	3
AELC 8503	Program Planning and Development in Agricultural and Extension Education	3
EPY 6214	Educational and Psychological Statistics	4
HDFS 8823	Advanced Theories of Human Development and Family Relations	3
HDFS 8813	Seminar in Human Development and Family Science	3
Core Required Courses		

Total Hours

The student's major professor and two other graduate faculty members will comprise the graduate committee. A final comprehensive oral examination is required.

Note: A majority of electives must be HDFS courses. At least one-half of the course work in the degree program, exclusive of thesis credits, must be at the 8000 level. Students may transfer up to 9 semester hours of courses from other accredited degree programs.

Master of Science in Early Intervention - Non-Thesis

College	Required	Courses
---------	----------	---------

Total Hours		30
HDFS 8553	Practicum II	3
HDFS 8543	Practicum I	3
EDX 6813	Introduction to Assessment Issues in Special Education	3
HDFS 8533	Instructional Strategies and Practice for Early Intervention	3
HDFS 8513	Inclusion and Family-Centered Early Intervention	3
HDFS 8503	Medical Aspects of Developmental Disabilities in Young Children	3
HDFS 8123	The Effects of Poverty on Children and Families	3
HDFS 8113	Trends in Infant and Child Development	3
Major Required Courses		
AELC 8803	Applying Research Methods to Agricultural and Extension Education	3
HDFS 8823	Advanced Theories of Human Development and Family Relations	3
0 1		

Doctor of Philosophy in Human Development & Family Science

Core Required Courses		
HDFS 8833	Foundations of Human Development and Family Studies	3
HDFS 6843	Family Interaction	3
HDFS 8853	Current Issues in Human Development and Family Studies	3
HDFS 9000	Research and Dissertation in Human Development and Family Science	20
Teaching and Outreach (select one of the	following):	3
HDFS 8123	The Effects of Poverty on Children and Families	
AELC 8413	Methods of Planned Change in Agricultural and Extension Education	
AELC 8503	Program Planning and Development in Agricultural and Extension Education	

Total Hours		60
Approved Electives		15
SO 8233	Qualitative Analysis	
AELC 9583	Analysis and Interpretation of Data in Agricultural and Extension Education Research	
EPY 9213	Multivariate Analysis in Educational Research	
AND one of the following (3 hours):		3
EPY 8214	Intermediate Educational and Psychological Statistics	4
Statistics and Analysis		
EDF 9463	Qualitative Data Collection in Education	
EDF 9453	Introduction to Qualitative Research in Education	
AELC 8803	Applying Research Methods to Agricultural and Extension Education	
AELC 8703	Evaluation of Agricultural and Extension Education Programs	
Research and Evaluation (select tw	vo of the following):	6
AELC 8513	Volunteer Development in Agricultural and Extension Education	

The student must pass a written comprehensive exam prior to being admitted to candidacy. A dissertation committee, consisting of the student's major professor and three other graduate faculty members, must be established. A dissertation defense before the committee is required.

Note: A majority of the electives must b HDFS courses. At least one-half of the coursework in the degree program, exclusive of dissertation credits, must be at the 8000 level. Approved 7000 Directed Individual Study courses cannot count toward 8000/9000-level requirements. No more than 6 semester hours of graduate credit may be earned in Directed Individual Study courses. Students may transfer up to 9 semester hours of courses from other accredited degree programs.

The School of Human Sciences graduate courses may be used for a minor or for selected certificates in Human Sciences in cooperation with other degree programs. Areas of emphasis are available in the following program areas in Human Sciences: apparel, textiles and merchandising, and human development and family studies. The School also participates in the graduate Gender Studies Certificate by offering HDFS 6313, HDFS 6403, and HS 6513 and the Gerontology Certificate by offering HDFS 6403, HDFS 6813, and HDFS 6863.

For additional information about graduate offerings in the School of Human Sciences, contact Dr. Tommy Phillips.

Landscape Architecture

Department Head: Prof. Sadik C. Artunc Graduate Coordinator: Dr. Chuo Li Landscape Architecture Building Box 9725 Mississippi State, MS 39762 Telephone: 662-325-3012 E-mail: cl1004@msstate.edu

Graduate study leading to a Master of Landscape Architecture degree is offered in the Department of Landscape Architecture; thesis and non-thesis options are available. Students in the program have the opportunity to work with faculty on a wide range of research and design topics within the profession of landscape architecture. Special program emphasis is placed on watershed planning, landscape management, and community planning and design. The design studio courses broadly consider landscape issues related to water, health, and habitat in an effort to achieve the department's mission of "fostering the will and ability to plan, design, build and manage regenerative communities."

Admission

The applicant to the M.L.A. program should have a minimum GPA of 2.80 on a 4.00 scale. A student without a bachelor's degree in landscape architecture from an accredited program may undertake the M.L.A. as a first professional degree but is required to undertake additional "leveling" coursework to ensure competency in the field; this typically requires an additional year of study. Submission of Graduate Record Examination (GRE) scores is recommended but not required. The applicant's submission should include a letter of interest that includes a written statement (no more than 1500 words) explaining his or her interest in pursuing graduate studies in landscape architecture at Mississippi State University. Three letters of recommendation from individuals familiar with the applicant's academic work, motivation, and character should accompany the application. The applicant should also submit a detailed résumé. Applicants with degrees from allied fields (such as architecture or civil engineering) should submit a portfolio if they wish to be considered for course reductions during the leveling year. Contact the department's graduate coordinator for additional information.

Accelerated Program

Highly qualified undergraduates (GPA of 3.0 or higher) in professional design programs are encouraged to apply to the Accelerated MLA Program. This program permits students to earn up to 16 hours of graduate level coursework during their junior and senior years of undergraduate studies. Students take graduate level courses and earn both undergraduate credit and graduate credit simultaneously. Students need to consult with a potential graduate advisor to ensure graduate credit could be applied to a Program of Study for the graduate degree. Application to this program may be made at the end of the sophomore or the junior year (i.e., after completion of 60 or more hours of graded undergraduate courses). Students interested in applying to the Accelerated Program should contact the Department of Landscape Architecture's Graduate Coordinator for more details.

Master of Landscape Architecture - Thesis

Core Courses

Total Hours		33
SO 8274	Graduate Social Statistics I	
ST 8114	Statistical Methods	
Select one of the following:		4
LA 8000	Thesis Research/ Thesis in Landscape Architecture	6
Other Requirements		
Approved Graduate-level Elective		3
LA 8613	Research Methods in Landscape Architecture	3
LA 8751	Seminar in Contemporary Design Issues	1
LA 8741	Proposal Writing Seminar	1
LA 8731	Seminar in Community Based Planning	1
LA 8533	Landscape Architecture Graduate Studio III	3
LA 8721	Seminar in Landscape Management	1
LA 8523	Landscape Architecture Graduate Studio II	3
LA 8711	Seminar in Watershed Planning and Management	1
LA 8513	Landscape Architecture Graduate Studio I	3
LA 6113	Design Theory and Criticism	3

A thesis proposal will be developed for presentation to and approval by the graduate committee. The graduate committee is comprised of not fewer than three graduate faculty, at least two of whom must be from the Department of Landscape Architecture. The candidate's graduate committee must approve the thesis and administer a final oral examination or thesis defense. The thesis must be submitted to the members of the committee for approval at least fourteen days prior to a scheduled defense.

Master of Landscape Architecture - Non-Thesis

Total Hours		39
LA 8545	LA Studio IV-Case Study ¹	5
LA 6514	Ecological Planting Design	4
LA 6443	Exterior Design-Build Studio	3
LA 6124	Landscape Architecture Construction V: Construction Documents	4
Other Requirements		
Graduate-level Elective		3
LA 8613	Research Methods in Landscape Architecture	3
LA 8751	Seminar in Contemporary Design Issues	1
LA 8741	Proposal Writing Seminar	1
LA 8731	Seminar in Community Based Planning	1
LA 8533	Landscape Architecture Graduate Studio III	3
LA 8721	Seminar in Landscape Management	1
LA 8523	Landscape Architecture Graduate Studio II	3
LA 8711	Seminar in Watershed Planning and Management	1
LA 8513	Landscape Architecture Graduate Studio I	3
LA 6113	Design Theory and Criticism	3
Core Courses		

Total Hours

¹ Non-thesis student must have a signed proposal prior to entering LA 8545. The proposal must include the course instructor and one additional graduate faculty member from the department who will serve as an advisor.

Plant and Soil Sciences

Department Head: Dr. Darrin Dodds

Graduate Coordinator: Dr. Michael Cox 117 Dorman Hall Box 9555 Mississippi State, MS 39762 Telephone: 662-325-2311 E-mail: mcox@pss.msstate.edu

Graduate study offered in the Department of Plant and Soil Sciences leads to the Master of Science in Plant and Soil Sciences degree with concentrations in Agronomy, Horticulture, or Weed Science and also to the Doctor of Philosophy degree in Plant and Soil Sciences with a concentration in Agronomy, Horticulture, or Weed Science. The Horticulture concentration within the Plant and Soil Sciences degrees also offers a minor in Floral Management. The department has an extensive research program which provides a diversity of problems for thesis and dissertation research under the supervision of experienced and highly trained scientists. The Department of Plant and Soil Sciences offers graduate programs in Plant Breeding and Genetics, Molecular Biology, Crop Modeling, Agronomy, Soil Science, Crop Physiology, Weed Science, Turfgrass Science, Remote Sensing, and Horticulture. A Precision Agriculture Certificate is also offered.

Graduate programs are designed to develop skills in research techniques in reference to the individual needs of each student. This program is developed and administered by a departmental committee within the student's area of specialization and may include courses in mathematics and statistics, biology, chemistry, biochemistry, remote sensing, etc., as well as agronomic, horticultural, and weed science courses. Graduate assistantships are provided, subject to availability of funds. An undergraduate grade average of B or better is required to be eligible for an assistantship. Requests for additional information should be addressed to:

Department Head Plant and Soil Sciences Box 9555 Mississippi State, MS 39762

Accelerated Program

Highly qualified undergraduates are encouraged to apply to an Accelerated Program which permits enrollment in graduate courses in Agronomy, Horticulture, or Weed Science during the student's final year of undergraduate studies. For complete information, see Accelerated Programs (p. 48). This option is only available for students who plan to pursue a thesis-based Master of Science degree in Plant and Soil Sciences with a concentration in Agronomy, Horticulture, or Weed Science.

In addition to the University requirements, the Department of Plant and Soil Sciences also requires the following information from applicants:

- 1. Submission of a standard application for graduate studies in the Department of Plant and Soil Sciences
- 2. Three letters of recommendation from individuals familiar with the applicant's academic performance
- 3. Submission of scores from the Graduate Record Examination (GRE) General Test prior to enrolling in graduate courses
- 4. A statement of professional interests and goals from the applicant, including specification of one or more potential major professors

Precision Agriculture Certificate

There is a need to train students in the broad array of precision agriculture technologies. This certificate program complements majors taught across College of Agriculture and Life Sciences (CALS) departments. This certificate features emerging technologies in decision-based agricultural planning and implementation. The certificate requires a minimum of 16 hours with at least 10 credit hours specific to Precision Agriculture coursework and 6 additional hours of electives or optional courses. Graduate requirements: PSS/ABE 2543 may be required as a leveling course and graduates may need a combination of Option 1 and Option 3 (below) to meet graduate credit requirements.

To obtain a Precision Agriculture Certificate, students are required to complete the following 16 hours:

PSS 2543	Precision Agriculture I	3
or ABE 2543	Precision Agriculture I	
PSS 4543	Precision Agriculture II (or PSS 6543 or ABE 4543/6543)	3
ECE 4411	Remote Sensing Seminar (or ECE 6411 or FO 4411/6411 or GR 4411/6411 or PSS 4411/6411)	1
ABE 4000	Directed Individual Study in Agricultural and Biological Engineering (or ABE 7000 or PSS 4000/7000)	3

Option 1: Choose from the following.		6-8
ABE 4483	Introduction to Remote Sensing Technologies (or ABE 6483 or ECE 4483/6483 or PSS 4483/6483)	
ABE 3513	The Global Positional System and Geographic Information Systems in Agriculture and Engineering	
FO 4471/6471	(and GIS for Natural Resource Management)	
FO 4472/6472		
PSS 4373/6373	Geospatial Agronomic Management	
GR 4303/6303	Principles of GIS	
GR 3303	Survey of Geospatial Technologies	
	T courses) : Any TWO transfer courses from the following in a Precision Agriculture Technology griculture Business and Management Technology program	6-8
AGT 1163 Introduction to Spatial Info	rmation Systems	
AGT 2154 Geographic Information Sy	vstems I	
AGT 1254 GPS Data Collection		
AGT 2164 Variable Rate Technology		
AGT 1354 Remote Sensing		
AGT 2474 Site Specific Pest Manage	ment	
OR Completion of the UAV Training Prog	gram courseork at Hinds Community College	
Option 3: Discipline Specific Electives		6-8
ABE 3413	Bioinstrumentation I	
ABE 4163	Agricultural and Off-Road Machinery Management	
or ABE 6163	Machinery Management for Agro-Ecosystems	
ABE 4263/6263	Soil and Water Management	
ABE 4844/6844		
ABE 6423	Bioinstrumentation II	
AEC 3413	Introduction to Food Marketing	
AEC 3513	Economics of Food and Fiber Production	
AEC 4113/6113	Agribusiness Firm Management	
AEC 4133/6133	Analysis of Food Markets and Prices	
AEC 4343/6343	Advanced Farm Management	
BIO 4214	General Plant Physiology	
EPP 3124	Forest Pest Management	
EPP 4163/6163	Plant Disease Management	
EPP 4214/6214	Diseases of Crops	
EPP 4234/6234	Field Crop Insects	
EPP 4263/6263	Principles of Insect Pest Management	
FIN 3123	Financial Management	
PSS 3301	Soils Laboratory	
PSS 3303	Soils	
PSS 3133	Introduction to Weed Science	
PSS 4113/6113	Agricultural Crop Physiology	
PSS 4313/6313	Soil Fertility and Fertilizers	
PSS 4333/6333	Soil Conservation and Land Use	
PSS 4343/6343	Controlled Environment Agriculture	
PSS 4813/6813	Herbicide Technology	
PSS 4823/6823	Turfgrass Weed Management	

Departmental Admission Criteria

M.S. and Ph.D. in Plant and Soil Sciences with concentrations in Agronomy, Horticulture, or Weed Science:

GPA—
 For Master of Science: 2.75

For Doctor of Philosophy: 3.00 on graduate work

- TOEFL (Test of English as a Foreign Language) or IELTS (International English Language Testing Systems) score— Agronomy: TOEFL score of 500 PBT (61 iBT) or IELTS score of 5.5
 Horticulture: TOEFL score of 500 PBT (61 iBT) or IELTS score of 5.5
 Weed Science: TOEFL score of 550 PBT (79 iBT) or IELTS score of 6.5
- GRE—All graduate programs require submission of GRE scores.
- A non-thesis M.S. does not qualify toward admission to a Ph.D. program in the Department of Plant and Soil Sciences at Mississippi State University.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Leveling Courses

The Department of Plant and Soil sciences recognizes that many students who hold bachelor degrees from other educational areas may wish to study toward an advanced degree within the department. These students may come from areas with different requirements than those normally associated with Agronomy, Horticulture, or Weed Science. To increase the possibility of success in attaining the advanced degree, the department requires all graduate students to have a fundamental understanding of soil and plant science. To this end, all graduate students must have had at least one course in soil science equivalent to Soils (PSS 3303), a plant science course covering basic plant physiology, college mathematics, college chemistry, and college-level biology. Graduate students who do not possess these courses upon acceptance will be required to complete these courses during the first or second semester of their attendance at Mississippi State University.

General Department Completion Requirements

M.S.-- A thesis and an oral thesis defense are required. The graduate committee must approved the thesis topic, research proposal, program of study, and final thesis. A thesis defense is required.

M.S. Non-Thesis -- A research paper approved by the student's graduate committee and an oral comprehensive exam are required.

Ph.D. -- The dissertation is required of all candidates for the doctorate degree. Original research, a written examination, an oral preliminary examination, and an oral dissertation defense and examination are required. At least one semester of teaching experience is strongly encouraged. The graduate committee must approved the dissertation topic, research proposal, program of study, and final dissertation.

Academic Performance

Students in the M.S. and Ph.D. degree programs must maintain a 3.00 GPA after admission to the program. No grade below C will be accepted for graduate credit. More than two grades of C or below not exceeding 8 credit hours constitute grounds for dismissal. Note: A C grade for a course that is retaken and in which the student earns a grade of B or higher will not be included in the 8 total hours. However, the original grade is included as part of the calculation of the GPA. At any time, the student will lose any departmental assistantship should his/her cumulative drop below a 3.00. Students with alternative sources of funding (scholarships, fellowships, etc.) must follow the rules and regulations of the funding source.

Master of Science in Plant and Soil Sciences with Agronomy Concentration - Thesis

Prerequisites - as stipulated by the major professor, the departmental graduate coordinator, and the dean.

Graduate-level coursework		12
PSS 8811	Seminar ¹	1
ST 8114	Statistical Methods (or other graduate-level statistics course) ²	4
8000-level coursework ³		7
Research/thesis ⁴		6
Total Hours		30

- ¹ An exit seminar describing the thesis research is required as part of the credit hours.
- A graduate-level statistics course is required as part of the credit hours.

- 3 The total 8000-level coursework credits must equal a minimum of 12 hours.
- 4 A thesis defense is required.

Master of Science in Plant and Soil Sciences with Agronomy Concentration - Non-Thesis

Prerequisites - as stipulated by the major professor, the departmental graduate coordinator, and the dean.

Total Hours		30
Additional 8000-level coursework 4		10
ST 8114	Statistical Methods (or other graduate-level statistics course) ³	4
PSS 8811	Seminar ²	1
PSS 7000	Directed Individual Study in Plant and Soil Sciences ¹	3
Graduate-level coursework		12

otal Hours

1 The student must develop a research paper approved by the student's graduate committee. In addition, a comprehensive examination over coursework is required.

- 2 An exit seminar describing the thesis research is required as part of the credit hours.
- 3 A graduate-level statistics course is required as part of the credit hours.
- 4 The total 8000-level coursework must equal a minimum of 15 hours.

Doctor of Philosophy in Plant and Soil Sciences with Agronomy Concentration

Prerequisites - as stipulated by the major professor, the departmental graduate coordinator, and the dean.

Total Hours		40
PSS 9000	Dissertation Research /Dissertation in Plant and Soil Sciences	20
Additional graduate-level coursework 4, 5		14
ST 8114	Statistical Methods (or other graduate-level statistics course) 3	4
PSS 8831	Seminar ²	1
PSS 8821	Seminar ¹	1

l otal Hours

- 1 The first seminar should be done within the first year of the student's program and should present the research proposal and include a review of relevant literature.
- 2 An exit seminar will describe the results of the student's dissertation research.
- 3 A graduate-level statistics course is required as part of the credit hours.
- 4 The minimum coursework required for a PhD in Plant and Soil Sciences is 20 hours beyond the Master's degree requirements.
- 5 Mississippi State University requires all students earn at least 53 hours graduate credit beyond the bachelor's level to include a minimum of 20 dissertation credits.

A qualifying examination may be administered at the beginning of the student's program. The student must successfully complete a program of study as approved by the major advisor and graduate committee. The student must pass a preliminary examination. a written and oral preliminary examination will be administered by the graduate committee after completion or within 6 hours of completing coursework. Original research and a dissertation are required of all candidates for the doctoral degree.

Master of Science in Plant and Soil Sciences with Horticulture Concentration - Thesis

Prerequisites - as stipulated by the major professor, the departmental graduate coordinator, and the dean. In addition, graduate students accepted into the Horticulture concentration are expected to have complete a course in General Plant Physiology or will be required to include this course on their graduate program of study.

Total Hours		30
Research/thesis ⁴		6
Additional 8000-level coursework ³	7	
ST 8114	Statistical Methods (or other graduate-level statistics course) 2	4
PSS 8811	Seminar ¹	1
Graduate-level coursework	12	

- ¹ An exit seminar describing the thesis research is required as part of the credit hours.
- ² A graduate-level statistics course is required as part of the credit hours.
- ³ The total 8000-level coursework must equal a minimum of 12 hours.
- ⁴ A thesis defense is required.

Master of Science in Plant and Soil Sciences with Horticulture Concentration - Non-Thesis

Prerequisites - as stipulated by the major professor, the departmental graduate coordinator, and the dean. In addition, graduate students accepted into the Horticulture concentration are expected to have complete a course in General Plant Physiology or will be required to include this course on their graduate program of study.

Total Hours		30
Additional 8000-level coursework 4		15
ST 8114	Statistical Methods ³	4
PSS 8811	Seminar ²	1
PSS 7000	Directed Individual Study in Plant and Soil Sciences ¹	3
Graduate-level coursework		7

- ¹ The student must develop a research paper approved by the student's graduate committee. An oral comprehensive examination is required.
- ² An exit seminar describing the thesis research is required as part of the credit hours.
- ³ A graduate-level statistics course is required as part of the credit hours.
- ⁴ The total 9000-level coursework must equal a minimum of 15 hours.

Doctor of Philosophy in Plant and Soil Sciences with Horticulture Concentration

Prerequisites - as stipulated by the major professor, the departmental graduate coordinator, and the dean. In addition, graduate students accepted into the Horticulture concentration are expected to have complete a course in General Plant Physiology or will be required to include this course on their graduate program of study.

Total Hours		44
PSS 9000	Dissertation Research /Dissertation in Plant and Soil Sciences	20
Additional graduate-level coursework 4, 5		15
ST 8214	Design and Analysis of Experiments (or other graduate-level statistics course) 3	4
PSS 8831	Seminar ²	1
PSS 8821	Seminar ¹	1
BCH 6013	Principles of Biochemistry	3

Total Hours

¹ The first seminar should be done within the first year of the student's program and should present the research proposal and include a review of relevant literature.

- ² An exit seminar will describe the results of the student's dissertation research.
- ³ A graduate-level statistics course is required as part of the credit hours; two graduate-level statistics courses beyond the B.S. degree are required for the Ph.D. in the Horticulture concentration.
- ⁴ The minimum coursework required for a PhD in Plant and Soil Sciences with a Horticulture concentration is 24 hours beyond the master's degree requirements.
- ⁵ Mississippi State University requires all students earn at least 53 graduate credit hours beyond the bachelor's level to include a minimum of 20 hours dissertation credits.

A qualifying examination may be administered at the beginning of the student's program. The student must successfully complete a program of study as approved by the major advisor and graduate committee. The student must pass a preliminary examination. A written and oral preliminary examination will be administered by the graduate committee after completion or within 6 hours of completing coursework. Original research and a dissertation are required of all candidates for the doctoral degree.

Horticulture (Floral Management) Graduate Minor

PSS 6013	Principles of Floral Design	3
PSS 6023	Floral Management	3
PSS 6033	Case Studies in Floral Management	3

Total Hours		12
PSS 6043	International Horticulture	3

The Horticulture concentration within the Plant and Soil Sciences degrees also offers a minor in Floral Management. The minor is available for graduate students seeking training in this field to complement their graduate degree. Students seeking the minor are required to complete the 12-hour program. The student's graduate committee must include a minor committee member from the Department of Plant and Soil Sciences.

Master of Science in Plant and Soil Sciences with Weed Science Concentration -Thesis

Prerequisites - as stipulated by the major professor, the departmental graduate coordinator, and the dean.

Total Hours		30
Research/thesis ⁴		6
Additional 8000-level coursework ³		7
ST 8114	Statistical Methods (or other graduate-level statistics course) ²	4
PSS 8811	Seminar ¹	1
Graduate-level coursework		12

- 1 An exit seminar describing the thesis research is required as part of the credit hours.
- 2 A graduate-level statistics course is required as part of the credit hours.
- 3 The total 8000-level coursework must equal a minimum of 12 hours. Up to 9 hours of PSS 8701-8771. Current Topics in Weed Science may be included to meet these requirements. 4
- A thesis defense is required.

Master of Science in Plant and Soil Sciences with Weed Science Concentration - Non-Thesis

Prerequisites - as stipulated by the major professor, the departmental graduate coordinator, and the dean.

Total Hours		30
Additional 8000-level coursework ⁴		10
ST 8114	Statistical Methods ³	4
PSS 8811	Seminar ²	1
PSS 7000	Directed Individual Study in Plant and Soil Sciences ¹	3
Graduate-level coursework		12

1 The student must develop a research paper approved by the student's graduate committee. A comprehensive examination is required.

- 2 An exit seminar describing the thesis research is required as part of the credit hours.
- 3 A graduate-level statistics course is required as part of the credit hours.
- 4 The total 8000-level coursework must equal a minimum of 15 hours.

Doctor of Philosophy in Plant and Soil Sciences with Weed Science Concentration

Prerequisites - as stipulated by the major professor, the departmental graduate coordinator, and the dean.

Total Hours		40
PSS 9000	Dissertation Research /Dissertation in Plant and Soil Sciences	20
Additional graduate-level coursework 4, 5		14
ST 8114	Statistical Methods (or other graduate-level statistics course) 3	4
PSS 8831	Seminar ²	1
PSS 8821	Seminar ¹	1

Total Hours

- 1 To be done in the early stages will present the research proposal and include a review of relevant literature.
- 2 Exit seminar will describe the dissertation research.
- 3 A graduate-level statistics course is required as part of the credit hours.
- 4 The minimum coursework required for a PhD in Plant and Soil Sciences is 20 hours beyond the master's degree requirements. Up to 9 hours of PSS 8701-8771. Current Topics in Weed Science may be included to meet these requirements.

⁵ Mississippi State University requires all students earn at least 53 hours graduate credit beyond the bachelor's level to include a minimum of 20 hours dissertation credits.

A qualifying examination may be administered at the beginning of the student's program. The student must successfully complete a program of study as approved by the major advisor and graduate committee. The student must pass a preliminary examination. a written and oral preliminary exam will be administered by the graduate committee after completion or within 6 hours of completing coursework. Original research and a dissertation are required of all candidates for the doctoral degree.

Weed Science Concentration Prerequisite and Core Courses

As specified by the student's major professor and graduate committee.

Poultry Science

Department Head: Dr. Mary M. Beck Graduate Coordinator: Dr. Kelley Wamsley 325 Wise Center Drive Box 9665 Mississippi State, MS 39762 Telephone: 662-325-3416 E-mail: k.wamsley@msstate.edu

The Poultry Science Department offers the following degrees:

- Master of Science degree in Agriculture with a concentration in Poultry Science
- Master of Agriculture in Agriculture with a concentration in Poultry Science
- · Doctor of Philosophy degree in Agricultural Sciences with a concentration in Poultry Science

The department also offers M.S. and Ph.D. programs with concentrations in the interdisciplinary programs of genetics and animal physiology. Admission requirements and detailed information for those interdisciplinary degree programs can be found listed separately under each of the individual programs.

Accelerated Program

Highly qualified undergraduates in the Poultry Science Department at Mississippi State University are encouraged to consider applying to the Accelerated Program which permits students to earn up to 9 hours of graduate-level coursework during their final year of undergraduate studies. For complete information, see Accelerated Programs (p. 48).

In addition to University requirements, the Department of Poultry Science also requires the following information from applicants:

- 1. Three letters of recommendation
- 2. Selection of a potential major professor from the departmental graduate faculty
- 3. A statement of purpose that describes their academic and professional goals as well as how their prior academic and professional experiences have prepared them for the Accelerated Program and graduate study

Students interested in applying to the Accelerated Program should contact the Department's Graduate Coordinator, Dr. Kelley Wamsley, for more details.

Admission Criteria

Admission requirements for the M.S. in Agriculture degree with a concentration in Poultry Science are the same as those listed in the General Requirements of the Graduate School in the College of Agriculture and Life Sciences (CALS) except that any request for Graduate Record Examination (GRE) test scores is dependent upon the faculty member who will serve as the thesis director (major professor) but the GRE score is not a Department of Poultry Science requirement.

Admission requirements for the Ph.D. degree concentration in Poultry Science are the same as those listed in the General Requirements of the Graduate School in the College of Agriculture and Life Sciences (CALS) except that any request for Graduate Record Examination (GRE) test scores is dependent upon the faculty member who will serve as the dissertation director (major professor), but the GRE score is not a Department of Poultry Science requirement.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be

dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. While in the provisional status, a student is not eligible to hold a graduate assistantship.

Academic Performance

Satisfactory academic performance standards are the same as those for CALS, except as follows:

- The student is allowed to make no more than two C grades in courses taken for graduate credit.
- The student will be recommended for dismissal if he/she receives a third C or any grade below a C.
- In addition, the student's committee reserves the right to establish a "core" course or courses whereby any grade below a B in one of those courses is not accepted.
- The student will be recommended for dismissal if he/she receives a C or any grade below a C in a core course.
- The student must have a final GPA of 3.00 or higher to graduate.
- Doctoral students only: To be eligible for the preliminary/comprehensive examination, a graduate student must maintain an overall B average in all graduate courses attempted.

Master of Science in Agriculture with Poultry Science Concentration - Thesis

Graduate-level coursework		12
8000-level coursework		12
PO 8000	Thesis Research/ Thesis in Poultry Sciences	6
Total Hours		30

A thesis defense is required. The thesis director and graduate committee will determine specific course requirements for the student's program. Before the end of the first semester of graduate work, the student must establish his or her graduate committee, complete the necessary paperwork, and gain the faculty members' consent to participate on the committee. Once the student's research plan has been established, the student is required to present his/her research plan to the faculty in the form of a departmental seminar.

Master of Science in Agriculture with Poultry Science Concentration - Non-Thesis

Graduate-level coursework	15
8000-level coursework	15
Total Hours	30

A comprehensive examination is required. The major professor and graduate committee will determine specific course requirements for the student's program. Before the end of the first semester of graduate work, the student must establish his/her graduate committee, complete the necessary paperwork and gain the faculty members' consent to participate on the committee.

Completion Requirements

Requirements for completion of the M.S. in Poultry Science are the same as those for CALS except that students in Poultry Science are required to participate in a limited teaching capacity, such as a guest lecturer, in one course during work on the degree. That limited teaching capacity will be determined by the student's graduate committee when the student's program of study is established. For additional information, email Dr. Kelley Wamsley.

Master of Agriculture in Agriculture with Poultry Science Concentration - Non-Thesis

Graduate Seminar		1-4
PO 8011	Graduate Seminar in Poultry Science (repeatable; number is determined by major professor and the committee)	
PO 7000	Directed Individual Study in Poultry Science	3
Graduate-level coursework		15
8000-level coursework ¹		8-11
Total Hours		30

¹ A minimum of 15 hours of 8000-level coursework is required for degree completion.

Students are required to complete 30 hours of coursework as approved by the graduate committee. Some Directed Individual Study courses, numbered at the 7000 level, may be approved to meet the 8000-level course requirement. Not more than 6 hours of graduate credit may be earned in Directed

Individual Study courses. Students will also have to complete a scholarly activity, participate in research projects, and develop a scholarly document focused on subject area.

Doctor of Philosophy in Agricultural Sciences with Poultry Science Concentration

The Ph.D. requires a minimum of three academic years beyond the B.S. degree with the number of hours varying as determined by the student and major professor. A minimum of 20 hours of PO 9000 Dissertation/Research is required in addition to coursework determined by the student and major professor.

Course requirements may include:

BCH 6603	General Biochemistry I	3
BCH 6613	General Biochemistry II	3
ST 8114	Statistical Methods	4
ST 8214	Design and Analysis of Experiments	4

A minor is not required, but if selected an additional 12 hours of graduate credit is required.

The preliminary examination must be attempted by the end of the fifth semester of the program. A Graduate Program of Study should be submitted and approved by the student's graduate committee and Graduate Coordinator by the end of the first semester of graduate study. The graduate committee should be composed of at least five members if the student has a minor and four members if the student does not have a minor. Committee members include the major professor, who must be a full member of the graduate faculty, at least three other members, two of whom are from the student's major field of interest, and a minor professor if the student has a minor field. Additional committee members may be included at the discretion of the major professor.

Completion Requirements

Requirements for completion of the Ph.D. in Poultry Science are the same as those for CALS except that each student in Poultry Science is required to participate in a limited teaching capacity, such as guest lecturer, in one course during his/her graduate study. That limited teaching capacity shall be determined by the student's graduate committee when the student's program of study is established.

College of Architecture, Art, and Design

Dean: Dr. Angi Bourgeois Associate Dean: Dr. Jeffrey Haupt Associate Dean: Dr. Bimal Balakrishnan Director of MFA in Historic Preservation: Dr. Beth Miller

240 Giles Hall Telephone: 662-325-2202 Mailing Address: PO Box AQ Mississippi State, MS 39762 Email: abourgeois@caad.msstate.edu Website: http://www.caad.msstate.edu (http://www.caad.msstate.edu/)

Master of Fine Arts in Historic Preservation

The Master of Fine Arts degree in Historic Preservation focuses on historic preservation combined with preservation field studies. Upon successful completion of the program, students will possess the skills necessary to educate diverse populations and promote historic preservation while employed with non-profit organizations, government agencies, cities, museums, private companies, and in academia. Students will complete coursework in: history of American architecture, landscape architecture, and interiors; investigation and documentation of structures, interiors, and sites; adaptive reuse of exesting buildings and intervention approaches; building materials conservation; historic preservation and conservation, preservation economics and advocacy; conservation of interior details, furniture, materials, and finishes; and additional preservation related courses available as electives.

Admission Requirements

Applicant's must have a bachelor's degree from a fully accredited four year educational institution, and earned a minimum GPA of 3.00 (based on a 4.00 system). They must submit an application form, a statement of purpose, official transcripts, and three letters of recommendation.

Provisional Admission

The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 or higher GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C unless one course retake is approved per the Graduate Course Retake Policy). The first 9 hours of graduate courses must be within the student's Program of Study. Courses with an S grade or transfer credits cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher

standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the Graduate Coordinator for the program's specific requirements. *While in provisional status, a student may be limited in the type of funding that can be used for a graduate assistantship (eg, positions that are state funded)*. Colleges and/or departments make these funding decisions following the rules of the Institutions of Higher Learning (IHL).

Academic Performance

A graduate student should be placed on probation by the department when academic deficiencies occur but the student can potentially meet all degree requirements successfully. Examples of these situations include but are not limited to the following:

- GPA falls below 3.00 required by the University;
- Receives a third course grade lower than a B (one of these courses must be retaken and the student must earn a grade of B or higher); or
- Fails to meet a departmental requirement.

A student may also be placed on academic probation if he or she falls short of any other standards for satisfactory academic performance established by their academic unit. Specific information relative to retaking of courses or completing remedial work will be established by the appropriate academic advisor, graduate committee, and Graduate Coordinator and shall be documented in written form. This remediation plan must specify a required date of completion. If the student intends to pursue the academic appeal process relating to the reason for being placed on probation, he or she must do so during the first probationary semester. If, at the end of the probationary period, the student has not met the requirements outlined in the remediation plan, she or he shall be dismissed. A student cannot take a comprehensive examination or defend/submit a thesis or dissertation during the probationary period without prior approval from the Academic Dean.

A graduate student shall be dismissed from the University if one or more of the following conditions occur:

- He or she receives a second course grade of D or lower;
- He or she receives a fourth course grade of C or lower;
- He or she is found to be responsible for violating the Student Honor Code for a second time;
- He or she was placed on academic probation and failed to meet the requirements for release from probationary status;
- He or she failed a comprehensive examination or final thesis/dissertation defense two times in pursuit of an academic degree, unless the academic program has a different requirement; or
- He or she falls short of any standards established by his or her academic unit, and the department recommends dismissal with approval of the Department Head (if applicable) and the Academic Dean.

A student shall be dismissed by the Graduate School for failure to meet University requirements as stated above after the academic unit confirms that there are no extenuating circumstances. A student can also be dismissed if the student's academic department recommends dismissal by submitting a Recommendation for Academic Dismissal form (a letter may be attached) from the Graduate Coordinator, approved by the Department Head (if applicable) and the Academic Dean, clearly stating the departmental requirements the student failed to meet.

Upon review and approval of the reason(s) for dismissal, an official academic dismissal letter from the Dean of the Graduate School is sent to the student via email to the student's MSU account. The letter informs the student that any schedule of classes for the following semester(s) will be dropped, and the Graduate School places an academic dismissal hold on the student's record to prevent further enrollment. The student may refer to the *Graduate Catalog* for information regarding the appeals process (see Academic Dismissal Appeal Procedure). A student who has been dismissed from a graduate program and has not been reinstated via the appeal process cannot apply for readmission into that program, except by meeting the conditions necessary to request Academic Amnesty (see Academic Amnesty).

Master of Fine Arts in Historic Preservation

- At least 30 credit hours of GPA-graded coursework must be taken at the 8000-level or higher.
- A student that has taken any of the above courses for undergraduate credit may use the undergraduate course to satisfy the graduate requirement for that course, however they must substitute another graduate-level course selected from the additional approved elective courses.
- Master's Thesis or Practicum: Within the minimum of 60 hours of coursework, students are required to complete a written thesis or practicum which must be approved by their thesis committee or practicum advisor. The thesis committee will consist of at least three members, of which two will be graduate faculty at MSU. Additional members could be industry representative(s). The practicum is practice based and may include research, documentation, drawings, on-site- experience, analysis, synthesis, and its completion should add to the body of knowledge in historic preservation.

School of Architecture

Director: Dr. Jassen Callender 240 Giles Hall 899 Collegeview St., Box AQ Mississippi State, MS 39762 Telephone: 662-325-2202 E-mail: mberkt@caad.msstate.edu

Website: http://caad.msstate.edu/mberk/ (http://www.caad.msstate.edu/sarc/home.php)

Master of Fine Arts in Historic Preservation

Major Required Courses		
ID 6403	Introduction to Historic Preservation	3
ID 8153	History of American Architecture and Landscape Architecture	3
ARC 6623	Historic Preservation Research Methods	3
ID 8010	Practicum	3
ID 8163	Historic Preservation Law	3
ID 8253	Adaptive Reuse of Existing Buildings	3
ID 8263	Interior Details, Furniture, Materials, and Finishes	3
GR 6303	Principles of GIS	3
ID 8273	Building Materials Conservation	3
ID 8283	Research Analysis Methods in Historic Preservation	3
ID 8353	Internship	3
ID 8453	Preservation Field Studies I	6
ID 8463	Historic Preservation Planning	3
ID 8483	Preservation Economics/Advocacy	3
ID 8553	Preservation Field Studies II	3
Additional Approved Electives		12
Total Hours		60

• At least 30 credit hours of GPA-graded coursework must be taken at the 8000-level or higher.

• A student that has taken any of the above courses for undergraduate credit may use the undergraduate course to satisfy the graduate requirement for that course, however they must substitute another graduate-level course selected from the additional approved elective courses.

• Master's Thesis or Practicum: Within the minimum of 60 hours of coursework, students are required to complete a written thesis or practicum which must be approved by their thesis committee or practicum advisor. The thesis committee will consist of at least three members, of which two will be graduate faculty at MSU. Additional members could be industry representative(s). The practicum is practice based and may include research, documentation, drawings, on-site- experience, analysis, synthesis, and its completion should add to the body of knowledge in historic preservation.

Certificate in Public Design

Total Hours		18
ARC 6873	Public Practice and Projects III (ARC 6863)	3
ARC 6833	Public Design Seminar III (ARC 6823)	3
ARC 6863	Public Practice and Projects II (ARC 6853)	3
ARC 6823	Public Design Seminar II (ARC 6813)	3
ARC 6853	Public Practice and Projects I	3
ARC 6813	Public Design Seminar I	3

The Certificate of Public Design will be granted upon the successful completion of the above sequence of courses.

The purpose for the program is to prepare design professionals to work in community-oriented design organizations and to be leaders in the field of public design. The certificate curriculum is designed as a three-semester program. The participants must be graduates of an accredited professional degree program in architecture, planning, or landscape architecture. Up to six interns each year will be supported. Interns will work alongside the studio's experienced full-time design staff on community projects for three-quarters of their time and complete coursework for one-quarter of their time.

College of Arts & Sciences

Dean: Dr. Rick Travis Associate Dean for Academic Affairs: Dr. Tommy Anderson Associate Dean for Research: Dr. Giselle Thibaudeau Munn Division Head, Meridian Campus: Dr. Richard Damms 208 Allen Hall Box AS Mississippi State, MS 39762 Telephone: 662-325-2646

Fax: 662-325-8740

Website: http://www.cas.msstate.edu (http://www.cas.msstate.edu/) E-mail: kim@deanas.msstate.edu

Degree and Certificate Programs

Department	Degree and	Concentration	Thesis	Non-Thesis	Starkville	Meridian	Distance
	Major	Concentration		1011-1116313			Distance
Anthropology and Middle Eastern Cultures	Master of Arts - Applied Anthropology		Х		Х		
Biological Sciences	Master of Science - Biological Sciences		Х		Х		
Biological Sciences	Master of Science - General Biology			Х			Х
Biological Sciences	Doctor of Philosophy - Biological Sciences				х		
Chemistry	Master of Sciences - Chemistry		Х	Х	Х		
Chemistry	Doctor of Philosophy - Chemistry				Х		
Classical & Modern Languages and Literatures	Master of Arts - Foreign Language		х	х	х		х
Communication	Master of Arts - Communication			Х	Х		Х
English	Master of Arts - English		Х	Х	Х		
English	Teaching of English to Speakers of Other Languages (TESOL) Certificate				x		x
Gender Studies Certificate					Х		
Geosciences	Master of Science - Geoscience	Applied Meteorology		Х			Х
Geosciences	Master of Science - Geoscience	Broadcast Meteorology		Х	Х		
Geosciences	Master of Science - Geoscience	Environmental Geosciences		Х	Х		Х
Geosciences	Master of Science - Geoscience	Geography	Х		Х		
Geosciences	Master of Science - Geoscience	Geology	Х		Х		
Geosciences	Master of Science - Geoscience	Geospatial Sciences	Х		Х		
Geosciences	Master of Science - Geoscience	Professional Meteorology	Х		Х		

Geosciences	Master of Science - Geoscience	Teachers in Geosciences		Х		х
Geosciences	Doctor of Philosophy - Earth and Atmospheric Science				X	
History	Master of Arts - History		Х	Х	Х	
History	Doctor of Philosophy - History				X	
History	Diversity Certificate					
Mathematics & Statistics	Master of Science - Mathematics		Х	Х	Х	
Mathematics & Statistics	Master of Science - Statistics		Х	Х	Х	
Mathematics & Statistics	Doctor of Philosophy - Mathematical Sciences				X	
Physics and Astronomy	Master of Science - Physics		Х	Х	Х	
Physics and Astronomy	Doctor of Philosophy - Physics				X	
Political Science and Public Administration	Master of Arts - Political Science		Х	Х	Х	
Political Science and Public Administration	Master of Public Policy and Administration - Public Policy and Administration			X	X	
Political Science and Public Administration	Doctor of Philosophy - Public Policy and Administration				X	
Psychology	Master of Science - Psychology		Х		Х	
Psychology	Doctor of Philosophy - Applied Psychology	Cognitive Science			X	
Psychology	Doctor of Philosophy - Applied Psychology	Clinical Psychology			X	
Sociology	Master of Science - Sociology		Х	Х	Х	
Sociology	Doctor of Philosophy - Sociology				X	

Anthropology and Middle Eastern Cultures

Department Head: Dr. Hsain Ilahiane Graduate Coordinator: Dr. Molly Zuckerman 208 Cobb Institute of Archaeology Box AR Mississippi State, MS 39762 Telephone: 662-325-7524 E-mail: grad@anthro.msstate.edu

Graduate study leading to a Master of Arts degree in Applied Anthropology is offered by the Department of Anthropology and Middle Eastern Cultures.

Admission Criteria

- A complete application for graduate study at MSU
- · Official transcripts showing credits earned at institutions of higher education
- A 3.00 GPA on the last 60 hours of baccalaureate work
- · A statement of purpose explaining why the applicant wishes to study anthropology at MSU
- · Scores on the General Graduate Record Examination (GRE)
- Three letters of recommendation from people who know the applicant's academic ability and potential

A student who is admitted to the program without a bachelor's degree in anthropology and who has not completed the following will be required to take:

AN 1103	Introduction to Anthropology	3
AN 1344	Introduction to Biological Anthropology	4
AN 1143	Introduction to Cultural Anthropology	3

These courses are not offered for graduate credit. A student who has not taken AN 6123 or its equivalent must take it for graduate credit.

A student enters the graduate program in the fall or spring semester. To be considered for admission, all application materials must be received by February 15 (fall admission) or October 15 (spring admission).

A request to waive the internship requirement must be provided in writing to the anthropology graduate coordinator by the graduate student. The request must give details of previous jobs and experience in applied settings, including length of each, employer, supervisor, and kinds of anthropology-related tasks performed. The student must arrange for submission of a letter from each agency or firm for which the student claims paid or volunteer work. Such letters must detail the kinds of work performed, the anthropological knowledge required, and must attest to the student's satisfactory performance of the work. This material will become part of the student's file. The waiver request will be considered by the anthropology graduate coordinator in consultation with other Anthropology faculty. If the request is granted, a signed copy of the waiver agreement will be placed in the student's file. Credit will not be awarded for waived internships.

Provisional Admission

An applicant who has not fully met the GPA requirements stipulated by the University and the Anthropology program for admission may be granted admission as a degree-seeking graduate student with provisional status. Such students must have as their initial objective advancement to regular status. Provisional students must receive a 3.00 GPA on the first 9 hours of graduate-level courses on their program of study taken at Mississippi State University (with no grade lower than a C) to gain regular admission status. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student will be dismissed from graduate study. While in the provisional status, students are not eligible to hold a graduate assistantship.

Assistantships

Applications for assistantships must be completed separately from admission applications and be submitted directly to the Anthropology Graduate Coordinator. Assistantship applications may be obtained from the coordinator (contact information below). An academic writing sample is required as part of the assistantship application. Assistantship application deadlines are February 15 (for fall semester) and October 15 (for spring semester).

Academic Performance

Unsatisfactory performance in the program will result in dismissal. Unsatisfactory performance is defined as the failure to maintain a B average in graduate courses attempted after admission to the program, a grade of U, D, or F in two courses, failure of the oral thesis defense, an evaluation of unsatisfactory on the thesis, or any other failure of a required component of the program of study. Evaluation of graduate grade point averages will occur following the first two regular semesters of coursework and every semester thereafter.

Accelerated Program

The goal of the accelerated B.A./M.A. program in Applied Anthropology (APAN) in the Department of Anthropology and Middle Eastern Cultures (AMEC) is to enable highly qualified Anthropology students to earn up to 12 hours of graduate course credit during their final year of undergraduate studies. Students will complete graduate-level courses (6000-level) and receive dual credit for the equivalent undergraduate course (4000-level). Application to this program may be made as early as the junior year. The student must have completed 60 or more hours of graded undergraduate courses and

achieved a 3.50 GPA for all undergraduate coursework at the time of application. Students must apply and be admitted to the accelerated program prior to enrolling in graduate courses. Interested students should contact the graduate coordinator, Dr. Molly Zuckerman, for additional details.

Information

For additional information, contact the Anthropology Graduate Coordinator.

Program of Study

A student may elect to specialize either in applied archaeology/bioarchaeology or in applied cultural anthropology. The program exposes students to proposal writing, consulting practices, and ethics.

The program focuses on preparing students for placement in the public and private sectors as cultural resource specialists, applied skeletal biologists, applied health scientists, and community and sustainable development practitioners, as well as preparing them for further graduate study.

Master of Arts in Applied Anthropology, Applied Archaeology/Bioarchaeology Emphasis

Archaeology field school ¹		
Required courses		
AN 6123	Anthropological Theory	3
AN 6523	Public Archaeology	3
AN 8011	Professionalization in Applied Anthropology	1
AN 8013	Quantitative Methods in Anthropology	3
AN 8533	Readings in Archaeology: Theory	3
Technical elective graduate course	6-7	
Additional 8000-level coursework	6	
Research		6
AN 8000	Thesis Research/ Thesis in Anthropology	
Internship		5
One-semester- or one-summer-lor	ng internship	
Total Hours		36-37

1

AN 2516 Archaeological Field Methods: Survey: 1-6 hours, or AN 3516 Archaeological Field Methods: Excavation: 1-6 hours, or AN 3540 Archaeological Travel and Participation Program: 1-6 hours must be completed if the student has not had equivalent courses or field experience. Courses do not count for graduate credit.

An oral exam and thesis are required.

The emphasis in applied archaeology/ bioarchaeology focuses on cultural resource management. Specialty areas include the following:

- archaeological surface survey and excavation methods
- · artifact analysis
- · settlement pattern and spatial analysis
- · environmental archaeology
- osteoarchaeology
- forensics

Master of Arts in Applied Anthropology, Applied Cultural Anthropology Emphasis

Required courses		
AN 6123	Anthropological Theory ¹	3
AN 8011	Professionalization in Applied Anthropology	1
AN 8013	Quantitative Methods in Anthropology	3
Elective graduate courses		9
Additional 8000-level coursework		9
Research		6
AN 8000	Thesis Research/ Thesis in Anthropology	
Internship		5

Total Hours

1

Must be completed if the student has not had equivalent courses or field experience.

An oral exam and thesis are required.

The applied cultural anthropology specialization emphasizes medical anthropology; environmental anthropology; business and economic anthropology; mediating the impacts of development; urban anthropology; and communication in multi-cultural settings. Ethnographic and qualitative research methods, as practiced in applied settings, are stressed.

Graduate Anthropology Minor

The department offers a graduate minor in anthropology consisting of 12 graduate hours including AN 6123. The minor is flexible in content and designed to complement the student's work in other fields. Courses taken for a graduate minor in anthropology must be taught by anthropology faculty. A student selecting this minor must include a minor committee member on his/her graduate committee.

Biological Sciences

Department Head: Dr. Angus Dawe Graduate Coordinator: Dr. Justin Thornton General Biology Coordinator: Dr. Donna M. Gordon 219 Harned Hall, 295 Lee Blvd Box GY Mississippi State, MS 39762 Telephone: 662-325-3120 E-mail: grad_studies@biology.msstate.edu, msgb@biology.msstate.edu

Graduate study leading to the Master of Science and Doctor of Philosophy degrees is offered in Biological Sciences. Major areas of emphasis include molecular, developmental, cellular and organismal biology. An emphasis in biological sciences will be interdisciplinary, drawing from courses in and out of the department relating to a single unifying field, such as cell biology, evolutionary biology/ecology, or microbiology. Graduate research and teaching assistantships are available.

A Master of Science degree in General Biology (GBIO) is offered through distance learning. This degree program is designed for practicing K-12 teachers who need graduate-level comprehensive instruction in biology. This web-based degree program culminates with a capstone hands-on learning experience in lab and field settings.

Accelerated Program

Highly qualified undergraduates at Mississippi State are encouraged to consider applying to the Accelerated Program. This program permits enrollment in up to 9 hours of graduate-level courses in Biological Sciences during the student's final year of undergraduate studies. Upon completion of graduate courses, undergraduate credit is also awarded. Students would need to consult with potential graduate advisors to ensure graduate credit could be applied to a program of study for the M.S. degree. Application to this program may be made as early as the end of the sophomore year (i.e., after completion of 60 or more hours of graded undergraduate courses). This option is only available for students pursuing a thesis-based Master of Science degree in Biological Sciences. For more information see Accelerated Programs (p. 48).

Admission Criteria

Requirements for entrance into the M.S. and Ph.D. programs in the Department of Biological Sciences include the following:

- 1. A GPA of 2.75 on a 4.00 system for all undergraduate work and a GPA of 3.00 for all coursework in the biological sciences
- 2. Three letters of recommendation from individuals familiar with the applicant's academic performance
- 3. Submission of scores from the Graduate Record Examination (GRE) General Test
- 4. A statement of professional interests and goals from the applicant

Requirements for admission to the Master of Science in General Biology include the following:

- 1. A minimum GPA of 2.75 on a 4.00 system on the last 60 hours of the undergraduate degree and a GPA of 3.00 for all coursework in the biological sciences
- 2. Three letters of recommendation from individuals familiar with the applicant's academic performance
- 3. A statement of purpose, professional goals and interests, and work experience

Requirements for entrance into the combined B.S./M.S. program in the Department of Biological Sciences include the following:

36

- 1. A GPA of 3.50 or higher on a 4.00 system for all undergraduate work (no fewer than 60 hours)
- 2. Submission of a standard application for graduate studies in the Department of Biological Sciences, along with application fee
- 3. Three letters of recommendation from individuals familiar with the applicant's academic performance
- 4. Submission of scores from the Graduate Record Examination (GRE) General Test prior to enrolling in graduate courses
- 5. A statement of professional interests and goals from the applicant, including specification of one or more potential major professors

Contingent Admission

In some cases, a student can be accepted pending a particular condition, such as completion of a B.S. or M.S. degree or other conditions such as determined by the faculty and/or the Graduate School. Graduate students accepted on a contingent basis may receive an assistantship.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. A student will not be retained on provisional status for more than two semesters. While in the provisional status, a student is not eligible to hold a graduate assistantship. This option is not available for students pursuing the combined B.S./M.S. program.

Academic Performance

The graduate student must maintain an average of B (3.00) or higher for all courses after admission to the program. Only grades of C or higher will be accepted for credit. One course of the approved graduate program can be repeated; the two grades will be averaged. All grades earned will be employed in overall GPA calculations. Failure to demonstrate satisfactory progress toward completion of degree requirements, including earning two or more Cs or earning a grade of D or F, may be considered by the Graduate Committee in consultation with the student's advisory committee to be sufficient cause for dismissal from the graduate program. If the student's GPA falls below 3.00, he/she will have a one-semester grace period in which to retain a teaching assistantship. By the end of this grace period, the student must have achieved an overall 3.00 GPA. This 3.00 GPA must be maintained for the duration of the graduate program, or the student will be recommended for dismissal from the graduate program. The student may retain a teaching assistantship during this probationary semester. During the probationary semester, the student must be enrolled in approved program requirements or, if the program has not yet been approved, in courses appropriate for the program.

Master of Science in Biological Sciences

BIO 8011	Seminar I ¹	1
BIO 8021	Seminar II ¹	1
ST 8114	Statistical Methods ²	4
Additional graduate-level coursework		18
BIO 8000	Thesis Research/ Thesis in Biological Sciences	6
Total Hours		30

¹ Only one hour of BIO 8011 and one hour of BIO 8021 will be credited towards the degree.

² Or appropriate substitute, as approved by the advisory committee.

An exit seminar, a final comprehensive examination, and a thesis are required. At least 12 hours of coursework must be 8000-level.

Doctor of Philosophy in Biological Sciences

BIO 8011	Seminar I ¹	1
BIO 8021	Seminar II ¹	1
ST 8114	Statistical Methods ²	4
Graduate-level coursework	to be determined by student's graduate committee	
BIO 9000	Dissertation Research/ Dissertation in Biological Sciences	20
1		

Only one hour of BIO 8011 and one hour of BIO 8021 will be credited towards the degree.

Or appropriate substitute, as approved by the advisory committee.

An exit seminar, a comprehensive examination, a dissertation, and a dissertation defense are required.

The Doctor of Philosophy course requirements are determined by the student's advisory committee. Mandatory academic performance is the same as specified by Graduate School policy.

Accelerated Program

A student accepted into the accelerated program is allowed to enroll in graduate courses in the student's final undergraduate semester. The student and advisor may select up to 9 hours that will satisfy both undergraduate and graduate requirements. These courses may be split level (i.e., split 4000-6000 level) or 8000 level classes. The student should take the courses for graduate credit (i.e., 6000 level or higher). To register for graduate courses, the student must first submit to the Graduate School a completed Undergraduate Request to Enroll in Graduate Courses(s) form. The combination of undergraduate and graduate credit hours may not exceed 13 hours within a semester. After successfully completing the graduate-level classes, the student and undergraduate advisor will complete a request to receive undergraduate credit for the course. After receiving the request, the Registrar will grant credit for the undergraduate course and give the same grade as received for the graduate course. For the case of a split-level class, the transcript will show credit for both the 4000 and 6000 levels on the transcript. In the case of an 8000 level class, an undergraduate course of the same title will be entered on the transcript to allow dual credit.

Students are permitted to opt out of the combined program at any time, at which point they can complete only the undergraduate portion of the program. No additional dual counting of courses will occur after the student opts out of the combined program.

Students will receive the Bachelor's degree once the requirements for the Bachelor's degree are met. Students will be required to complete all of the requirements for both the Bachelor's and Master's degrees in order to receive both degrees, and those requirements will be identical to the requirements for students enrolled in traditional B.S. and M.S. programs. Students will be classified as undergraduates until they fulfill all the requirements for the undergraduate degree. At that time, they will be classified as graduate students and will be subject to all the guidelines pertaining to the M.S. in Biological Sciences degree. Students admitted to this program should read and understand guidelines in the Department of Biological Sciences Graduate Student Handbook before registering for any courses for graduate credit.

Master of Science in General Biology

Requirements for the Master of Science in General Biology (GBIO) include a 33-hour program of coursework and a written comprehensive examination administered at the beginning of the final term. Each student will be required to complete Capstone in Modern Biology, an intensive face-to-face course of planned, hands-on lab-and field-based activities.

For additional information, write to the Graduate Coordinator listed at the beginning of this page.

Total Hours		33
BIO 8183	Capstone in Modern Biology	3
BIO 8093	Experimental Biology and Biostatistics	3
BIO 8063	Comprehensive Study of Plants	3
BIO 8053	Comprehensive Study of Animals	3
BIO 8043	Ecology and the Environment	3
BIO 8033	Advanced Cell Biology	3
BIO 8023	Modern Microbiology	3
BIO 6043	Developmental and Reproductive Biology	3
BIO 6033	Fundamentals of Biotechnology	3
BIO 6023	Principles of Evolutionary Biology	3
BIO 6013	Genetics and Molecular Biology	3

Total Hours

Chemistry

Department Head: Dr. Dennis W. Smith, Jr. Graduate Coordinator: Dr. David Wipf 1115 Hand Chemical Laboratory Box 9573 Mississippi State, MS 39762 Telephone: 662-325-3584 E-mail: grad@chemistry.msstate.edu Website: http://www.chemistry.msstate.edu

The Department of Chemistry provides a flexible and dynamic environment in which to pursue a Master of Science or Doctor of Philosophy degree in Chemistry. Students have the opportunity to work with faculty that have interests in the traditionally defined areas of Analytical, Biological, Inorganic, Organic, and Physical Chemistry. Additionally, active research in the interdisciplinary areas of Chemistry Education and Polymer and Materials Science are also available. For more information write to the Graduate Coordinator or visit the Department of Chemistry's website.

Students wishing to pursue a program leading to a Master of Science degree in Chemistry are required to complete a thesis or non-thesis option outlined below. The thesis concentration requires M.S. students to engage in research with a member of the Graduate Faculty. This unique experience gives students hands-on knowledge in research and develops practical skills associated with regular laboratory practices. The non-thesis concentration requires additional coursework broadening M.S. students' educational experiences and technical knowledge. Both concentrations, however, will refine the student's knowledge in chemistry and serve as preparation for challenges in academic settings and industrial careers.

The thesis option requires a minimum of 6 hours of chemistry research (CH 8000) under the supervision of a Graduate Faculty member (research advisor) in the Department of Chemistry. Students choosing the thesis option must generate and defend an original thesis as part of a final examination for the M.S. degree program. All thesis-track students are required to complete at least 12 hours of 8000-level courses, exclusive of research hours, and 1 hour of chemistry seminar (CH 8711).

The non-thesis option requires additional coursework to generate a minimum of 30 hours. Students choosing the coursework-only option will pass a comprehensive chemistry examination directed by a Graduate Faculty member (academic advisor) in the Department of Chemistry with Graduate Coordinator approval. All non-thesis track students are required to complete at least 15 hours of 8000-level coursework, to which research credits do not apply, and 1 hour of chemistry seminar (CH 8711).

Admission Criteria

All students who have earned a B.S. in chemistry, biochemistry, or other closely related field will be given full consideration for admission and the award of an assistantship. All applicants should report their scores for the GRE general exam as part of their required application materials. International students may be admitted with a TOEFL (Test of English as a Foreign Language) score of 500 PBT (78 iBT) or an IELTS (International English Language Testing Systems) score of 6.0, but generally a TOEFL score of at least 550 PBT (79 iBT) or an IELTS score of 6.5 is required for a student to be considered for financial aid.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. The specific courses used to overcome these deficiencies are chosen by the Department's Graduate Affairs committee on a case-by-case basis. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student will be dismissed from the graduate program. A student cannot remain on provisional status for more than two semesters. While in the provisional status, a student is not eligible to hold a graduate assistantship.

Academic Performance

An overall GPA of 3.00 on a 4.00 scale is required for all graduate courses taken after admission to the program is required by the University to remain in good standing. The Department of Chemistry requires grades of B or better on all chemistry courses in the student's program of study. If a student fails to meet either criterion, he or she is placed on probation. If the student does not correct the deficiency within one semester, the student may be dismissed from the program.

Master of Science in Chemistry - Thesis

8000-level CH courses chosen in consultation	with the research advisor/committee	12
6000-level or above courses chosen in consul	Itation with the research advisor/committee ¹	11
CH 8711	Seminar	1
CH 8000	Thesis Research/ Thesis in Chemistry	6

i otal Hours

¹ A minimum of 12 hours at the 8000 level is required. Coursework outside the department at the 6000 level may be deemed acceptable by a student's graduate committee but cannot constitute more than 50% of the total program. Students are allowed to earn up to 6 hours of CH 7000 Directed Individual Study as part of the thesis option.

Each graduate student must complete a research project, write a thesis, and defend their results before a graduate committee.

Master of Science in Chemistry - Non-Thesis

Total Hours		30
8000-level CH courses chose	en in consultation with the academic advisor/committee	15
6000-level or above courses	chosen in consultation with the academic advisor/committee ¹	14
CH 8711	Seminar	1

¹ Coursework outside the department at the 6000 level may be deemed acceptable by a student's graduate committee but cannot constitute more than 50% of the total program. Students are allowed to earn up to 6 hours of CH 7000 Directed Individual Student as part of the non-thesis option.

Each non-thesis M.S. student must pass three comprehensive exams from the five traditional areas of chemistry, which include Analytical, Biological, Inorganic, Physical, and Organic chemistry. Student must also pass an oral exam given by their graduate committee.

Doctor of Philosophy in Chemistry

CH 8111	Professional Chemistry	1
Coursework at 8000-level or higher ¹		18
3 seminars		3
CH 9000	Dissertation Research/ Dissertation in Chemistry	20
Total Hours		42

¹ Coursework outside the department at the 6000 level may be deemed acceptable by a student's graduate committee but cannot constitute more than 50% of the total program.

In addition, each Ph.D. student must pass a series of cumulative exams and an oral proposal examination.

Each Ph.D. student must complete a research project, write a dissertation, and defend their results before a graduate committee.

Classical and Modern Languages and Literatures

Department Head: Dr. Robert West (Interim) Graduate Coordinator: Dr. Salvador Bartera 1502 Lee Hall Box FL Mississippi State, MS 39762 Telephone: 662-325-3480 E-mail: sbartera@cmll.msstate.edu

Graduate study is offered in the Department of Classical & Modern Languages and Literatures leading to the degree of Master of Arts. Areas of study are French, German, and Spanish. The degree program is offered on the Starkville campus as well as online.

Admission Criteria

The Graduate Record Examination (GRE) is not required for admission to the M.A. program in Classical & Modern Languages and Literatures. International students are required to have a TOEFL (Test of English as a Foreign Language) score of 525 PBT (70 iBT) or an IELTS (International English Language Testing Systems) score of 6 or better for consideration. In order to receive full consideration for an assistantship, applicants are encouraged to submit all materials, including the Application for Graduate Assistantship, by April 1.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Performance

Continuous enrollment in the University or in a specific graduate program is dependent upon a satisfactory evaluation of academic performance and progress toward the completion of a specified degree. A student's progress is considered satisfactory unless judged otherwise by the department and/ or the dean of the college offering the program. Unsatisfactory performance may be defined as the failure to maintain a B average in graduate courses attempted after admission to the program, a grade of U, D, or F in any course, more than two grades below a B, failure of the preliminary/comprehensive examination, an unsatisfactory evaluation of a thesis or dissertation, failure of the research defense, or any other failure of a required component of one's program of study. Any one of these, or any combination of these, may constitute the basis for the termination of a student's graduate study in a degree program; individual programs have the right to establish their own criteria.

To be eligible for the preliminary/comprehensive examination, a graduate student must maintain an overall B average in all graduate courses attempted after admission to the program.

Graduate teaching assistantships, awarded on a competitive basis, are available. In order to receive full consideration for an assistantship, applicants are encouraged to submit all materials, including the Application for Graduate Assistantship, by April 1. For additional information, contact the Graduate Coordinator.

Program of Study/Completion Requirements

Thesis and non-thesis options are available. A minimum of 21 graduate-level semester hours taught in one target language must be taken for the thesis or non-thesis M.A.; options, except for students pursuing study in two languages. Students may pursue study in two languages by taking a minimum of 18 hours in each language.

For the thesis option, a minimum of 12 hours must be taken at the 8000-level. For the non-thesis option, a minimum of 15 hours must be at the 8000-level. Up to 6 credit hours of Directed Individual Study credits (FL 7000) may be counted toward the 8000-level requirement. Also required for the degree is a comprehensive written and oral examination based upon all coursework taken and a departmental graduate reading list. Thesis students will also defend their thesis during the comprehensive oral examination.

Master of Arts in Foreign Language - Thesis

FL XXXX	Graduate language courses in chosen area of study ¹	21
Additional graduate-level coursework		3
Research/thesis ²		6
Total Hours		30

¹ Students are encouraged to take FL 8113 Capstone Seminar, FL 8023 Introduction to Literary Criticism, FL 8793 Foreign Language Planning, Instruction, and Assessment, and FL 8333 Cultural Studies and/or FL 8693 Advanced Foreign Language Pedagogy.

² Requires an oral defense of the thesis, given during the comprehensive oral examination.

Note: If students pursue study in two languages, they are are required to have a minimum of 18 hours at the graduate level in each language, for a total of 36 hours.

Master of Arts - Non-Thesis

FL XXXX Graduate-level courses in chosen area of study	21
FL XXXX or additional graduate-level coursework '	12
Total Hours	33

Students are encouraged to continue taking coursework in their area of study. Students are encouraged to take FL 8113 Capstone Seminar, FL 8023 Introduction to Literary Criticism, FL 8793 Foreign Language Planning, Instruction, and Assessment, FL 8333 Cultural Studies and/ or FL 8693 Advanced Foreign Language Pedagogy. Students are also encouraged to work in a minor field such as (but not limited to) History, Education, and Teaching of English as a Second Language.

Note: If students pursue study in two languages, they are required to have a minimum of 18 hours at the graduate level in each language, for a total of 36 hours.

Communication

1

Department Head: Dr. Terry Likes Graduate Coordinator: Dr. Melody Fisher 130 McComas Hall Box PF Mississippi State, MS 39762 Telephone: 662-325-3320 Website: https://www.comm.msstate.edu (https://www.comm.msstate.edu/) E-mail: tlikes@comm.msstate.edu

The Master of Arts degree in Communication is a 33 credit hour program designed to meet the educational and preparatory needs for communication professionals looking to advance their careers, individuals preparing to become professional educators of speech, media and communication, and individuals planning to pursue a Ph.D. in Communication or related field of study. The program will provide students with a strong theoretical foundation in classic and contemporary communication theories; training in contemporary communication methods and their applications across contexts; allow students to explore and teach media history and best practices within and with contemporary media, mass media, social media, and digital media in

different communication contexts and; equip students grounded examples, applied experiences, and research opportunities and insights to make them ready contributors to their organizations and communities.

Admission Criteria

To be considered for regular admission to the Master of Arts degree program in Communication, applicants must meet the following requirements:

- · Statement of Purpose that demonstrates how the program will assist applicants with career goals
- 3 letters of recommendation--at least one academic reference preferred
- 79 TOEFL or 6.5 IELTS minimum score for international applicants
- 3.00 overall undergraduate GPA
- Resumes are preferred, but optional

Provisional Admission

The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 or higher GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C unless one course retake is approved per the Graduate Course Retake Policy). The first 9 hours of graduate courses must be within the student's Program of Study. Courses with an S grade or transfer credits cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the Graduate Coordinator for the program's specific requirements. *While in provisional status, a student may be limited in the type of funding that can be used for a graduate assistantship (eg, positions that are state funded)*. Colleges and/or departments make these funding decisions following the rules of the Institutions of Higher Learning (IHL).

Academic Performance

A graduate student should be placed on probation by the department when academic deficiencies occur but the student can potentially meet all degree requirements successfully. Examples of these situations include but are not limited to the following:

- GPA falls below 3.00 required by the University;
- Receives a third course grade lower than a B (one of these courses must be retaken and the student must earn a grade of B or higher); or
- · Fails to meet a departmental requirement.

A student may also be placed on academic probation if he or she falls short of any other standards for satisfactory academic performance established by their academic unit. Specific information relative to retaking of courses or completing remedial work will be established by the appropriate academic advisor, graduate committee, and Graduate Coordinator and shall be documented in written form. This remediation plan must specify a required date of completion. If the student intends to pursue the academic appeal process relating to the reason for being placed on probation, he or she must do so during the first probationary semester. If, at the end of the probationary period, the student has not met the requirements outlined in the remediation plan, she or he shall be dismissed. A student cannot take a comprehensive examination or defend/submit a thesis or dissertation during the probationary period without prior approval from the Academic Dean.

A graduate student shall be dismissed from the University if one or more of the following conditions occur:

- · He or she receives a second course grade of D or lower;
- · He or she receives a fourth course grade of C or lower;
- · He or she is found to be responsible for violating the Student Honor Code for a second time;
- He or she was placed on academic probation and failed to meet the requirements for release from probationary status;
- He or she failed a comprehensive examination or final thesis/dissertation defense two times in pursuit of an academic degree, unless the academic program has a different requirement; or
- He or she falls short of any standards established by his or her academic unit, and the department recommends dismissal with approval of the Department Head (if applicable) and the Academic Dean.

A student shall be dismissed by the Graduate School for failure to meet University requirements as stated above after the academic unit confirms that there are no extenuating circumstances. A student can also be dismissed if the student's academic department recommends dismissal by submitting a Recommendation for Academic Dismissal form (a letter may be attached) from the Graduate Coordinator, approved by the Department Head (if applicable) and the Academic Dean, clearly stating the departmental requirements the student failed to meet.

Program of Study

 Major Required Coursework

 CO 8203
 Communication Theory

 CO 8223
 Seminar in Communication Research

Total Hours		22
Additional Electives as Approved by Graduate Coordinator		18
CO 8753	Special Project in Communication	3
CO 8243	Communication Pedagogy	3
CO 8333	Seminar in Media	3

English

Department Head: Dr. Daniel Punday Graduate Coordinator: Dr. Shalyn Claggett 2000 Lee Hall Box E Mississippi State, MS 39762 Telephone: 662-325-3644 E-mail: src173@msstate.edu

Teaching English to Speakers of Other Languages (TESOL) Certificate Program Program Director: Dr. Wendy Herd 2313 Lee Hall Box E Mississippi State, MS 39762

Graduate Study is offered in the Department of English leading to the Master of Arts degree. Teaching assistantships are available.

Admission Criteria

E-mail: wjh159@msstate.edu

Prerequisites for admission into the graduate program include all the general requirements of the Office of the Graduate School and an undergraduate English degree (or 18 hours of undergraduate English courses beyond composition, with a B average or higher). Applicants are strongly encouraged to submit GRE scores. International students must obtain a TOEFL (Test of English as a Foreign Language) score of 625 PBT (106 iBT) or an IELTS (International English Language Testing Systems) score of 8 or better. An applicant must submit all materials by March 15 to be considered for an assistantship.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While on provisional status, a student is not eligible to hold a graduate assistantship.**

Teaching English to Speakers of Other Languages (TESOL) Certificate Program

The Certificate in the Teaching of English to Speakers of Other Languages (TESOL) is designed to provide students with the theoretical and practical knowledge needed to begin a career in English language teaching. Students who earn the certificate will be prepared to teach English as a foreign language in countries outside the United States and English as a second language in positions inside the United States that do not require a teacher's license. The TESOL certificate alone does not lead to a K-12 teaching license, which is required to teach in the public school system of the United States, but it can be added as an ESL supplemental endorsement to an existing or in-progress teaching license.

Admission to the Certificate Program

The graduate program of the Certificate in TESOL is open to graduate students in good standing who are currently enrolled at the University in any major. The graduate-level certificate program is also open to non-degree seeking students who have completed a Bachelor's degree in any major. Degree-seeking students will be awarded their certificates at the time that they complete their degrees.

Additionally, the program is open to members of the following groups who hold a B.A./B.S. or higher degree:

- · Current employees of Mississippi State University
- · People currently employed as educators in Mississippi at any level
- · People who have earned a degree at MSU within the previous five years

Unsatisfactory Performance

Unsatisfactory performance in the graduate program in English may be defined as any of the following: failure to maintain a "B" average in attempted graduate courses after admission to the program, a grade of U or F in any one course, failure of the comprehensive examination, unsatisfactory evaluation of a thesis, or failure of a required component of the program of study. Any one of these or a combination of these may constitute the basis for review for possible dismissal. The graduate coordinator will review the record along with the student's graduate committee and take a final course of action which will be immediate dismissal or the establishment of a probationary period in which corrective action must take place. Appeal of dismissal can be made by submitting a written appeal statement to the department head. If the dismissal is upheld by the department head upon the student's appeal, the student can then submit a written appeal to the dean of the College of Arts & Sciences.

Programs of Study

Students may pursue an emphasis in Creative Writing or a minor in Teaching of English as a Second Language. External minors are also available.

Master of Arts in English - Thesis

Total Hours		30
EN 8000	Thesis Research/ Thesis in English	6
EN 8103	Graduate Research in English	3
Graduate coursework		21

A thesis is required.

- All students must display a reading knowledge of a foreign language, usually by having completed four undergraduate semesters in that language with a B average or higher.
- · All students, regardless of their fields of study, must take a comprehensive examination in British and American literature. The exam must be taken at the beginning of the student's fourth full semester.

Master of Arts in English - Non-Thesis

Total Hours		33
EN 8103	Graduate Research in English	3
Graduate coursework		30

- · All students must display a reading knowledge of a foreign language, usually by having completed four undergraduate semesters in that language with a B average or higher.
- All students, regardless of their fields of study, must take a comprehensive examination in British and American literature. The exam must be taken at the beginning of the student's fourth full semester.

Teaching English to Speakers of Other Languages (TESOL) Certificate Program

Total Hours		15
EN 6493	TESOL Practicum	
EN 6453	Methods in TESOL	
EN 6433	Approaches to TESOL	
Select two of the following:		6
Language Teaching Methodol	logy	
EN 6443	English Syntax	3
EN 6463	Studies in Second Language Acquisition	3
EN 6403	Introduction to Linguistics	3
Theoretical Background		

Total Hours

.....

The program requires 15 credit hours (5 courses) in linguistics and English language teaching methods that introduce students to basic methods of linguistic analysis and principles of communicative language teaching.

Non-degree seeking students will be awarded their certificates immediately upon completing the certificate requirements.

Gender Studies Certificate Program

Director: Dr. Kimberly Kelly 231 Etheredge Hall Box C, MS 9562

Mississippi State, MS 39762 Telephone: 662-325-2355 E-mail: genderstudies@msstate.edu Website: http://genderstudies.msstate.edu/)

Gender Studies is an interdisciplinary academic program that examines the construction of gender as a social, cultural, and psychological phenomenon and the various ideologies that underpin the distinctions that different societies over time have made between the categories of "man" and "woman." As a field of inquiry, Gender Studies considers how gender as a social and cultural construction shapes people's lives, their relationships, the workplace, institutional structures, public policy, and the production of knowledge. It also investigates the different impact of events, technologies, and government policies on men and women. The study of gender helps to broaden understandings of culture and identity, the intersection of gender with race, class, and sexuality, health and body politics, region and environment, nationalism, and citizenship.

The Gender Studies Certificate is awarded to students who complete 12 credit hours from the listed courses. The student may also petition the director for approval of another course.

COE 6743	Gender Issues in Counseling	3
EN 8593	Studies in Post-Colonial Literatures	3
HDFS 6313	Family Resource Management	3
HDFS 6403	Introduction to Gerontology	3
HI 6273	Women in American History	3
HI 6293	History of Gender and Science	3
PSY 6983	Psychology of Aging	3
SO 6403	Sociology of Gender and Sexuality	3
SO 8503	Seminar in the Family	3

Geosciences

Department Head: Dr. John C. Rodgers, III Graduate Coordinator: Dr. Andrew Mercer Online Programs Coordinator: Dr. Mike Brown Hilbun 108 Box 5448 Mississippi State, MS 39762 Telephone: 662-325-3915 On-Campus Programs Email: tina@geosci.msstate.edu Online Learning Programs E-mail: yjacobs@geosci.msstate.edu

Admission

The Department of Geosciences offers graduate study leading to the Master of Science degree in Geoscience and the Doctor of Philosophy degree in Earth and Atmospheric Science. An applicant to the program must have an undergraduate GPA of at least 2.75 on a scale of 4.00 for entry to the master's program and at least 3.00 at both the undergraduate and graduate level for entry to the doctoral program. The general GRE is required of all on-campus applicants.

Although helpful, an undergraduate background in Geosciences is not a prerequisite for admission into the M.S. in Geoscience program. Applicants to the master's program in the Broadcast or Professional Meteorology concentrations are required to have passed Calculus I prior to arrival on campus, and the completion of Calculus II will greatly improve the chances of being accepted. All other master's applicants are recommended to have completed Calculus I.

Applicants to the doctoral program are required to have completed a thesis-based master's degree and have a background in one of the departmental emphasis areas. All applicants for the Doctoral program **must** identify a mentor (dissertation supervisor) prior to acceptance into the program. Applicants who have not completed a thesis or are from other science disciplines will be considered on a case-by-case basis through a petition, initiated by the identified mentor, to the department's graduate faculty. The doctoral degree student should anticipate a four-year program of study. Depending on the applicant's emphasis area of interest, Calculus I and II may be required for admission.

The application package must contain the application for admission; at least three letters of reference; official bachelor's degree transcript; official transcripts from all colleges attended after earning the bachelor's degree (both undergraduate and graduate work); and a statement of purpose. An applicant for the Main Campus program is required to take the GRE. A student admitted to the Broadcast Meteorology concentration can only begin

studies in the fall term. Applicants desiring assistantship funding consideration are strongly advised to submit the assistantship application no later than January 15.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Performance

The Department of Geosciences follows the Graduate School guidelines regarding academic dismissal from an academic program. Additionally, a grade of U given for thesis or dissertation research hours, three grades of C, or a grade of D or F for any regular class will result in dismissal from the program. A student in the Broadcast Meteorology concentration who earns a C in the first year of graduate study will be required to take a proficiency exam in the summer before the second year. Unsatisfactory performance on the exam will result in dismissal from the program.

Concentration Descriptions

- The **Applied Meteorology Program** is designed for individuals with meteorological, environmental or hazards-related careers. This non-thesis concentration is offered through distance education.
- The **Broadcast Meteorology** concentration is designed for students intending to pursue meteorology careers in media. This non-thesis concentration combines meteorology coursework with the Practicum in Broadcast Meteorology sequence.
- Environmental Geosciences is a non-thesis concentration intended for students interested in a broader cross-section of the geosciences. It is offered both on-campus and through distance education.
- The **Geography** concentration is a thesis-based program appropriate for students interested in studying the spatial distribution of cultural and physical features across the Earth's surface. It can be tailored toward specific interests in either human or physical geography.
- The Geology concentration is thesis-based and intended to prepare students for careers in professional geology or further graduate study.
- The concentration in **Geospatial Sciences** is a thesis-based program designed to prepare students to use geospatial technologies to provide insight into Earth and atmospheric processes.
- The Professional Meteorology/Climatology concentration is thesis-based and is intended to prepare students for forecasting careers or further graduate study.
- The **Teachers in Geosciences** concentration is a non-thesis two-year, 36 credit hour program of study offered through distance education. It is designed primarily for K-12 science teachers.

Master of Science Programs of Study

Both a thesis track and a non-thesis track are available at the master's level for both on-campus and distance learning delivery methods.

General Departmental Requirements

Both options require competency in statistics or a foreign language. A student enrolled in a non-thesis concentration may petition the graduate faculty to complete a thesis. The department will not approve the request unless a faculty member has agreed to serve as major professor and a committee can be assembled. The department follows the Graduate School guidelines regarding the minimum number of course hours that must be at 8000-level or higher.

The department has on-campus concentrations in the following areas:

- Broadcast Meteorology
- Environmental Geosciences
- · Geography
- Geology
- · Geospatial Sciences
- Professional Meteorology/Climatology

The department also offers the following concentrations through distance education:

- Applied Meteorology Program (AMP)
- Environmental Geosciences (ENGS)
- Teachers In Geosciences (TIG)

The AMP is designed for individuals who are already in meteorological, environmental, or hazards-related careers. The Environmental Geosciences concentration is intended for individuals interested in a broader cross-section of the geosciences. The TIG concentration is primarily designed for inservice teachers.

A student admitted to the Applied Meteorology program (AMP) must hold a B.S. degree in a science and have completed GR 4713 or its equivalent. A student who is admitted in the graduate program in Geosciences in the Broadcast Meteorology concentration must successfully complete a background assessment test in meteorology. The test will be administered during the spring of each year. A student scoring less than 80% on this test must successfully complete (grade of B or better) GR 1604 from MSU by Distance Learning before starting his or her initial enrollment on campus for study in Broadcast Meteorology. A student admitted to the Environmental Geosciences concentration must have completed GG 1113 and GR 1604 or their equivalents. All prerequisite courses may be taken through distance education prior to enrolling in the graduate programs. Specific classes may require further prerequisites.

Master of Science in Geosciences with Applied Meteorology Concentration

Total Hours		36
Additional graduate-level coursework ²		9
GR 8143	Advanced Forecasting Techniques	
GR 8133	Foundations in Forecasting	
GR 8813	Advanced Hazards and Disasters	
GR 8633	Climate Change	
GR 8613	Hydrometeorology	
GR 8613	Hydrometeorology	
GG 8613	Hydrology	
GG 8233	Environmental Geoscience	
GG 8203	Ocean Science	
GR 6933	Dynamic Meteorology II	
GR 6823	Dynamic Meteorology I	
GR 6753	Satellite and Radar Meteorology	
GR 6603	Climatology	
GR 6473	Numerical Weather Prediction	
GR 6333	Remote Sensing of the Physical Environment	
GR 6313	Advanced GIS	
Select at least nine hours from the following:	1	9
GR 6943	Tropical Meteorology	
GR 6923	Severe Weather	
Select at least one of the following:		3
GR 8573	Research in Applied Meteorology	3
GR 8453	Quantitative Analysis in Climatology	3
GR 8833	Weather and Society	3
GR 6303	Principles of GIS	3
GR 8553	Research Methods in Geoscience	3

Total Hours

1 Substitutions may be made with the approval of the major professor and committee and with appropriate documentation. They must be noted on the program of study. Note: A split-level course completed at the undergraduate level cannot be repeated on the graduate level for use on the program of study.

2 A research project presentation and a written and oral comprehensive examination are required.

Master of Science in Geosciences, Broadcast Meteorology Concentration

GR 8553	Research Methods in Geoscience	3
Select at least 9 hours from the following: 1		9
GR 6502	Practicum in Broadcast Meteorology I	
GR 6512	Practicum in Broadcast Meteorology II	

Total Hours		36
Additional graduate-level course	ework ²	24
GR 8453	Quantitative Analysis in Climatology	
GR 8843	Advanced Mesoscale Meteorology	
GR 6813	Natural Hazards and Processes	
GR 6203	Geography of North America	
GR 6823	Dynamic Meteorology I	
GR 6753	Satellite and Radar Meteorology	
GR 6733	Synoptic Meteorology	
GR 6623	Physical Meteorology	
GR 6613	Applied Climatology	
GR 6532	Practicum in Broadcast Meteorology IV	
GR 6522	Practicum in Broadcast Meteorology III	

Total Hours

1

A student who has taken any of these 9 hours in an undergraduate Geosciences program may substitute these or other appropriate MSU graduate-level courses. Substitutions may be made with the approval of the major professor and committee. They must be noted on the program of study. Note: A split-level course completed at the undergraduate level cannot be repeated on the graduate level for use on the program of study.

2 A research project presentation and a written and oral comprehensive examination are required.

Master of Science in Geosciences with Environmental Geosciences Concentration

GR 8553	Research Methods in Geoscience	3
GR 8410	Field Methods Seminar	3
or GR 8573	Research in Applied Meteorology	
Select at least 9 hours from the following: 1		9
GG 6033	Resources and the Environment	
GG 6063	Earth and Atmospheric Energy Resources	
GR 6303	Principles of GIS	
GR 6313	Advanced GIS	
GR 6333	Remote Sensing of the Physical Environment	
GG 6503	Geomorphology	
GG 6523	Coastal Environments	
GR 6123	Urban Geography	
GG 6613	Physical Hydrogeology	
GR 6813	Natural Hazards and Processes	
GR 6603	Climatology	
GR 6613	Applied Climatology	
GG 8203	Ocean Science	
GG 8233	Environmental Geoscience	
GR 8633	Climate Change	
GR 8813	Advanced Hazards and Disasters	
Additional graduate-level coursework ²		15
Total Hours		30

Total Hours

1

A student who has taken any of these 9 hours in an undergraduate Geosciences program may substitute these or other appropriate MSU graduate-level courses. Substitutions may be made with the approval of the major professor and committee. They must be noted on the program of study. Note: A split-level course completed at the undergraduate level cannot be repeated on the graduate level for use on the program of study.

2 A capstone research project (oral presentation and paper) and a written and oral comprehensive examination are required.

Master of Science in Geosciences with Geography Concentration

GG 8561	Geoscience Seminar	1
GR 8542	Geographic Literature	2
or GG 8572	Geologic Literature	

Select at least 9 hours from the following: ¹		9
GR 6123	Urban Geography	
GR 6203	Geography of North America	
GR 6213	Geography of Latin America	
GR 6223	Geography of Europe	
GR 6233	Geography of Asia	
GR 6243	Geography of Russia and the Former Soviet Republics	
GR 6253	Geography of Africa	
GR 6263	Geography of the South	
GR 6283	Geography of Islamic World	
GR 8313	Advanced Human Geography	
Additional graduate-level coursework		12
GR 8000	Thesis Research/ Thesis in Geography ²	6
Total Hours		30

1

A student who has taken any of these 9 hours in an undergraduate Geosciences program may substitute these or other appropriate MSU graduate-level courses. Substitutions may be made with the approval of the major professor and committee. They must be noted on the program of study. Note: A split-level course completed at the undergraduate level cannot be repeated on the graduate level for use on the program of study.

2 A thesis defense / comprehensive exam is required.

Master of Science in Geosciences with Geology Concentration

GG 8561	Geoscience Seminar	1
GR 8542	Geographic Literature	2
or GG 8572	Geologic Literature	
Select at least 9 hours from the following	y. ¹	9
GG 6033	Resources and the Environment	
GG 6063	Earth and Atmospheric Energy Resources	
GG 6114	Mineralogy	
GG 6123		
GG 6153	Engineering Geology	
GG 6201	Practicum in Paleontology	
GG 6203	Principles of Paleobiology	
GG 6233	Applied Geophysics	
GG 6304	Principles of Sedimentary Deposits I	
GG 6403	Gulf Coast Stratigraphy	
GG 6413	Structural Geology	
GG 6433	Subsurface Methods	
GG 6443	Principles of Sedimentary Deposits II	
GG 6503	Geomorphology	
GG 6523	Coastal Environments	
GG 6613	Physical Hydrogeology	
GG 6623	Chemical Hydrogeology	
GG 8713	Regional Geology of Eastern North America	
Additional graduate-level coursework		12
GG 8000	Thesis Research/ Thesis in Geosciences ²	6
Total Hours		30

Total Hours

2 Thesis defense / comprehensive exam is required.

¹ A student who has taken any of these 9 hours in an undergraduate Geosciences program may substitute these or other appropriate MSU graduate-level courses. Substitutions may be made with the approval of the major professor and committee. They must be noted on the program of study. Note: A split-level course completed at the undergraduate level cannot be repeated on the graduate level for use on the program of study.

Master of Science in Geosciences with Geospatial Sciences Concentration

Total Hours		30
GR 8000	Thesis Research/ Thesis in Geography ²	6
Additional graduate-level coursework		12
GR 8303	Advanced Geodatabase Systems	
GR 6411	Remote Sensing Seminar	
GR 6363	Geographic Information Systems Programming	
GR 6333	Remote Sensing of the Physical Environment	
GR 6323	Cartographic Sciences	
GR 6313	Advanced GIS	
GR 6303	Principles of GIS	
Select at least 9 hours from the following:	1	9
or GG 8572	Geologic Literature	
GR 8542	Geographic Literature	2
GG 8561	Geoscience Seminar	1

1

A student who has taken any of these 9 hours in an undergraduate Geosciences program may substitute these or other appropriate MSU graduate-level courses. Substitutions may be made with the approval of the major professor and committee. They must be noted on the program of study. Note: A split-level course completed at the undergraduate level cannot be repeated on the graduate level for use on the program of study.

² A thesis defense / comprehensive exam is required.

Master of Science in Geosciences with Professional Meteorology/Climatology Concentration -Thesis

Total Hours		30
GR 8000	Thesis Research/ Thesis in Geography ²	6
Additional graduate-level coursework		12
GR 8453	Quantitative Analysis in Climatology	
GR 8843	Advanced Mesoscale Meteorology	
GR 6813	Natural Hazards and Processes	
GR 6933	Dynamic Meteorology II	
GR 6823	Dynamic Meteorology I	
GR 6753	Satellite and Radar Meteorology	
GR 6733	Synoptic Meteorology	
GR 6623	Physical Meteorology	
GR 6613	Applied Climatology	
Select at least 9 hours from the followin	ng: ¹	9
or GG 8572	Geologic Literature	
GR 8542	Geographic Literature	2
GG 8561	Geoscience Seminar	1

1

A student who has taken any of these 9 hours in an undergraduate Geosciences program may substitute these or other appropriate MSU graduate-level courses. Substitutions may be made with the approval of the major professor and committee. They must be noted on the program of study. Note: A split-level course completed at the undergraduate level cannot be repeated on the graduate level for use on the program of study.

² Thesis defense / comprehensive exam is required.

Master of Science in Geosciences with Teachers in Geosciences Concentration

GR 8553	Research Methods in Geoscience	3
Select 15 hours from the following: ¹		15
GR 6603	Climatology	
GG 8203	Ocean Science	
GG 8233	Environmental Geoscience	

GR 8400	Field Methods in Geosciences	
GR 8410	Field Methods Seminar ²	
Additional graduate-level coursework ³		18

36

Total Hours

1 Substitutions may be made with the approval of the major professor and committee and with appropriate documentation. They must be noted on the program of study. Note: A split-level course completed at the undergraduate level cannot be repeated on the graduate level for use on the program of study.

2 Four (4) credits required, may also be repeated for 3 hours of electives.

3 A research project presentation and a written and oral comprehensive examination are required.

Doctoral Program of Study

Doctor of Philosophy in Earth and Atmospheric Sciences

Total Hours		36
Additional courses offered withi	in the Department of Geosciences ¹	10
or GR 9000	Dissertation Research /Dissertation in Geography	
GG 9000	Dissertation Research /Dissertation in Geology	20
GR 8913	Philosophy and Ethics in Geosciences	3
GG 8913	Research, Readings, and Techniques in Geosciences	3

Total Hours

1 At the discretion of the student's Ph.D. committee, other courses offered from MSU may also be used to satisfy this requirement. Six hours must be at the 8000 level. Note: A split-level course completed at the undergraduate level cannot be repeated on the graduate level for use on the program of study.

The doctoral program will include 36 hours beyond the master's and the completion of a dissertation. Written and oral comprehensive examinations are administered at the end of required coursework. A dissertation proposal defense is also required. Doctoral students are required to maintain on-campus residency through their admission to candidacy, which occurs at the successful completion of their comprehensive examinations and dissertation proposal defense.

Geospatial and Remote Sensing Certificate

Geospatial technology refers to the acquisition and analysis of spatial data. The Geospatial and Remote Sensing Certificate allows any MSU students from across the University to receive recognition for mastering geospatial coursework. Both undergraduate and graduate certificate degrees are available for both the Starkville and Online education learners. The certificate comprises 15 hours of coursework in four different areas: geographic information systems (3 credit hours), remote sensing (3 credit hours), advanced geospatial course work (3 credit hours), and geospatial applications (6 credit hours). The successful completion of the GRSC will give students the foundation to utilize geospatial technologies within their field and it will provide the opportunity to promote their geospatial mastery to potential employers or potential graduate programs. Interested graduate students should contact either the graduate coordinator or department head. Students must maintain a GPA of 3.00 for the certificate to be awarded.

History

Department Head: Dr. Alan I. Marcus Graduate Coordinator: Dr. Andrew Lang 214 Allen Hall Box H Mississippi State, MS 39762 Telephone: 662-325-3604 E-mail: correspondence@history.msstate.edu

Diversity Certificate Program Director: Dr. Alan I. Marcus

214 Allen Hall Box H Mississippi State, MS 39762 Telephone: 662-325-7075 E-mail: aimarcus@history.msstate.edu

The Department of History offers programs leading to the Master of Arts and Doctor of Philosophy degrees. Fields for the master's degree are: United States, Europe, Latin America, Asia, Africa, and World. Fields for the PhD. Degree are: United States and Europe. A student may choose a minor

field of study outside the History Department with concurrence of his or her advisor. Not all of the fields listed above are available for dissertation research or as the major field for a Master of Arts degree.

Admission Criteria

The History Department expects an applicant to have either an overall GPA of 3.00 or a GPA of 3.00 in the last two years of undergraduate study. The prerequisite for admission to a graduate program in history is a minimum of 18 hours of undergraduate history courses; for a graduate minor in history, 12 hours of undergraduate history courses are required. A Ph.D. applicant must submit the Graduate Record Examination (GRE) and must submit a writing sample with their application packet to the Office of the Graduate School. Applicants who received the M.A. in History from MSU are not required to take the GRE. Examples of acceptable writing samples are publications, chapters from a thesis, or a seminar paper.

An international student intending to pursue a graduate degree in history must meet all regular requirements and, in addition, present a Test of English as a Foreign Language score of 550 or higher. This requirement does not apply to international students with degrees from an American institution nor to students from countries where English is the primary language. The applicant should understand that the History Department uses the statement of purpose as a major factor in making admissions decisions. It is to the applicant's advantage to take special care in completing this statement. The applicant should add additional pages to the statement of purpose if necessary. To facilitate the selection of an advisor the applicant should explain his/her fields of interest in the statement of purpose. An applicant whose quantitative credentials meet the stated criteria may still be denied admission because of qualitative factors. Normally, applicants will receive an admission decision within 30 days after the receipt of all required materials by the department.

Application Deadlines

Fall Semester	April 1
Spring Semester	November 1
Teaching Assistantships (fall semester only)	March 1

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Contingent Admission

An applicant lacking an adequate background in history may be granted contingent admission and be required to take additional courses at the undergraduate level.

Academic Performance

Although one C grade may be included in a graduate program, the History Department views C grades as evidence of unsatisfactory work. A student who earns a second C grade will be dismissed from the program. Students earning one grade of D or F will also be dismissed from the program. A candidate for degree must have achieved a B average by the end of the coursework.

Diversity Certificate Program

The Diversity Certificate Program seeks to teach workplace success by providing the multi-cultural knowledge and skills necessary to navigate among a diverse workforce. At the heart of this post-baccalaureate program is the demand that students learn and think critically about race, race relations, ethnicity, social class and inequality, religion, and gender. This requirement will produce employees who have the necessary sensitivity and understanding to accept important leadership challenges and to advance themselves and their workplace.

Its methods are straightforward. Each student seeking a certificate must take at least one of two courses from each of four distinct fields: History, Sociology, Gender Studies and African American Studies. Students are free to take more than the minimum number of courses; however, the program an intense immersion in one course from each area will enhance understanding sufficient for business persons to achieve objectives most sensibly and expeditiously.

The choice of these four fields is deliberate and precise. History will enable students to learn the various forces, activities and trends leading to the present day world; history grants perspective. Sociology will explore and explain the interactions among and between diverse peoples in the present day; it explores social dynamics. Both African American and Gender Studies offer a more multivariate approach. Borrowing from a number of disciplines and specialties, they offer an interdisciplinary, multicultural perspective, revealing numerous, tangible intersections among institutional sexism and racism, power relationships, economic allocation and self and group actualization.

Together, these four fields create a tightly woven package that will make a true difference both in the students who take the courses and the workplaces in which they operate. Each of the courses has a similar approach using classic writings, great thinkers and pertinent events as well as analysis and understanding of those whose voices in social settings remain obscured. Each utilizes the most recent information and insight to fashion an acute demonstration of how multicultural knowledge and understanding is essential to successful functioning in all aspects of the modern world.

Admission

Applicants must be graduates of accredited undergraduate institutions and be admitted by the Graduate Office either as a degree-program or unclassified graduate student. Students wishing to apply for the certificate program must submit a writing sample explaining how they plan to use the Diversity Certificate in their careers. This document is required from degree-program and unclassified graduate students and must be submitted directly to Dr. Alan Marcus. International students must obtain a TOEFL (Test of English as a Foreign Language) score of 625 PBT (106 iBT) or an IELTS (International English Language Testing Systems) score of 8.0 or better.

Accelerated Program

Highly qualified undergraduates are encouraged to apply to an Accelerated Program which permits enrollment in graduate courses while still an undergraduate. See Accelerated Programs (p. 48).

In addition to the University requirements the Department of History also requires the following.

- Undergraduate students may apply to the Accelerated Program once they have accumulated 60 hours of graded coursework and 15 hours of graded coursework in history. Applicants must have maintained a 3.5 GPA in both their cumulative undergraduate coursework and their coursework in history. Admission is contingent upon the student completing HI 3903 with a grade of B or better. The initial application will be to the History Department.
- 2. Applicants must submit a completed graduate application form, a statement of purpose for graduate study, transcripts, and at least two letters of recommendation from history faculty members. The application deadlines for this program are November 1 and April 1.
- 3. All applications will be reviewed at the start of the semester for which the student has been admitted into the program; students whose GPA has fallen below the minimum requirement or who have failed to complete HI 3903 with a B, will be removed from the program.
- 4. If a student intends to apply for this program he or she should meet with the graduate coordinator during the advising period prior to the semester for which the student intends to apply for admission to select the appropriate courses. The student must apply to the Graduate School for regular admission into the graduate program during his or her last year of enrollment as an undergraduate.

Interested students should also refer to the Master of Arts Degree for Accelerated Program Students section under Programs of Study.

Master of Arts Degree Program of Study

The History Department offers the Master of Arts degree with an emphasis in United States, European, Latin American, African, Asian, or World History. A student may choose between a thesis and a non-thesis degree program. Each student will choose a primary and a secondary area of emphasis. The primary area of emphasis will be drawn from one of the following subject areas: United States, European, Latin American, Asian, African, or World History. The secondary area of emphasis for a thesis student will be drawn from either another one of the above subject areas, or a topical field related to a particular region or historical phenomenon. Students can minor in a field outside of history; a minor outside of history must include at least nine semester hours.

A degree candidate with a thesis must also demonstrate proficiency in one research skill which may be either reading proficiency in a foreign language or proficiency in quantitative methods or some other relevant research skill as determined by the student's graduate committee. The non-thesis program is designed for students planning to enter secondary education or who want to develop a broad understanding of history for a variety of other reasons. The secondary area of emphasis for a non-thesis degree candidate must be drawn from a geographic region other than the one the student has selected for the primary field. The non-thesis program does not require a research skill.

Each student must have a graduate committee composed of three graduate faculty members who will oversee the student's progress toward the M.A. degree and conduct a written comprehensive examination and an oral defense of it at the conclusion of the student's graduate studies. At least two of the committee members must be members of the History Department's graduate faculty. If a minor from outside the department is selected, one member must be from the minor area of study.

Each master's degree candidate will complete a comprehensive examination at the completion of graduate studies. The examination will cover both primary and secondary fields and will be taken at a time and in a format determined by the student's graduate committee. The student choosing the thesis option will also be expected to provide an oral defense of the thesis at the conclusion of her/his graduate studies.

Master of Arts in History (United States Emphasis) - Thesis

Research seminar		3
HI 8923	Historiography and Historical Method	3
Select two of the following:		6
HI 8933	Colloquium in Colonial and Revolutionary America	

30

HI 8943	Colloquium in the U.S. History from 1787-1877	
HI 8953	Colloquium in the U.S. History from 1877-1945	
HI 8963	Colloquium in the U.S. History from 1945-present	
Additional graduate-level coursework		18

Total Hours

Master of Arts in History (United States Emphasis) - Non-Thesis

Total Hours		30
Additional graduate-level co	bursework	18
HI 8963	Colloquium in the U.S. History from 1945-present	
HI 8953	Colloquium in the U.S. History from 1877-1945	
HI 8943	Colloquium in the U.S. History from 1787-1877	
HI 8933	Colloquium in Colonial and Revolutionary America	
Select two of the following -	one pre-1877 and one post-1877:	6
HI 8923	Historiography and Historical Method	3
Research seminar		3

Total Hours

Master of Arts in History (European, Latin American, Asian, African, or World History **Emphasis) - Thesis**

Research seminar		3
HI 8923	Historiography and Historical Method	3
Additional graduate-level coursework		24
Total Hours		30

Master of Arts in History (European, Latin American, Asian, African, or World History **Emphasis) - Non-Thesis**

Research seminar		3
HI 8923	Historiography and Historical Method	3
Additional graduate-level coursework		24
Total Hours		30

Master of Arts in History for Accelerated Program Students

The History Department offers undergraduate students with an interest in history the opportunity to complete a Master of Arts in History with an additional year of post-baccalaureate study. This program offers both the thesis and non-thesis options outlined in the regular Master of Arts degree program.

Requirements

Students in this program must meet the same expectations regarding primary and secondary fields of emphasis, research skills, and forming a graduate committee as students in the regular M.A. program. Each candidate for the degree must complete the required coursework for either the thesis or nonthesis M.A.

Master of Arts in History (United States Emphasis) - Thesis

Additional graduate-level coursework		18
HI 8963	Colloquium in the U.S. History from 1945-present	
HI 8953	Colloquium in the U.S. History from 1877-1945	
HI 8943	Colloquium in the U.S. History from 1787-1877	
HI 8933	Colloquium in Colonial and Revolutionary America	
Select two of the following:		6
HI 8923	Historiography and Historical Method	3
Research seminar		3
Baccalaureate degree		

Total Hours

Master of Arts in History (United States Emphasis) - Non-Thesis

Total Hours		30
Additional graduate-level of	coursework	18
HI 8963	Colloquium in the U.S. History from 1945-present	
HI 8953	Colloquium in the U.S. History from 1877-1945	
HI 8943	Colloquium in the U.S. History from 1787-1877	
HI 8933	Colloquium in Colonial and Revolutionary America	
Select two of the following	- one pre-1877 and one post-1877:	6
HI 8923	Historiography and Historical Method	3
Research seminar		3
Baccalaureate degree		

Master of Arts in History (European, Latin American, Asian, African, or World History **Emphasis) - Thesis**

Total Hours		30
Additional graduate-level coursework		24
HI 8923	Historiography and Historical Method	3
Research seminar		3
Baccalaureate degree		

Total Hours

Master of Arts in History (European, Latin American, Asian, African, or World History Emphasis) - Non-Thesis

Total Hours		30
Additional graduate-level coursework		24
HI 8923	Historiography and Historical Method	3
Research seminar		3
Baccalaureate degree		

Total Hours

Program of Study as an Undergraduate

In the course of completing the requirements for the student's undergraduate degree the student may enroll in up to 9 hours of graduate courses which will count toward both the student's undergraduate degree and the M.A. in history. These courses can be at either the 6000 or 8000 level, and the student should enroll in them for graduate credit. Once the graduate course has been completed, the student and advisor will apply to the Registrar to have the course count for undergraduate credit. Once this application is granted, the course will appear on the student's undergraduate transcript. A split-level course will appear as the 4000-level equivalent of the 6000-level course. An 8000-level course will appear on the student's transcript as a 4993 Special Topics course with the same name as the 8000-level course. The student may opt out of the program at any time and complete a regular undergraduate major in history. Once the student has opted out, however, no further courses will be allowed to count for both graduate and undergraduate credit.

Registration for a graduate course requires the undergraduate student to complete the Undergraduate Request to Enroll in Graduate Courses(s) form. The student can access the form at http://www.grad.msstate.edu/forms/pdf/accel.pdf and must submit the completed form to the Graduate School. The Graduate School will inform the student by email when he/she can register for the graduate course.

The student will receive the bachelor's degree after the requirements for that degree have been met. On completion of the degree the student will be admitted into the regular graduate program provided the student has received no grade lower than a C in any course taken for graduate credit and not received more than one C in the courses taken for undergraduate credit; in either of these cases the student will be dismissed from the graduate program. If the student's GPA in graduate-level courses is below a 3.00 the student will enter the graduate portion of the program on academic probation and may be removed from the program if the overall GPA does not rise above 3.00 at the end of the student's first full semester in the graduate program.

Program of Study for the Student's Post-Baccalaureate Year

In the student's post-baccalaureate year he or she will be expected to complete either the thesis or non-thesis degree program. Students who do not complete the program by the end of the summer following their first post-baccalaureate year will be automatically transferred into the regular M.A. program.

Doctor of Philosophy Degree

The History Department offers the Ph.D. degree with a primary emphasis in either United States or European History. The student will choose a primary field of emphasis in either United States History or European History. Students are required to prepare for examination in four fields of emphasis. Two fields of emphasis will be chronological fields within the primary area of emphasis (U.S. or European). A third field of emphasis will be drawn from the department's four core areas (International Security and Internal Safety, History of Science and Technology, Agricultural, Rural, and Environment History, or Race, Identity, Gender, and Region). The final field of emphasis will be a topical or regional field or in a discipline other than history. Fields of emphasis outside of the History Department must include at least 12 hours. The student should refer to the History Department's list of available fields of emphasis for more information. Each student must hold a bachelor's degree from an appropriately accredited institution of higher learning and possess qualifications indicating ability to do graduate work on a doctoral level, as determined by the department's Graduate Committee.

The department expects that the student will normally complete at least 60 hours of coursework (40 classroom hours and 20 research hours) beyond the bachelor's degree for the Ph.D. degree in history. Credit earned in a master's degree program at Mississippi State or up to 20 credit hours earned elsewhere may be used to satisfy requirements for the doctoral program if it is appropriate to the candidate's doctoral fields and acceptable to the student's graduate committee. Each student pursuing the Ph.D. degree in history must demonstrate proficiency in at least one research skill by the end of the fourth semester of his or her enrollment in the program. This requirement may be fulfilled by demonstrating a reading knowledge of a foreign language or by demonstrating proficiency in another research skill appropriate to the student's field of study. Each candidate is required to complete, or have completed, HI 8923 at Mississippi State and two research seminars. Each student is also required to select a specialization in one of the History Department's four core areas:

- International Security and Internal Safety, or
- · History of Science and Technology, or
- · Agricultural, Rural, and Environmental History, or
- · Race, Identity, Gender, and Region

Doctor of Philosophy in History (United States Emphasis)

Total Hours		60
HIST XXXX	Additional graduate coursework	7
Three seminar-related course	es in the specialiszation ²	9
HI 8883	U.S. Agricultural History, 1500-2000	
HI 8893	Seminar in History of International Security and Internal Safety	
HI 8873	Seminar in History of Science and Technology	
Select one of the following in	specialization area:	3
HI 8963	Colloquium in the U.S. History from 1945-present ¹	3
HI 8953	Colloquium in the U.S. History from 1877-1945 ¹	3
HI 8943	Colloquium in the U.S. History from 1787-1877 ¹	3
HI 8933	Colloquium in Colonial and Revolutionary America ¹	3
HI 8923	Historiography and Historical Method	3
HI 9000	Dissertation Research /Dissertation in History	20
Two research seminars		6

Total Hours

- 1 Or an equivalent acceptable to the graduate committee.
- 2 Chosen in consultation with the student's graduate committee.

Doctor of Philosophy in History (European History Emphasis)

Total Hours		60
HIST XXXX	Additional graduate coursework	19
Three seminar-related cour	rses in the specialization ¹	9
HI 8883	U.S. Agricultural History, 1500-2000	
HI 8893	Seminar in History of International Security and Internal Safety	
HI 8873	Seminar in History of Science and Technology	
Select one of the following	in specialization area:	3
HI 8923	Historiography and Historical Method	3
Research		20
Two research seminars		6

¹ Chosen in consultation with the student's graduate committee.

The prospective Ph.D. candidate must understand that work toward a Ph.D. degree is different from other academic work he or she may have undertaken. The holder of a Ph.D. degree is assumed to have mastered his or her field of study and to have developed an ability to do original research and to make original contributions to knowledge. It is the responsibility of the student's major professor and committee members to determine when this level of understanding has been reached. It cannot be measured by the number of courses completed, and the exact amount of coursework required of each student in the History Department may vary.

Each student must have a graduate committee composed of at least four graduate faculty members. The chairman must be from the student's major field of emphasis and must be a full member of the graduate faculty. He or she will normally be the student's future dissertation director. The committee will include a second reader, who will assist the dissertation director, and at least two other members. Four members of the committee must be members of the History Department's graduate faculty.

When the student and his or her major professor agree that adequate preparation has been made, the major professor will schedule a comprehensive examination. Full-time Ph.D. students should normally take their comprehensive examinations within three years of enrollment, and part-time Ph.D. students should take their comprehensive examinations within four years of enrollment. The student must have either completed all coursework or be within 6 hours of completing the coursework. The student must have fulfilled the research skill requirement and must have met all other History Department and Graduate School requirements. Each student will take four written comprehensive examinations. Students will be allowed one day for each field, and the four examinations must be completed within a two-week period. Faculty members who have collaborated in preparing a student for a particular field of emphasis may contribute to one examination. The student's committee will then decide if the quality of the written examinations warrants proceeding to the oral examination. If a student fails either the written or oral part of the comprehensive examination, she or he may retake it after the passage of four months. A second failure will result in termination from the program.

After passing comprehensive examinations, the student must submit a dissertation proposal which must be approved in writing by all members of the student's graduate committee before the student will be admitted to candidacy for the Ph.D. The dissertation proposal must include at least the topic, historical question to be answered, hypothesis answering that question, and sources to be consulted. The dissertation proposal must specify both the director and the second reader. No candidates will be granted a dissertation fellowship until the approved dissertation proposal is on file in the History Department office.

The composition of the candidate's graduate committee for the dissertation need not be identical to the committee which conducts the comprehensive examination. The second reader of a dissertation will be actively involved in the dissertation process. The second reader will be kept informed of the progress the candidate is making in the research and will comment upon drafts of outlines and chapters as the candidate writes them.

The dissertation must show the candidate's mastery of research methods in history and must make an original contribution to scholarship in the candidate's field. The dissertation must reflect at least 20 semester hours of dissertation research. The candidate's graduate committee must approve the dissertation and administer a final oral examination (defense). The dissertation must be provided to the members of the committee at least fourteen days before the defense.

For additional information contact the Graduate Coordinator.

Diversity Certificate Program

Total Hours		12
or GS 8973	Gender and Work	
GS 8963	Exploring Issues in Gender	3
or AAS 8603	Racism and the Color Line	
AAS 8793	Rae and Cultural Diversity in the Workplace	3
or SO 8990	Special Topics in Sociology	
SO 8983	Seminar in Race Relations	3
or HI 8783	Issues in African American History	
HI 8773	Issues in Women's History	3

The Diversity Certificate Program requires a B or better in 12 credit hours earned by taking one course from each of the pairs.

Mathematics and Statistics

Department Head: Dr. Mohsen Razzaghi

Graduate Coordinator: Dr. Mohammad Sepehrifar 410 Allen Hall Drawer MA Mississippi State, MS 39762 Telephone: 662-325-3414 Fax: 662-325-0005 E-mail: office@math.msstate.edu Website: http://math.msstate.edu

Mathematics

Admission Criteria

Graduate study is offered in the Department of Mathematics and Statistics leading to the degrees of Master of Science in Mathematics and Doctor of Philosophy in Mathematical Sciences. For unrestricted admission to the master's degree program, a degree applicant must submit three letters of recommendation and transcripts from all former institutions attended. The applicant must present the equivalent of an undergraduate major in mathematics, as described in the general catalog, with a minimum grade point average of 2.75 on a 4.00 scale on the last two years of undergraduate academic work. In addition, a student is expected to possess those qualities that, in the judgment of the departmental graduate faculty, indicate that the applicant has the ability to do graduate work at the appropriate level. A minimum score of 477 PBT (153 CBT or 53 iBT) on the Test of English as a Foreign Language (TOEFL) or a score of 4.5 on the International English Language Testing Systems (IELTS) is required of international students (with some exceptions). An applicant for the Ph.D. program must meet the requirements for admission to the master's degree program and submit a satisfactory score on the Graduate Record Examination (GRE) General Test. The department awards a limited number of teaching assistantships. It is recommended that teaching assistantship applicants who do not have English as their native language must submit a score of at least 600 PBT (100 iBT) on the TOEFL or 7.5 on the IELTS.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Performance

Continuous enrollment in the University or in a specific graduate program is dependent upon a satisfactory evaluation of academic performance and progress toward the completion of a specified degree. A student's progress is considered satisfactory unless judged to be unsatisfactory by the department and/or the dean of the college offering the program.

Unsatisfactory progress in a degree program may be defined as one or more of the following:

- A student's failure to maintain a B average on all graduate courses attempted after admission to the program
- Failure of a Master's Core Examination or a Ph.D. Comprehensive Area Examination
- Failure of the preliminary examination

In January, May, and August of each year, the Graduate Coordinating Committee will review the academic records of students who were admitted with contingent or provisional status, are currently on probation, have earned a grade of D, F, or U during the previous semester, or have earned more than two grades below B. The Graduate Coordinating Committee will consider making a recommendation to the Dean of the Graduate School that a student be dismissed from his/her degree program if any of the following conditions exist:

- The student's progress in his/her degree program is deemed unsatisfactory
- The student is not making satisfactory progress toward satisfying any condition of his/her contingent admission
- The student is on academic probation and cannot meet the requirements for good academic standing within the next 9 credit hours taken in the student's program of study

Any of the following will result in a recommendation for dismissal from a graduate degree program:

- Two failures on the Master's Core Examination or a Ph.D. Comprehensive Area Examination
- Failure of a student in provisional status to achieve a 3.00 GPA on the first 9 hours of regular graduate level coursework taken at Mississippi State University
- More than two grades below a B
- A grade of D, F, or U in any course (graduate or undergraduate) taken while the student is enrolled in a graduate program in mathematics or statistics

The student and advisor (if different from the graduate coordinator) will be notified in writing when the first and second unsatisfactory grades are received. A student enrolled in a graduate program in the Department of Mathematics and Statistics will be placed on academic probation if the student

fails to maintain a 3.00 GPA or earns a grade below a B in a prerequisite course. To be removed from academic probation, the student must achieve an overall GPA of 3.00 or higher on coursework taken toward the degree.

To be eligible for the preliminary/comprehensive examination, a graduate student must maintain an overall B average in all graduate courses attempted while in a specific program. Individual programs may have additional requirements.

Statistics

Admission Criteria

Graduate study is offered in the Department of Mathematics and Statistics leading to the degrees of Master of Science in Statistics and Doctor of Philosophy in Mathematical Sciences. Admission to the master's degree program in statistics is open to graduates in all disciplines. An applicant must submit three letters of recommendation and transcripts from all former institutions attended. The student must present the equivalent of a bachelor's degree, with a minimum grade point average of 2.75 on a 4.00 scale on the last two years of undergraduate academic work. In addition, a student is expected to possess those qualities that, in the judgment of the departmental graduate faculty, indicate that the applicant has the ability to do graduate work at the appropriate level. A minimum score of 477 PBT (53 iBT) on the Test of English as a Foreign Language (TOEFL) or 4.5 on the International English Language Testing Systems (IELTS) is required of international students (with some exceptions). An applicant for the Ph.D. program must meet the requirements for admission to the master's degree program and submit a satisfactory score on the Graduate Record Examination (GRE) General Test. The department awards a limited number of teaching assistantships. It is recommended that teaching assistantship applicants who do not have English as their native language must submit a score of at least 600 PBT (100 iBT) on the TOEFL or 7.5 on the IELTS.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Performance

Continuous enrollment in the University or in a specific graduate program is dependent upon a satisfactory evaluation of academic performance and progress toward the completion of a specified degree. A student's progress is considered satisfactory unless judged to be unsatisfactory by the department and/or the dean of the college offering the program.

Unsatisfactory progress in a degree program may be defined as one or more of the following:

- A student's failure to maintain a B average on all graduate courses attempted after admission to the program
- Failure of a Master's Core Examination or a Ph.D. Comprehensive Area Examination
- Failure of the preliminary examination

In January, May, and August of each year, the Graduate Coordinating Committee will review the academic records of students who were admitted with contingent or provisional status, are currently on probation, have earned a grade of D, F, or U during the previous semester, or have earned more than two grades below B. The Graduate Coordinating Committee will consider making a recommendation to the Dean of the Graduate School that a student be dismissed from his/her degree program if any of the following conditions exist:

- The student's progress in his/her degree program is deemed unsatisfactory
- The student is not making satisfactory progress toward satisfying any condition of his/her contingent admission
- The student is on academic probation and cannot meet the requirements for good academic standing within the next 9 credit hours taken in the student's program of study

Any of the following will result in a recommendation for dismissal from a graduate degree program:

- Two failures on the Master's Core Examination or a Ph.D. Comprehensive Area Examination
- Failure of a student in provisional status to achieve a 3.00 GPA on the first 9 hours of regular graduate level coursework taken at Mississippi State University
- More than two grades below a B
- A grade of D, F, or U in any course (graduate or undergraduate) taken while the student is enrolled in a graduate program in mathematics or statistics

The student and advisor (if different from the graduate coordinator) will be notified in writing when the first and second unsatisfactory grades are received.

A student enrolled in a graduate program in the Department of Mathematics and Statistics will be placed on academic probation if the student fails to maintain a 3.00 GPA or earns a grade below a B in a prerequisite course. To be removed from academic probation, the student must achieve an overall GPA of 3.00 or higher on coursework taken toward the degree.

To be eligible for the preliminary/comprehensive examination, a graduate student must maintain an overall B average in all graduate courses attempted while in a specific program. Individual programs may have additional requirements.

Prerequisite Courses

The master's degree program in Statistics requires as prerequisite expertise in the following: Matrix Algebra, Computer Concepts, and Calculus at the level of MA 2743 Calculus IV.

Master of Science in Mathematics - Thesis

MA 6153	Matrices and Linear Algebra ¹	3
MA 6753	Applied Complex Variables ¹	3
MA 6933	Mathematical Analysis I ¹	3
MA 6163	Group Theory	3
or MA 6943	Mathematical Analysis II	
MA /ST 6543	Introduction to Mathematical Statistics I	3
or MA 6313	Numerical Analysis I	
MA XXXX	Additional graduate-level coursework	15
MA 8000	Thesis Research/ Thesis in Mathematics	6
Total Hours		36

1 Requires an examination.

Master of Science in Mathematics - Non-Thesis

Total Hours		36
MA 7000	Directed Individual Study in Mathematics ²	3
MA XXXX	Additional graduate-level coursework	18
or MA 6313	Numerical Analysis I	
MA /ST 6543	Introduction to Mathematical Statistics I	3
or MA 6943	Mathematical Analysis II	
MA 6163	Group Theory	3
MA 6933	Mathematical Analysis I ¹	3
MA 6753	Applied Complex Variables ¹	3
MA 6153	Matrices and Linear Algebra ¹	3
	4	

Total Hours

1 Requires an examination.

2 A project is required.

Doctor of Philosophy in Mathematical Sciences - Mathematics

MA 9000 Dissertation Research /Dissertation in Mathematics	20
Graduate-level coursework in area of specialization	9-12
Graduate-level coursework in each of four areas of mathematics and/or statistics	24

Comprehensive area examinations, a preliminary examination, a dissertation, and dissertation defense are required. Before taking the preliminary examination, a Ph.D. student must satisfy the departmental foreign language requirement.

Research areas for the Ph.D. include:

- applied and computational mathematics
- · ordinary and partial differential equations
- · functional analysis and operator theory
- topology

- · graph theory
- · geometric combinatorics and
- · statistics

For further details and specific degree requirements contact the Graduate Coordinator.

Master of Science in Statistics - Thesis

Total Hours		36
ST XXXX	Additional graduate-level coursework	15
ST 8000	Thesis Research/ Thesis in Statistics	6
ST 8613	Linear Models I ¹	3
ST 6573	Introduction to Mathematical Statistics II ¹	3
ST 6543	Introduction to Mathematical Statistics I ¹	3
ST 8603	Applied Statistics ¹	3
ST 8533	Applied Probability ¹	3

1 Requires an examination over these core courses.

Master of Science in Statistics - Non-Thesis

ST 8533Applied Probability 1ST 8603Applied Statistics 1ST 6543Introduction to Mathematical Statistics I 1ST 6573Introduction to Mathematical Statistics II 1ST 8613Linear Models I 1ST XXXXAdditional graduate-level courseworkST 7000Directed Individual Study in Statistics 2	36
ST 8603Applied Statistics 1ST 6543Introduction to Mathematical Statistics I 1ST 6573Introduction to Mathematical Statistics II 1ST 8613Linear Models I 1	3
ST 8603Applied Statistics 1ST 6543Introduction to Mathematical Statistics I 1ST 6573Introduction to Mathematical Statistics II 1	18
ST 8603 Applied Statistics ¹ ST 6543 Introduction to Mathematical Statistics I ¹	3
ST 8603 Applied Statistics ¹	3
	3
ST 8533 Applied Probability ¹	3
	3

Total Hours

1 Requires an examination over these core courses.

2 A project is required.

In addition, there is ample flexibility in the non-thesis option to allow a graduate student with special interest in an area of statistical application to acquire an area of emphasis in that particular applied field.

Doctor of Philosophy in Mathematical Sciences - Statistics

Graduate-level coursework in each of four areas of mathematics and/or statistics		24
Graduate-level coursework in area of specialization		9-12
ST 9000 Dissertation Research /Dissertation in Statistics		20
Total Hours		53-56

Comprehensive area examinations, a preliminary examination, a dissertation, and dissertation defense are required. Before taking the preliminary examination, a Ph.D. student must satisfy the departmental foreign language requirement.

Research areas for the Ph.D. include:

- · linear models
- multivariate statistics
- · probability theory and stochastic processes and
- · statistical methods

Many applied courses are offered that are suitable for a minor in statistics at the master's or doctoral level.

For further details and specific degree requirements, contact the Graduate Coordinator.

Philosophy and Religion

Department Head: Dr. J. Robert Thompson

228 Etheredge Hall Box JS Mississippi State, MS 39762 Telephone: 662-325-2382 Website: http://www.philosophyandreligion.msstate.edu (http://www.philosophyandreligion.msstate.edu/)

The Department of Philosophy and Religion offers graduate courses that a student can take for elective credit. For additional information call 662-325-2382.

Physics and Astronomy

Department Head: Dr. Mark A. Novotny Graduate Coordinator: Dr. Henk F. Arnoldus 125 Hilbun Hall Box 5167 Mississippi State, MS 39762 Telephone: 662-325-2806 Fax: 662-325-8898 E-mail: hfa1@msstate.edu Website: http://physics.msstate.edu/)

Graduate study is offered in the Department of Physics and Astronomy leading to the degrees of Master of Science in Physics and to the Doctor of Philosophy in Physics. Both thesis and non-thesis options are offered for the Master of Science. An interdisciplinary program leading to the degree of Doctor of Philosophy in Engineering with a concentration in Applied Physics is available. A specific program, depending on the research interest of the student, is established by consultation between the student and his/her advisor. The non-thesis M.S. option provides a means of enabling the Ph.D.-track student to complete graduate education in a timely manner.

Major areas of study include the following:

- · Computational physics
- Theoretical and experimental optics
- · Diagnostics using the techniques of laser spectroscopy
- · Experimental and theoretical nuclear structure physics
- · Intermediate energy nuclear physics
- · Experimental and applied electromagnetic scattering
- Astrophysics
- Astrochemistry

Graduate research and teaching assistantships are available.

Admission Criteria

TOEFL and IELTS scores are used following the General Requirements for Admission by the University.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Performance

A candidate for a degree must average B or higher on all graduate courses attempted after admission to the program. No grade under C will be accepted on the program of study, and no more than 8 credit hours of C grades can be earned. With the approval of the graduate coordinator and the college dean, a student may retake one course per degree, except for those approved for repeated credit (e.g. special topics, individual studies, thesis, dissertation, etc.). Both courses will remain on the permanent transcript, and both grades will be included in the GPA computation. Repeated courses must be taken at Mississippi State University. No additional program credit hours will be generated from a repeated course.

Master of Science in Physics - Thesis

Total Hours		30
PH 8000	Thesis Research/ Thesis in Physics and Astronomy	6
Thesis		
Other coursework		12
PH 8313	Electromagnetic Theory	
PH 8213	Mechanics	
PH 8243	Methods of Theoretical Physics II	
Select two of the following:		6
PH 8743	Quantum Mechanics I	3
PH 8233	Methods of Theoretical Physics I	3
Required Oburses		

A thesis is required.

Master of Science in Physics - Non-Thesis

Required Courses		
PH 8213	Mechanics	3
PH 8233	Methods of Theoretical Physics I	3
PH 8243	Methods of Theoretical Physics II	3
PH 8313	Electromagnetic Theory	3
PH 8743	Quantum Mechanics I	3
PH 8753	Quantum Mechanics II	3
Other coursework		12
Total Hours		30

Students must pass written preliminary examinations on Classical Mechanics, Electromagnetic Theory, Mathematical Physics and Quantum Mechanics. After successfully passing these examinations, the students are required to pass an oral comprehensive examination.

Doctor of Philosophy in Physics

All Ph.D. candidates will be required to take a minimum of 20 credit hours of PH 9000 Research/Dissertation. The committee for an individual student may require additional courses, depending on the research area and background of the student. All students must pass an oral preliminary examination on the proposed dissertation topic.

In addition, all Ph.D. candidates are required to demonstrate a broad background in physics by passing four written preliminary examinations on Classical Mechanics, Electromagnetic Theory, Mathematical Physics and Quantum Mechanics.

Political Science and Public Administration

Department Head: Dr. Brian Shoup (Interim)

Graduate Coordinator: Dr. Dragan Stanisevski 105 Bowen Hall Box PC Mississippi State, MS 39762 Telephone: 662-325-2711 E-mail: dstanisevski@pspa.msstate.edu () Website: http://www.pspa.msstate.edu (http://www.pspa.msstate.edu/)

The Department of Political Science and Public Administration offers graduate study leading to the following degrees:

- Doctor of Philosophy (Ph.D.) in Public Policy and Administration
- Master of Public Policy and Administration (M.P.P.A.)
- Master of Arts (M.A.) in Political Science

The department awards a limited number of graduate assistantships.

Doctor of Philosophy in Public Policy and Administration

Admission Criteria

A student admitted to the Ph.D. program must have earned a graduate degree from an accredited university with a master's level grade point average of at least 3.35. Applicants must submit the results of the Graduate Record Examination (GRE); three letters of recommendation; a current résumé, two samples of previously written research (e.g., graduate thesis or capstone analysis) or analytic work completed in his or her professional career; and a statement of professional intent. The Ph.D. committee interviews most applicants.

Any international applicant whose native language is not English must submit scores that are not more than two years old from either the Test of English as a Foreign Language (TOEFL) or the International English Language Language Testing Systems (IELTS). These applicants must achieve a score of 600 PBT (100 iBT) or better on the TOEFL or 7.5 on the IELTS.

Academic Probation

A student whose GPA fall below 3.00 will be placed on academic probation the following semester. See the complete Academic Probation policy in this catalog.

Unsatisfactory Performance

A student in the Ph.D. program will be dismissed if he or she receives a second grade of C or lower or fails the preliminary exams a second time.

Master of Public Policy and Administration

The 42-hour Master of Public Policy and Administration (M.P.P.A.) program strives to professionalize and diversify public service. The program prepares persons to serve effectively as public administrators at the national, state, and local levels of government.

Admission Criteria

A competitive applicant for the M.P.P.A. program must have completed the last two years of undergraduate work with a grade point average of 3.00; applicants with previous graduate work must have a grade point average of 3.00 on such coursework. Moreover, the applicant must submit three letters of recommendation, official transcript(s), and a Statement of Purpose. An applicant with a lower grade point average may be admitted provisionally if she or he has appropriate work experience.

Any international applicant whose native language is not English must submit scores that are not more than two years old from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing Systems (IELTS). These applicants must have a score of 600 PBT (100 iBT) or better on the TOEFL or 7.5 on the IELTS.

A student who has not been enrolled for one regular semester (fall or spring) is required to submit a readmission form and a new statement of purpose. The readmission must be approved by the Graduate Coordinator. If a student has not been enrolled for one calendar year, the applicant must submit a new application and statement of purpose to be considered for readmission. The M.P.P.A. program accepts applications for Fall, Spring, and Summer semesters.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a B). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Probation

A student whose GPA fall below 3.00 will be placed on academic probation the following semester. See the complete Academic Probation policy in this catalog.

Unsatisfactory Performance

A student in the M.P.P.A. program will be dismissed if he or she receives a second grade of C or lower. He or she will also be dismissed if found responsible for violating the Student Honor Code for a second time. See the complete Graduate School policy on Academic Dismissal in this catalog.

Master of Arts in Political Science

Admission Criteria

A competitive applicant for the Master of Arts in Political Science program must have completed the last two years of undergraduate work with a grade point average of 3.00; an applicant with previous graduate work must have a grade point average of 3.00 on such coursework. Moreover, the applicant must submit three letters of recommendation. An applicant with a lower grade point average may be admitted if he or she has a competitive score on the verbal, quantitative, and analytical writing portions of the GRE.

Any international applicant whose native language is not English must submit scores that are not more than two years old from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing Systems (IELTS). These applicants must achieve a score of 600 PBT (100 iBT) on the TOEFL or 7.5 on the IELTS.

Readmission

A student not enrolled for one regular semester (fall or spring) is required to submit a readmission form and a new statement of purpose. The readmission must be approved by the Graduate Coordinator. If a student has not been enrolled for one calendar year, the applicant must submit a new application and statement of purpose to be considered for readmission into his/her program of study.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a B). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Probation

A student whose GPA fall below 3.00 will be placed on academic probation the following semester. See the complete Academic Probation policy in this catalog.

Unsatisfactory Performance

A student in the Master of Arts program will be dismissed if he or she:

- receives a second grade of C or lower, or
- fails the comprehensive examination a second time, or
- receives unsatisfactory grades for two semesters in PS 8000 (thesis only), or
- is found to be responsible for violating the Student Honor Code for a second time.

See the complete Graduate School policy on Academic Dismissal in this catalog.

Accelerated Program

Highly qualified PSPA undergraduates (3.50 GPA and above) are encouraged to apply to the Accelerated Program. This program permits students to earn up to 15 hours of graduate level coursework during their final year of undergraduate studies. Students can take graduate level courses and earn both undergraduate and graduate credit simultaneously. Students need to consult with a potential graduate advisor to ensure graduate credit could be applied to a Program of Study for the graduate degree. Application to this program may be made as early as the end of the junior year (i.e., after completion of 90 or more hours of graded undergraduate courses). Students interested in applying to the Accelerated Program should see Accelerated Programs for complete information and contact the Department's Accelerated Program Director, Dr. Leslie Baker.

Master of Arts in Political Science - Thesis

Approved coursework in research methods and public policy		6
PS 8000 Thesis Research/ Thesis in Political Science		6
PS XXXX	Additional political science courses	12
Approved electives		6
Total Hours		30

The thesis program is open to anyone who obtains approval by the M.A. Committee. A minimum of 12 hours excluding thesis credits at the 8000-level is required.

Master of Arts in Political Science - Non-Thesis

Approved coursework in research methods and public policy		6
PS XXXX	Additional political science core courses	12
Approved electives ¹		15
Total Hours		33

¹ If all or part of the elective coursework is completed outside of political science, students must choose courses from no more than two other departments.

A minimum of 15 hours at the 8000-level is required.

The non-thesis program is open to anyone with at least 18 undergraduate semester hours in social science courses, including 9 hours in political science, who meets the minimum admission requirements.

Master of Public Policy and Administration

Core Courses		
PPA 8103	Seminar in Public Administration	3
PPA 8703	Government Organization and Administrative Theory	3
PPA 8713	Public Personnel Management	3
PPA 8723	Public Budgeting and Financial Management	3
PPA 8733	Public Program Evaluation	3
PPA 8743	Administrative Law	3
PPA 8803	Research Methods for Public Affairs	3
PPA 8903	Public Policy	3
PPA 8983	Integrative Capstone	3
Elective Courses		
Courses in selected concentration		12
Internship		
Public or non-profit internship ¹		3
Total Hours		42

¹ The internship is waived for students possessing at least one year of relevant work experience.

Core courses provide broad training in public policy and administration. These courses cover the fundamental competencies essential for professional practice in the field of public policy and administration. Each student must complete a 12-hour elective concentration to augment knowledge, skills, and abilities acquired in required courses. These courses are tailored to the student's career objective.

Doctor of Philosophy in Public Policy and Administration

Public Administration Core Courses

PPA 9603	Scope of American Public Administration	3
PPA 9703	Organization Behavior in the Public Sector	3
PPA 9713	Administration of Human Resources in a Public Sector Environment	3
PPA 9723	Public Budgeting Processes and Their Policy Implications	3
PPA 9613	Rural Government Administration I: Theoretical and Environmental Aspects	3
PPA 9203	Constitutional and Political Framework of Public Administration.	3
PPA 9303	Foundations of Public Administration	3
PPA 9403	Comparative Public Administration	3
PPA 9903	Public Policy Formulation and Implementation	3
Elective Courses		
Any graduate-level courses approved by the student's committee		6
Research Methodology		
PPA 9803	Multivariate Analysis and Design for Public Affairs	3
PPA 9993	Research Design and Philosophy of Science	3
PPA 9503	Qualitative Research for Public Affairs	3

Total Hours		65
PPA 9000	Dissertation Research /Dissertation in Public Policy and Administration	20
Dissertation		
PPA 9813	Advanced Quantitative Analysis for Public Affairs	3

The program focuses primarily on preparing graduates for teaching careers and for research careers.

The program's secondary focus is preparing graduates for management careers in federal, state, and local administration.

Assistantships are available for full-time study. An applicant interested in being considered for financial assistance must indicate that interest at the time of application. Applications for financial assistance are due by March 1.

A student who has not been enrolled for one regular semester (fall or spring) is required to submit a readmission form and a new statement of purpose. The readmission must be approved by the Graduate Coordinator. If a student has not been enrolled for one calendar year, the applicant must submit a new application and statement of purpose to be considered for readmission.

Psychology

Department Head: Dr. Mitchell Berman Graduate Coordinator: Dr. Kevin Armstrong 110 Magruder Hall Drawer 6161 Mississippi State, MS 39762 Telephone: 662-325-3202 E-mail: grad@psychology.msstate.edu Website: http://www.psychology.msstate.edu/)

The Department of Psychology offers a doctoral degree in Applied Psychology. The objective of the program is to train applied psychologists for employment in business, industry, engineering, college, university, clinical, and other applied settings. Concentrations are offered in the areas of Cognitive Science and Clinical. The Cognitive Science concentration focuses on the interplay and linkages between cognitive psychology, advances in computer science and engineering, the varying cognitive abilities of individuals, and demands for people to use technology more easily and efficiently. The Clinical concentration focuses on the study and application of psychological science involving both normal and pathological human behavior, drawing from the cognitive, social, and biological arenas as well as computer science and advanced technologies. The department does not offer a terminal master's degree. Students who do not already possess a master's degree earn one along the way.

A minor in cognitive science is designed for students outside of Psychology who wish to pursue an interdisciplinary study of mind and thought. Students completing the program will have a broad understanding of the field of cognitive science and will have demonstrated an approach that highlights the interdisciplinary nature of cognitive science.

Admission Criteria

Prerequisites for admission into the graduate program include all the general requirements of the Graduate School and the following courses at the undergraduate level:

- · For all applicants--statistics and experimental psychology
- For the cognitive science doctoral concentration-- introductory cognitive psychology
- For the clinical doctoral concentration--abnormal psychology (students are also encouraged to complete coursework in Biological, Developmental, Social and Cognitive Psychology, and in History and Systems of Psychology)

The application deadline for the Cognitive Science doctoral program is January 15. The Clinical Psychology doctoral program deadline is December 1.

The applicant may be admitted into the graduate program without having completed all of the undergraduate course requirements contingent upon making up any deficiencies as soon as possible.

Requirements for admission into the graduate program are as follows: three letters of recommendation, an official score on the Graduate Record Examination (GRE) general test, and transcripts of all college/university work. The applicant not meeting the GPA requirement of 3.00 for the Ph.D. program may receive provisional admission if other factors (e.g., publications, work experience, excellent grades at the end of an undergraduate career) suggest the potential for successful graduate-level work.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer

credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student shall be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements.

Academic Performance

Unsatisfactory performance in the graduate program in psychology is defined as any of the following:

- · Earning a second grade of D or lower in graduate courses in a semester
- Earning grades of C or lower in more than two courses not exceeding 8 credit hours for all courses since admission into the program, including those outside the program of study
- A course grade of C or lower represents unsatisfactory mastery of a course's material and students will be required to retake a class in which they earn a letter grade of C. Students can retake only one course per degree and must submit a Request to Retake a Course form for approval to do so
- In the Cognitive Science doctoral concentration: failing the first or second year projects, the general or specialty examinations, or the preliminary examination
- In the Clinical doctoral concentration: failing the manuscript exam twice, failing the comprehensive exam twice, or not being certified as ready for internship by the clinical faculty by the end of one's fifth year of study
- · Unsatisfactory evaluation of a thesis or dissertation
- · Failing a required component of study
- Failing to adhere to the APA Ethical Principles (www.apa.org/ethics/code (http://www.apa.org/ethics/code/)), the Mississippi State University Honor Code (http://www.honorcode.msstate.edu/) and Graduate Academic Requirements (p. 44).

Any one of these or a combination will constitute the basis for review for possible dismissal. The graduate coordinator and the student's graduate committee will review the record and recommend a final course of action: immediate dismissal or the establishment of a probationary period during which corrective action must take place. Appeal of the dismissal can be made by submitting a written appeal statement to the department head. If the dismissal is upheld by the department head upon the student's appeal, the student can then submit a written appeal to the dean of the College of Arts and Sciences.

Doctor of Philosophy in Applied Psychology with Cognitive Science Concentration

Research Methods and Quantitative Core

Total Hours		72
PSY 8731	Applied Cognitive Science Research Seminar	
Cognitive Science Seminar		5
PSY 8793	Advanced Cognitive Science Professional Skills	
PSY 8783	Cognitive Science Professional Skills	
PSY 8693	Advanced Cognitive Science Research Skills	
PSY 8683	Cognitive Science Research Skills	
Research & Professional Skills	5	12
PSY 8653	Applied Cognitive Reading Seminar	
Advanced Graduate Seminars		6
PSY 8763	Expertise and Cognitive Skill Acquisition	
PSY 8753	Advanced Human Memory	
PSY 8743	Perception and Attention	
Cognitive Psychology Integrat	ion (Select two from the following)	6
PSY 8773	Computational Cognitive Neuroscience	
PSY 8723	Cognitive Models of Skills	
Cognitive Science Integration		6
PSY 8713	Issues and Methods in Cognitive Psychology	
PSY 8703	Advanced Cognitive Science	•
Cognitive Science Core		6
PSY 9000	Dissertation Research /Dissertation in Psychology	
Research	r sychological Research	21
PSY 8513	Psychological Research	
PSY 8803	Advanced Quantitative Methods for Industrial Organizational and General Psychology	
PSY 8214	Quantitative Methods in Psychology II	10

10

Doctor of Philosophy in Applied Psychology with Clinical Concentration

Research Methods and Quantitative Co	ore	10
PSY 8214	Quantitative Methods in Psychology II	
PSY 8803	Advanced Quantitative Methods for Industrial Organizational and General Psychology	
PSY 8513	Psychological Research	
Research		21
PSY 9000	Dissertation Research /Dissertation in Psychology	
Clinical Concentration ¹		21
PSY 8713	Issues and Methods in Cognitive Psychology	
PSY 8313	Developmental Psychology	
PSY 8613	Advanced Social Psychology	
EPY 8113	History and Systems of Psychology	
PSY 8823	Diversity in Applied Psychology	
PSY 8233	Ethical and Professional Issues in Clinical Psychology	
PSY 9730	Doctoral Internship in Clinical Psychology	
Total Hours		52

1

Clinical concentration courses are APA Breadth and/or licensure requirements.

Master of Science in Psychology for Clinical Doctoral Students

Total Hours		47
Elective		3
PSY 8533	Introduction to Clinical Practicum in Psychology	3
PSY 8460	Applied External Clinical Practicum	4
PSY 8450	Applied Clinical Practicum	4
PSY 8383	Behavior Therapy	3
PSY 8364	Personality Appraisal	4
PSY 8354	Intelligence Testing	4
PSY 8333	Systems of Psychotherapy	3
PSY 8323	Psychopathology	3
PSY 8000	Thesis Research/ Thesis in Psychology	6
PSY 8513	Psychological Research	3
PSY 8214	Quantitative Methods in Psychology II	4
PSY 6403	Biological Psychology	3

Total Hours

Clinical doctoral students will be concurrently enrolled in the Master of Science in Psychology degree program automatically after acceptance into the doctoral program. There is no terminal MS degree in Clinical psychology.

Students admitted into the Clinical doctoral program who have completed a master's degree in psychology with an empirical thesis at another institution may petition the Clinical Training Committee to waive the thesis requirement and up to 6 credit hours of coursework. Such students will need to complete the remaining course of study listed in the M.S. program above.

Master of Science in Psychology for Cognitive Science Doctoral Students

PSY 8214	Quantitative Methods in Psychology II	4
PSY 8513	Psychological Research	3
PSY 8000	Thesis Research/ Thesis in Psychology	1-13
Elective Hours		27
Total Hours		40

Cognitive Science doctoral students will be concurrently enrolled in the Master of Science in Psychology degree program automatically after acceptance into the doctoral program. There is no terminal MS degree in Cognitive Science or Psychology.

Students admitted into the Cognitive Science doctoral program who have completed a mater's degree in psychology wit an empirical thesis at another institution may petition the Cognitive Science training program to waive the thesis requirement and up to 6 credit hours of coursework. Such students will need to complete the remaining course of study listed in the M.S. program above.

Graduate Minor in Cognitive Science

PSY /CSE 6653	Cognitive Science	3
PSY XXXX	Select course from Psychology Courses list	3
IE XXXX or CSE XXXX	Select course from the Industrial and Systems Engineering Courses list or the Computer Science and Engineering Courses list	3
Select one course each from two of the following lists:		6
Psychology Courses		
Industrial and Systems Engineering Courses		
Computer Science and Engineering Courses		
English/Anthropology/Sociology Courses		
Electrical and Computer Engineering Cou	Irses	
Philosophy Course		
Total Hours		15

Psychology Courses

Total Hours		22-30
PSY 8990	Special Topics in Psychology (with approval)	1-9
or CSE 8613	Cognitive Models of Skill	
PSY 8723	Cognitive Models of Skills	3
PSY 8713	Issues and Methods in Cognitive Psychology	3
PSY 6753	Applied Cognitive Psychology	3
PSY 6733	Memory	3
PSY 6713	Language and Thought	3
PSY 6643	Social Cognition	3
PSY 6423	Sensation and Perception	3

Total Hours

Industrial and Systems Engineering Courses

IE 6113	Human Factors Engineering	3
IE 8153	Cognitive Engineering	3

Computer Science and Engineering Courses

CSE 6633	Artificial Intelligence	3
CSE 6663	Human-Computer Interaction	3
CSE 8673	Machine Learning	3
CSE 8990	Special Topics in Computer Science and Engineering (with approval)	1-9

English/Anthropology/Sociology Courses

EN /AN 6403	Introduction to Linguistics	3
EN 6463	Studies in Second Language Acquisition	3
EN 6633	Language and Society	3
or AN /SO 6633	Language and Society	
AN /SO 6623	Language and Culture	3

Electrical and Computer Engineering Courses

ECE 6713	Computer Architecture	3
ECE 6813	Communications Theory	3
ECE 8443	Pattern Recognition	3

Philosophy Course

PHI 6143

Philosophy of Science

Sociology

Department Head: Dr. Nicole Rader Graduate Coordinator: Dr. Margaret Hagerman 207 Bowen Hall Box C Mississippi State, MS 39762 Telephone: 662-325-2495 E-mail: sociology@soc.msstate.edu Website: http://www.sociology.msstate.edu/)

This department has graduate programs leading to the Master of Science and Doctor of Philosophy degrees in Sociology.

Admission Criteria

To apply to either degree program, the applicant must submit the following:

- 1. A completed application packet for graduate study at MSU
- 2. Official transcripts from previous institutions
- 3. A GPA of 3.00 on the last two years of baccalaureate work
- 4. An academic writing sample in English (a sample of the student's choice)
- 5. General Graduate Records Examination (GRE) scores
- 6. Three letters of recommendation (from people who are familiar the student's academic abilities and potential)
- 7. A statement of purpose (explaining why the student wishes to study Sociology at MSU and how the program at MSU will assist the student in attaining goals).

Academic Performance

Master of Science

Continuous enrollment in the M.S. program in Sociology is dependent upon a satisfactory evaluation of academic performance and progress toward completion of the degree. Unsatisfactory performance will result in dismissal from the program. A student's performance is deemed unsatisfactory if one or more of the following occurs:

- More than two letter grades below a B in a student's graduate coursework
- · Failure to maintain a cumulative 3.00 GPA for two consecutive semesters
- More than one unsatisfactory U grade for thesis research
- Two failures on the M.S. exit examination
- Two failures on the M.S. thesis defense

Upon the completion of coursework for a student's program of study, a student must defend a thesis proposal. Once the thesis proposal is accepted by the student's thesis committee, the student may proceed to carry out the thesis research in close consultation with his or her thesis committee. The student must pass a public defense of the thesis.

Doctor of Philosophy

Continuous enrollment in the Ph.D. program in Sociology is dependent upon a satisfactory evaluation of academic performance and progress toward completion of the degree. Unsatisfactory performance will result in dismissal from the program. A student's performance is deemed unsatisfactory if one or more of the following occurs:

- · More than two letter grades below a B in a student's graduate coursework
- · Failure to maintain a cumulative 3.00 GPA for two consecutive semesters
- · More than one unsatisfactory U grade for dissertation research
- Two failures on the Preliminary Examination

Upon the completion of coursework for a student's program of study, a student must defend a dissertation proposal. Once the dissertation proposal is accepted by the student's dissertation committee, the student may proceed to carry out the dissertation research in close consultation with his or her committee. The student must pass a public defense of the dissertation.

Master of Science in Sociology - Thesis

SO 8103Graduate Theory ISO 8213Research DesignSO 8274Graduate Social Statistics IAdditional coursework 1Thesis Research/ Thesis in Sociology	Fotal Hours		30
SO 8213 Research Design SO 8274 Graduate Social Statistics I	SO 8000	Thesis Research/ Thesis in Sociology	6
SO 8213 Research Design	Additional coursework ¹		14
	SO 8274	Graduate Social Statistics I	4
SO 8103 Graduate Theory I	SO 8213	Research Design	3
	SO 8103	Graduate Theory I	3

1

1

A minimum of 12 GPA credit hours of graduate coursework must be taken at the 8000 level.

Upon the completion of coursework for a student's program of study, a student must defend a thesis proposal. Once the thesis proposal is accepted by the student's thesis committee, the student may proceed to carry out the thesis research in close consultation with his or her thesis committee. After the thesis committee unanimously agrees that the thesis is defensible the student must pass a public defense of the thesis.

NOTE: Thesis and dissertation research are subject to review and approval by the University's Institutional Review Board (IRB).

Master of Science in Sociology - Non-Thesis

SO 8103	Graduate Theory I	3
SO 8213	Research Design	3
SO 8274	Graduate Social Statistics I	4
Additional coursework ¹		26
Total Hours		36

A minimum of 15 GPA credit hours of graduate coursework must be taken at the 8000 level.

A student must take an exit examination. The exit examination may be taken during the semester that all coursework for a student's program of study is completed or the semester immediately following completion of the coursework. The exit examination is a five hour, in-class exam which covers social theory, social research methods and statistic, and general sociology.

Doctor of Philosophy in Sociology

Sociological Tools ¹		23
SO 8213	Research Design ¹	
SO 8103	Graduate Theory I ¹	
SO 8113	Graduate Theory II ¹	
SO 8223	Quantitative Analysis	
SO 8233	Qualitative Analysis	
SO 8274	Graduate Social Statistics I ¹	
SO 8284	Graduate Social Statistics II ¹	
Area of Specialization Coursework		15
Electives		12
SO 9000	Dissertation Research /Dissertation in Sociology	20
Total Hours		70

After completing the sevencourses, a Ph.D. student is required to pass a Ph.D. qualifying examination in the areas of theory, methods, and statistics. The student typically takes the qualifying exam during the third or fourth semester of study.

After completing all coursework, the student takes a comprehensive preliminary examination in the area of specialization. Areas of specialization include the following:

1. Criminology

1

- 2. Rural Sociology
- 3. Social Demography and Population Studies
- 4. Social Inequality and Stratification.

After the completion of coursework for a student's program of study, the successful completion of the Ph.D. qualifying examination, and the Ph.D. preliminary examination, a student is admitted into doctoral candidacy. A doctoral candidate must defend a dissertation proposal. Once the dissertation proposal is accepted by the student's dissertation committee, the candidate may proceed to conduct dissertation research in close consultation with his

or her dissertation committee. After the dissertation committee unanimously agrees that the dissertation is defensible, the candidate must pass a public defense of the dissertation.

NOTE: Thesis and dissertation research are subject to review and approval by the University's Institutional Review Board (IRB).

Minor in Sociology

Graduate minors in Sociology must complete 12 hours of graduate courses in sociology and pass a written examination prepared by the minor professor. A minor committee member must serve on the student's graduate committee.

College of Business

Dean: Dr. Sharon Oswald Associate Dean: Dr. Kevin Rogers Director of Graduate Studies in Business: Dr. Nicole Ponder Administrative Director and Head of Meridian Campus: Dr. Terry Cruse Division Head, Meridian: Dr. Rebecca Long 200 McCool Hall Box 5288 Mississippi State, MS 39762 Telephone: 662-325-1891 Website: http://www.business.msstate.edu/gsb (http://www.business.msstate.edu/gsb/)

E-mail: gsb@business.msstate.edu

Department	Degree and Major	Concentration	Thesis	Non-Thesis	Starkville	Meridian	Distance
Adkerson School of Accountancy	Master of Professional Accountancy - Accounting			X	X		
Adkerson School of Accountancy	Master of Professional Accountancy - Accounting	Systems		X	X		
Adkerson School of Accountancy	Master of Taxation - Taxation			Х	Х		
Department of Finance and Economics	Master of Arts - Economics		Х	Х	Х		
Department of Management and Information Systems	Master of Science - Information Systems			X	X		X
Business Administration	Master of Business Administration - Business Administration			X	x	x	х
Business Administration	Master of Business Administration - Project Management			х	x	x	x
Business Administration	Doctor of Philosophy - Business Administration	Business Information Systems			X		

Business Administration	Doctor of Philosophy - Business Administration	Finance	X
Business Administration	Doctor of Philosophy - Business Administration	Management	X
Business Administration	Doctor of Philosophy - Business Administration	Marketing	X

The College of Business offers graduate coursework in business administration, accounting, information systems, management and marketing as well as applied economics. This section describes all doctoral and master's programs offered at the graduate level. Following is an overview of each department along with the specific courses offered by the faculty in each.

Doctoral Programs

The College of Business offers the Ph.D. in Business Administration with concentrations in the following areas: Business Information Systems, Finance, Management, and Marketing.

Adkerson School of Accountancy

Director: Dr. Shawn Mauldin Graduate Coordinator: Dr. Kelly Walker 300 McCool Hall Box EF Mississippi State, MS 39762 Telephone: 662-325-1632 Fax: 662-325-1646 E-mail: kwalker@business.msstate.edu

Graduate study is offered in the Adkerson School of Accountancy leading to the Master of Professional Accountancy (M.P.A.) degree or the Master of Taxation (M.TX.) degree. The objective of graduate study at the master's level is to further the student's education in business and accounting in preparation for a professional career in accounting.

The Adkerson School of Accountancy cooperates in interdisciplinary programs leading to the Master of Business Administration (M.B.A.) and the Doctor of Philosophy (Ph.D.) in Business Administration degree (see the Business Administration section of this publication).

Master of Professional Accountancy

The objective of the Master of Professional Accountancy (M.P.A.) program is to further the student's education in business and accounting while preparing for a professional career in accountancy. The accountancy program is accredited by AACSB International, the Association to Advance Collegiate Schools of Business, as part of the overall accreditation of the College of Business, as well as the supplemental AACSB accreditation of accounting programs at both the graduate and undergraduate levels.

Admission Criteria

An applicant to the M.P.A. program should hold a bachelor's degree from a fully recognized four-year institution of higher learning that enjoys unconditional accreditation by appropriate regional accrediting agencies. Regular admission to the M.P.A. program requires an acceptable GMAT score, a minimum overall GPA or upper-level business GPA of 3.00, and acceptable recommendation letters. A GMAT waiver may be available to exceptional applicants.

International Applicant

An international applicant not holding a prior degree from a U.S. institution must submit an indicator of English proficiency including one of the following: (1) TOEFL score of 575 PBT (84 iBT) or (2) IELTS score of 7.0.

Provisional Admission

An applicant who has not fully met the GPA and GMAT score requirements may be admitted on a provisional basis. The provisionally admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits

earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. While in the provisional status, a student is not eligible to hold a graduate assistantship.

Prerequisite Courses

A grade of C or better is required on all undergraduate prerequisite courses. The prerequisites listed below, or their equivalent, must be completed either before or during graduate coursework. A complete transcript evaluation will be more specific in individual cases.

ACC 3013Cost Accounting3ACC 3023Intermediate Accounting I3ACC 3033Intermediate Accounting II3ACC 4013Income Tax I3
ACC 3033 Intermediate Accounting II 3
ACC 4013 Income Tax I 3
ACC 4033 Auditing 3
EC 2113 Principles of Macroeconomics 3
EC 2123 Principles of Microeconomics 3
FIN 3123 Financial Management 3
BL 2413The Legal Environment of Business3

Computer literacy and written communication skills are other prerequisites.

NOTE: Where appropriate, M.B.A. foundation courses may be used to satisfy some of the prerequisites.

Academic Performance

A grade of C or better is required on all undergraduate prerequisite courses. A student in any graduate degree program in the College of Business may not continue with grades below B in more than 6 hours of program coursework, regardless of the overall average. Thus, any program is terminated automatically when a seventh credit hour below B is recorded on program coursework. In addition, the normal MSU requirements for satisfactory progress in a graduate program will be applied.

Completion Requirements

- 1. A student must complete the required curriculum and a minimum of 30 graduate semester hours.
- 2. A student must have no more than 6 hours of C grades on program coursework.
- 3. A student must achieve a 3.00/4.00 GPA on graduate accounting work attempted.
- 4. A student must achieve a 3.00/4.00 GPA on all graduate work attempted at MSU after being admitted to the degree program.

Master of Taxation

The primary objective of the Master of Taxation (M.TX.) program is to further the student's education in business and accounting with an emphasis in taxation while preparing for a professional career in accounting and taxation.

Admission Criteria

An applicant to the M.TX. program should hold a bachelor's degree from a fully recognized four-year institution of higher learning that enjoys unconditional accreditation by appropriate regional accrediting agencies. Regular admission to the M.TX. program requires an acceptable GMAT score, a minimum overall GPA or upper-level business GPA of 3.00, and acceptable recommendation letters. A GMAT waiver may be available to exceptional applicants.

International Applicant

An international applicant not holding a prior degree from a U.S. Institution must submit an indicator of English proficiency including one of the following: (1) TOEFL score of 575 PBT (84 iBT) or (2) an IELTS score of 7.0.

Provisional Admission

An applicant who has not fully met the GPA and GMAT score requirements may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Prerequisite Courses

The prerequisites listed below, or their equivalent, must be completed either before or during graduate coursework. A complete transcript evaluation will be more specific in individual cases.

ACC 3003	Accounting Information Systems I	3
ACC 3013	Cost Accounting	3
ACC 3023	Intermediate Accounting I	3
ACC 3033	Intermediate Accounting II	3
ACC 4013	Income Tax I	3
ACC 4033	Auditing	3
EC 2113	Principles of Macroeconomics	3
EC 2123	Principles of Microeconomics	3
FIN 3123	Financial Management	3
BL 2413	The Legal Environment of Business	3
		-

Computer literacy and written communication skills are other prerequisites.

NOTE: Where appropriate, M.B.A. foundation courses may be used to satisfy some of the above prerequisites.

Academic Performance

A grade of C or better is required on all undergraduate prerequisite courses. A student in any graduate degree program in the College of Business may not continue with grades below B in more than 6 hours of program coursework, regardless of the overall average. Thus, any program is terminated automatically when a seventh credit hour below B is recorded on program coursework. In addition, the normal MSU requirements for satisfactory progress in a graduate program will be applied.

Master's Degree Completion Requirements

- 1. A student must complete the required curriculum and a minimum of 30 graduate semester hours.
- 2. A student must have no more than 6 hours of C grades on program coursework.
- 3. A student must achieve a 3.00/4.00 GPA on graduate accounting work attempted.
- 4. A student must achieve a 3.00/4.00 GPA on all graduate work attempted at MSU after being admitted to the degree program.

Consult the Director, Adkerson School of Accountancy (p. 145) for further information.

Master of Professional Accountancy

Required Accounting Courses		
ACC 6063	Income Tax II ¹	3
ACC 8013	Seminar in Financial Accounting Theory	3
ACC 8023	Advanced Managerial Accounting	3
ACC 8033	Assurance and Audit Data Analysis	3
ACC 8043	Fraud Examination and Data Analysis	3
Accounting Electives		9
Select three of the following:		
ACC 8053	Financial Accounting Policy	
ACC 8063	Research in Tax Practice and Procedures	
ACC 8073	Taxation of Corporations and Shareholders	
ACC 8093	Taxation of Partnerships, S Corporations, Trusts, and Estates	
ACC 8113	Advanced Individual Taxation and Wealth Management	
ACC 8123	Tax Topics	
ACC 8183	International Accounting	
Business Electives		
Select 6 hours of graduate-level b	ousiness or accounting courses.	6

Total Hours

. .

¹ Unless completed as an undergraduate.

NOTE: No more than 9 hours at the 6000-level can count toward the degree.

Master of Taxation

Required Tax Courses		
ACC 8063	Research in Tax Practice and Procedures	3
ACC 8073	Taxation of Corporations and Shareholders	3
ACC 8113	Advanced Individual Taxation and Wealth Management	3
ACC 8093	Taxation of Partnerships, S Corporations, Trusts, and Estates	3
ACC 8123	Tax Topics	3
Electives (Choose 3 of the	following courses)	9
ACC 8013	Seminar in Financial Accounting Theory	
ACC 8033	Assurance and Audit Data Analysis	
ACC 8043	Fraud Examination and Data Analysis	
ACC 8053	Financial Accounting Policy	
Any approved graduate-level	accounting or business courses	6
Total Hours		30

Total Hours

NOTE: No more than 9 hours at the 6000-level can count toward the degree.

Graduate Minor in Accounting Data Analytics (9 credit hours total)

In lieu of 6 hours of graduate-level business or accounting courses, a student may elect a Graduate Minor in Accounting Analytics by selecting ACC 8043 as one of the accounting electives and by selecting the two courses below:

- ACC 8143: Accounting Data Analytics
- · BIS 8413: Data Analytics

Graduate Minor in Business Analytics (9 credit hours in total)

In lieu of the 6 hours of graduate-level business or accounting courses, the student will select the two courses below:

- · BIS 8413 Data Analytics
- BQA 6413 Business Forecasting and Predictive Analytics
- · Any approved course for the minor

M.P.A. - Concentration in Systems

In lieu of 6 hours of graduate-level business or accounting electives, students seeking the systems concentration will select the two courses below:

BIS 8213 Secure Systems Analysis and Design

Advanced Database Design Administraton¹ **BIS 8313**

¹ Programing prerequisites may be required.

M.TX. - Concentration in Systems

In lieu of 6 hours of graduate-level business or accounting electives, students seeking the systems concentration will select the two courses below as well as one other approved course, for a total of 9 hours:

BIS 8213 Secure Systems Analysis and Design

BIS 8313 Advanced Database Design Administraton¹

¹ Programing prerequisites may be required.

Business Administration - Ph.D.

Director of Graduate Studies in Business: Dr. Nicole Ponder 200 McCool Hall Box 5288 Mississippi State, MS 39762 Telephone: 662-325-1891

E-mail: gsb@business.msstate.edu

The College of Business offers a full-time degree program leading to the Doctor of Philosophy (Ph.D.) in Business Administration. The concentrations available under this degree include the following:

- Information Systems
- Finance
- Management
- Marketing

Admission Criteria

The applicant for admission to the Ph.D. program in business must hold a bachelor's degree from a recognized institution of higher learning and have demonstrated high promise of benefit from graduate study. All general requirements stated in this publication must be met. The doctoral applicant must also present a GMAT score from a test administered within the last five years; an undergraduate GPA of 3.00/4.00 or above, both cumulative and over the last 60 hours of undergraduate work; and a GPA of 3.25/4.00 on all prior graduate work. A GRE score may be presented in lieu of the GMAT, but the GMAT is strongly preferred. Consideration will be given to an applicant who is deficient in not more than one of the quantitative specifications cited above.

Enrollment in the Ph.D. program is limited to the number of openings available in each academic year. An applicant whose quantitative credentials meet the stated criteria above may still be denied admission. Included in the qualitative consideration are such factors as the quality of previous academic studies, the meshing of the purpose of study and the opportunities in the proposed field of study, prior professional and employment activities, and a recommendation of the faculty in the proposed field of study, including the availability of faculty support for research.

An international applicant not holding a prior degree from a U.S. Institution must submit a TOEFL report of 575 PBT (84 iBT) or an IELTS score of 7.0.

Application Deadlines

Students are admitted to the Ph.D. program in the fall semester of each year. Applicants to the Ph.D. program with a concentration in Finance are admitted only in odd years. In order to receive full consideration for both admission and assistantship, complete applications must be received by the Office of the Graduate School by **January 15**. The following deadlines apply separately to applications for admission and graduate assistantship.

Admission

The primary decision date for fall admission is the first of March. Since admission decisions are often competitively based for a limited number of openings, applicants are strongly encouraged to have all application and supporting materials in the Office of the Graduate School by January 15. Completed applications received after this date will continue to be screened until the end of April for fall admission. Applications received from the Graduate School after April 30 will be considered for admission only for fall of the following year. It is the applicant's responsibility to ensure that all supporting materials are received.

Assistantship

While an application for assistantship may be submitted at any time for vacancies which may arise, regular appointments are for the academic year (i.e., fall and spring semesters) and begin with the fall semester. To receive full consideration for a fall appointment, the Application for Graduate Assistantship in Business must be received by the Office of Graduate Studies in Business by January 15 of that year. Since only applicants who have been admitted to a degree program can be considered for graduate assistantship appointments, all admission application materials must also be received by January 15 for those desiring full consideration for a graduate assistantship offer.

Prerequisite Courses

The following are undergraduate courses (prerequisite courses) that must be completed either in the student's undergraduate program or after enrollment in the Ph.D. program at Mississippi State University. These courses are not considered as part of the student's formal graduate program of study and do not apply toward fulfillment of minimum credit hour requirements. A grade of C or better must be received in all prerequisite courses.

Business Computer Systems	3
Business Finance	3
Business Statistics	6
Calculus	3
Legal Environment of Business	3
Principles of Accounting	6
Principles of Economics	6
Principles of Management	3

Principles of Marketing Production Management

Graduate Committee

Each student's course of study and research is directed by a committee of graduate faculty called a graduate committee. A graduate committee must contain at least five members, all of whom must be members of the graduate faculty. The graduate committee that works with the student through the coursework stage of the program is the graduate program committee. When the student completes all coursework and requirements thereof, the graduate program committee is dissolved and the graduate committee is reformulated as the graduate dissertation committee.

Program Committee

The initial graduate committee is the student's program committee. The committee is composed of the following.

- The chair, who must be a Level I member of the graduate faculty and from the concentration field
- · At least two other members from the concentration field of study
- · One member from the support area or minor field
- One member from the College of Business.

This graduate committee is charged with specifying the courses that will constitute the student's program of graduate study and administering the comprehensive examination. The graduate program committee is dissolved when the student passes the comprehensive examination.

Dissertation Committee

The graduate committee formed following a successful comprehensive examination is the student's dissertation committee. The base requirements in constituting the committee are as follows: all members must be on the graduate faculty; three members, one of whom is the chairman and must be a member of the graduate faculty, are from the concentration; one member from the support area or minor; and the remaining members from areas germane to the dissertation. One member of the committee, who may or may not be the chairman, is designated as the dissertation director. This committee is charged with approval of the dissertation topic proposal and administering and grading of the final defense of the dissertation.

Dissertation Sub-Committee

The sub-committee is composed of the dissertation director and two other members from the graduate dissertation committee. While all members of the dissertation committee should be viewed as resources available to the student, the sub-committee is the group that will work actively with the student throughout the dissertation process. The members of the dissertation sub-committee are referred to as active members and for this reason the sub-committee is often referred to as the active committee.

Dissertation Readers

Members of the graduate dissertation committee who are not part of the dissertation sub-committee are referred to as readers.

Transfer of Credits

It is anticipated that an appreciable percentage of the students in the doctoral program will hold master's degrees in business or economics from recognized institutions for which they will be allowed credit approximating the first year of the doctoral program. In exceptional cases, limited additional transfer credit may be allowed. In no case will transfer credit be allowed for courses in which grades of C or less were earned.

Residence Requirement

At some time in the doctoral coursework, the student shall be required to devote two consecutive regular semesters (fall/spring) with a minimum load of 9 hours per semester to the graduate program at Mississippi State University.

Academic Performance

A student in any Ph.D. program in the College of Business may not continue in the program with grades below B in more than 6 hours of core coursework, regardless of the overall average. Thus, any program is terminated automatically when a seventh credit hour below B is recorded on core coursework. In addition the normal MSU requirements for satisfactory progress in a Ph.D. program will be applied.

Time Limit

A student in a Ph.D. doctoral program must complete the program within a period of five years after passing the Preliminary/Comprehensive Examination.

For More Information

For more information about the Ph.D. program in Business or application materials, contact the Director of Graduate Studies in Business.

Program of Graduate Study

The doctoral degree is awarded based on the demonstration of mature scholarship and ability to conduct meaningful and independent research. The degree is not granted as a result of taking a given set of courses or earning a given number of credit hours. While formal coursework is important, the specific courses and number of hours required will vary for different students. Thus, there is not a total number of courses or hours that will satisfy the degree requirements uniformly for all students. The coursework required for each student is based on: the student's ability to demonstrate to the graduate faculty a thorough grasp of the fields selected; the student's particular interests with regard to teaching and research; and the student's ability to conduct meaningful and independent research. A minimum of 36 credit hours must be taken in the student's program at MSU.

The proposed program of graduate study is specified by the student's graduate program committee in consultation with the student. During the first semester of enrollment, a proposed program of graduate study, approved by the graduate program committee, is to be submitted to the Office of Graduate Studies in Business for approval. A copy of the fully approved program of graduate study will be provided to the student and each individual whose signature appears on it. The student's signature is required on the program of study. The program at a minimum consists of a designated concentration field and a support area or minor field from within the College of Business, a research and teaching tools component, and dissertation research. Proposed changes in an approved program of graduate study must be approved in the same manner as the original program.

Doctor of Philosophy in Business Administration

Concentration Minimum Requirement 24 hours with no more than 6 hours outside the College of Business 24 Support Area Minimum Requirement 9 hours with no more than 6 hours outside the College of Business ^{1,2} 9 **Optional Minor** 12 hours graduate coursework in one discipline ² 12 Research and Teaching Tools ³ Research methods 4 9 BQA 9333 Statistical Methods for Business Research 3 **BQA 9533** Advanced Statistics for Business Decisions 3 Graduate-level instructional methods course 3 **Dissertation Research Requirements** 20 hours dissertation research in concentration 5 20 **Total Hours** 71-74

¹ With the approval of the program committee and the Director of Graduate Studies in Business, the student selects at least 9 hours of coursework to support his or her study of the concentration field. The courses can be chosen from one or several disciplines; hence no examination will be given.

² Support Area Minimum Requirement or Optional Minor must be chosen.

- ³ None of the courses in this area may be counted toward the course requirements in the concentration or support area.
- ⁴ Courses are selected by the student's programming committee with the approval of the Director of Graduate Studies in Business.
- ⁵ All research hours must be taken in the student's program at Mississippi State University. All students who have completed coursework and/or who have been admitted into degree candidacy must be continuously registered during at least two academic terms per year.

The list includes the minimum coursework requirements beyond the baccalaureate stipulated by the graduate faculty in the College of Business for the Ph.D.

Examinations/Completion Requirements

The following written and oral examinations are required of all Ph.D. students.

Quantitative Area Qualifying Examination

The Qualifying Examination in the Quantitative Area is a three-hour written examination covering the subject matter of BQA 9333 and BQA 9533. The examination is offered twice a year by the graduate faculty in Quantitative Analysis. The Office of Graduate Studies in Business maintains the schedule of examination dates. The student must be enrolled during the semester in which the examination is administered. The student must register for the examination with the Office of Graduate Studies in Business at least 30 days prior to the scheduled date of the examination. The student must sit for the qualifying examination in the quantitative area by the end of the third regular semester of study. Two failures on the qualifying examination result in automatic termination of the student's program.

Preliminary Examinations

Preliminary examinations are written examinations required in the concentration and each minor field. For each field in the College of Business, preliminary examinations are offered twice a year by the graduate faculty of the respective field. The Graduate Studies in Business office maintains the schedule of examination dates. The student must register for the examination with the Office of Graduate Studies in Business at least 30 days prior to the scheduled date of the examination.

The student may sit for a preliminary examination after completing 18 hours of graduate coursework at Mississippi State University and completion of all required coursework in the field of the examination. An academic area may stipulate additional requirements to sit for the concentration preliminary examination in that area. All preliminary examinations must be taken within 42 months after beginning coursework if the appropriate coursework is available. The student must be enrolled during the semester the examination is administered. Three failures on a preliminary examination in a given field result in automatic termination of the student's program.

- 1. Concentration Field Preliminary Examination—An eight-hour written examination is required in the concentration field.
- 2. Minor Field Preliminary Examination(s)—A four-hour written examination is required in each minor field.

Comprehensive Examination

All doctoral students are required to pass a comprehensive (oral) examination. It may be scheduled following passage of the qualifying examination, passage of all preliminary examinations, and when the student is within 6 hours of completing all coursework. The comprehensive examination must be scheduled within the first year of the student's eligibility to sit for the examination. The examination is scheduled through the Office of Graduate Studies in Business at least two weeks prior to the date desired for examination. The student or a committee member may request that the Office of the Graduate School appoint an outside observer to attend the comprehensive examination.

The examination is administered by the student's graduate program committee. A student may pass the examination with no more than one failure or dissenting vote from a member of the graduate program committee. A student who fails the comprehensive examination cannot apply to re-sit for the examination until a period of four months has elapsed from the date of the original examination. Two failures on the comprehensive examination result in automatic termination of the student's program. The student's graduate program committee is dissolved upon passage of the comprehensive examination.

Proposal Defense

Following passage of the comprehensive examination the student is eligible to defend a dissertation topic proposal. The proposal defense is scheduled by the chairman of the graduate dissertation committee through the Office of Graduate Studies in Business and is administered by the student's graduate dissertation committee. The student must be enrolled during the semester in which the examination is administered. The request to schedule the proposal defense must be made at least two weeks prior to the anticipated date of the defense. A proposal defense will not be scheduled sooner than two weeks after a copy of the written dissertation proposal has been distributed to all members of the graduate dissertation committee and the unit within which the concentration field is housed. The proposal defense is open to all interested parties, and copies of the proposal are available through the unit housing the concentration.

At the conclusion of the public defense, the graduate dissertation committee will meet in closed session, with and/or without the student, regarding approval of the proposed dissertation topic. The committee may approve subject to revisions, delay the decision, or fail to approve the proposal. The Office of Graduate Studies in Business is notified by the committee chairman of the committee's decision. Upon unanimous approval of the dissertation proposal by the members of the graduate dissertation committee and the approval by the director of Graduate Studies in Business, the student is admitted to candidacy for the doctoral degree.

Dissertation and Final Defense

The dissertation is required of all candidates for the doctorate and must show mastery of the techniques of research and a distinct contribution to the field under investigation and study. The dissertation must conform to the regulations set by the Graduate Council as specified in the manual *Standards* for *Preparing Dissertations and Theses*. This manual is available on-line at http://library.msstate.edu/thesis/index.asp (http://library.msstate.edu/thesis/).

The final defense of the dissertation is an oral examination. The examination is scheduled by the chairman of the graduate dissertation committee through the Office of Graduate Studies in Business and is administered by the student's graduate dissertation committee. The student must be enrolled during the semester in which the examination is administered. The request to schedule the final defense must be made at least two weeks prior to the anticipated date of the examination. The examination will not be scheduled sconer than two weeks after a copy of the final manuscript has been distributed to all members of the graduate dissertation committee and the unit within which the concentration field is housed. To qualify for graduate academic calendar of this publication. The final defense of the dissertation is open to all interested parties and copies of the manuscript are available through the unit housing the concentration. At the conclusion of the public defense, the graduate dissertation committee will meet in closed session, with and/or without the student, regarding the results of the final defense of the dissertation. The committee may pass subject to revisions, delay the decision, or fail the student on the final defense. A student may pass the examination with no more than one failing or dissenting vote from a member of the graduate dissertation committee. The results of the final defense are transmitted to the Office of Graduate Studies in Business by the chairman of the graduate dissertation committee at the conclusion of the meeting. To qualify for graduation in a given semester, the Office of Graduate Studies in Business by the chairman of the graduate dissertation committee at the conclusion of the meeting. To qualify for graduation in a given semester, the Office of Graduate Studies in Business by the chairman of the graduate dissertation committee at the conclusion of the meeting. To qualify for graduation in a given semester, the Office of Graduate Studies in Business by the chairman of the gradua

Business must report the results of the final defense to the Graduate School at least by the "Last day for submitting examination results" as published in the graduate academic calendar of this publication.

A student who fails the final examination cannot apply for reexamination until a period of six months has elapsed from the date of the original examination. Two failures on the final examination will result in the student's being terminated from further consideration as a doctoral candidate.

For further information on dissertation and defense please refer to the "Doctor of Philosophy" section in this publication.

Finance and Economics

Department Head and Graduate Coordinator: Dr. Kathleen Thomas Area Advisor, Ph.D. concentration in Finance: Dr. Brandon Cline 312 McCool Hall Box 9580 Mississippi State, MS 39762 Telephone: 662-325-2342 Finance Area Advisor's Email: brandon.cline@msstate.edu (http://catalog.msstate.eduemailto:claudia.williamson@msstate.edu)

The Department of Finance and Economics offers the following graduate degrees through the College of Business:

- · Master of Arts in Economics
- · Doctor of Philosophy in Business Administration with a concentration in Finance

The department also participates in the interdisciplinary Master of Business Administration (MBA) program. See the College of Business Administration section of this publication for MBA and PhD information.

Master of Arts in Economics

Because the Master of Arts (M.A.) degree in Economics is normally an incidental degree on the way to a doctoral degree, the Department of Finance and Economics does not typically offer a terminal M.A. degree. In rare circumstances, the Graduate Coordinator may approve an application for a terminal M.A. degree. However, in almost all cases, graduate students will earn the M.A. on the way to receiving their doctoral degree or if they leave the Ph.D. program after completing all necessary requirements for the M.A.

Master of Arts in Economics - Thesis

Total Hours		30
EC 8000	Thesis Research/ Thesis in Economics	6
EC XXXX	Graduate-level coursework	15
Additional Coursework		
EC 8173	Macroeconomics I	3
EC 8163	Microeconomics I	3
EC 8133	Econometrics I	3
Core Courses		

In the rare case where the Graduate Coordinator approves an application for a terminal M.A. degree, the M.A. student will prepare a program of study with consultation from the graduate advisor and a program committee. The student may choose to take field courses from a wide variety of areas within economics.

Master of Arts in Economics - Non-Thesis

Core Courses		
EC 8133	Econometrics I	3
EC 8163	Microeconomics I	3
EC 8173	Macroeconomics I	3
Additional Coursework		
EC XXXX	Graduate-level coursework	21
Total Hours		30

Total Hours

Cara Cauraaa

In the rare case where the Graduate Coordinator approves an application for a terminal M.A. degree, the M.A. student will prepare a program of study with consultation from the graduate advisor and a program committee. The student may choose to take field courses from a wide variety of areas within economics.

Doctor of Philosophy in Business Administration, Finance Concentration

).

See the Business Administration - Ph.D. Programs of Study (p.

Management and Information Systems

Department Head: Dr. Laura Marler Area Advisors: M.S.I.S.: Dr. Robert Otondo Ph.D. concentration in Management: Dr. Benjamin McLarty and Dr. Mel Fugate Ph.D. concentration in Information Systems: Dr. Kent Marett

320 McCool Hall Box 9581 Mississippi State, MS 39762 Telephone: 662-325-3928 E-mail: gsb@business.msstate.edu

The Department of Management and Information Systems offers the following graduate programs:

- Master of Science in Information Systems (M.S.I.S.)
- Doctor of Philosophy in Business Administration with a concentration in Information Systems (Ph.D.)
- Doctor of Philosophy in Business Administration with a concentration in Management (Ph.D.)

The department also participates in the interdisciplinary Master of Business Administration (M.B.A.) program. See the Business Administration section of this publication for M.B.A. and Ph.D. information.

Master of Science in Information Systems

The mission of the Master of Science in Information Systems program at MSU is to prepare students to become information systems professionals who can successfully develop, acquire, and integrate information technology across levels and functions of a firm. The M.S.I.S. program prepares students by equipping them with critical technical skills; strengthening communication skills; enhancing the students' understanding of business functions/operations; developing professional attitudes; and enhancing the students' understanding of the link between an organization and information technology.

Admission Criteria

The applicant for the Master of Science in Information Systems (M.S.I.S.) program should hold a bachelor's degree from a fully recognized four-year institution of higher learning that enjoys unconditional accreditation by appropriate regional accrediting agencies. The applicant must meet all general requirements stated in this publication.

The applicant for the M.S.I.S. program must have a grade point average of 3.00/4.00 or higher over the last 60 hours of undergraduate coursework. Admission to the M.S.I.S. program also requires a competitive score on the Graduate Management Admission Test (GMAT) or the Graduate Record Examination (GRE). While either GMAT or GRE scores are accepted, the GMAT is strongly preferred.

When a student is deficient in one of the criteria cited, the student's application may still be considered based on the strength of other materials contained in the student's application. However, reasonable minimum levels must be achieved in both the applicant's GPA and GMAT/GRE scores.

Our full-time, on-campus, and distance M.S.I.S programs accept applications for the fall, spring, and summer semesters. The deadlines for submitting all application materials, including GMAT or GRE scores, are the same general deadlines used by The Graduate School. These deadlines can be found in the Admissions Requirements (http://catalog.msstate.edu/graduate/admissions-information/admission-requirements/) section of the Graduate Catalog.

International Applicants

An international applicant not holding a prior degree from a U.S. institution must submit an indicator of English proficiency including one of the following: (1) TOEFL score of 575 PBT (84 iBT) or (2) IELTS score of 7.0.

Transfer of Credit

Up to 6 hours of graduate transfer credits may be accepted toward fulfilling the requirements for the M.S.I.S. degree, provided the credits have been earned in a recognized (regionally accredited) institution and are considered applicable to the student's graduate program. These credits are considered part of the student's program and must adhere to the eight-year time limit restriction. Grades of C or below are not acceptable, nor are extension credits from other institutions.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

In addition, students must complete the foundation courses listed below (or have equivalent undergraduate credit) with a grade of C or better. The College of Business offers survey courses in place of some undergraduate prerequisites. These are especially designed for non-business undergraduates and may be taken before or during the M.S.I.S. program. For each row in the table below, students without equivalent undergraduate credit must choose either the course from Column A or–if available–alternative course(s) from Column B.

A	В
ACC 2203 Survey of Accounting	ACC 2013 Principles of Financial Accounting or ACC 2023 Principles of Managerial Accounting
BQA 8443 Statistical Analysis for Business Decision Making*	BQA 2113 Business Statistical Methods I & BQA 3123 Business Statistical Methods II
	MGT 3113 Principles of Management
	EC 2113 Principles of Macroeconomics or EC 2123 Principles of Microeconomics
FIN 3123 Financial Management	
MKT 3013 Principles of Marketing	
3 hours of programming courses**	

*Offered only through the distance program.

**Examples of prerequisite classes that would fit the programming requirement include the following. Note that these are just examples. Any 3 hours of programming will be allowed.

Examples of Prerequisite Courses Fulfilling Programming Requirement

BIS 1523	Web Development I	3
BIS 2523	Web Development II	3
BIS 3523	Advanced Languages I	3
CSE 1233	Computer Programming with C	3
CSE 1273	Computer Programming with Java	3
CSE 1284	Introduction to Computer Programming	4

Academic Performance

A grade of C or better is required on all undergraduate prerequisite courses. A student in any graduate degree program in the College of Business may not continue in the program with grades below B in more than 6 hours of core graduate coursework, regardless of the overall average. Thus, any program is terminated automatically when a seventh credit hour below B is recorded on core graduate coursework. In addition, the normal MSU requirements for satisfactory progress in a graduate program will be applied.

Minor in Information Systems

A graduate minor in information systems is offered to both business and non-business graduate students. Students interested in business and technology may wish to pursue this minor. Typical career paths range from programmer to systems analyst, database administrator, network administration, IT manager, and chief information officer.

Accelerated Program

Highly qualified undergraduate BIS majors are encouraged to apply to the BIS Accelerated Program. This program permits students to earn up to 9 hours of graduate-level courses and earn both undergraduate and graduate credit simultaneously. Students must consult with a graduate advisor to ensure graduate credit could be applied to a program of study for the graduate degree. Application to this program may be made as early as the end of the junior year (i.e., after completion of 90 or more hours of graded undergraduate courses). Students interested in applying should see Accelerated Programs (p. 48) for information and contact the department's M.S.I.S. Area Advisor, Dr. Robert Otondo, at rotondo@business.msstate.edu for more details.

Master of Science in Information Systems

Major	Required	Courses
-------	----------	---------

Total Hours		30
15 hours of free electives (6000-level or higher) for students with 6 or more hours of programming coursework	
OR		
12 hours of free electives (Courses	6000-level or higher) for students who must take 3 hours of programming courses to meet Major Required	
Free Electives		12-15
3 hours of programming re- requirement)	quired for students with only 3 hours of previous programming coursework (per MSIS foundation	
Programming Requirement		3-0
BIS 8753	Information Systems Collaborative Project ¹	3
BIS 8413	Data Analytics	3
BIS 8313	Advanced Database Design Administration	3
BIS 8213	Secure Systems Analysis and Design	3
BIS 8113	Management Information Technology and Systems	3

1 Capstone course for the M.S.I.S. program and constitutes the comprehensive exam. A grade of B or better in this course is required for graduation.

No more than 6 hours may be below the 8000 level.

Doctor of Philosophy in Business Administration with Information Systems Concentration

See the Business Administration - Ph.D. Programs of Study (p. 151).

Doctor of Philosophy in Business Administration with Management Concentration

See the Business Administration - Ph.D. Programs of Study (p. 151).

Graduate Minor in Information Systems

Total Hours		9
BIS 8613	MIS Administration	
BIS 8513	Business Telecommunications	
BIS 8413	Data Analytics	
BIS 8313	Advanced Database Design Administration	
BIS 8213	Secure Systems Analysis and Design	
Select two of the following:		6
BIS 6533	Decision Support Systems	
BIS 6523	Business Programming with COBOL	
BIS 6513	Microcomputers and Networks	
BIS 6113	Business Information Systems Security Management	
Select one of the following: 1		3

Total Hours

1

NOTE: "Students who have already taken a course for credit at the 4000 level are not allowed to enroll in the same course for credit at the 6000 level without explicit permission of the instructor and graduate coordinator of the department offering the course, and the dean of the Graduate School.") MSU Academic Operating Policy and Procedure 11.04 (Revised March 2014), Item #5; available at http:// www.policies.msstate.edu/policypdfs/1104.pdf)

Minimum GPA of 3.00 is required.

The master's student selecting the minor must name a minor committee professor from the Department of Management and Information Systems to his/her graduate committee. Any student interested in a minor in information systems should contact the Department of Management and Information Systems at (662) 325-3928.

Marketing, Quantitative Analysis, and Business Law

Department Head: Dr. Melissa Moore Area Advisor: Dr. Robert Moore, Ph.D. concentration in Marketing 324 McCool Hall Box 9582 Mississippi State, MS 39762 Telephone: 662-325-3163 E-mail: mqabl@business.msstate.edu

The Department of Marketing, Quantitative Analysis, and Business Law cooperates in interdisciplinary programs leading to the Master of Business Administration degree (M.B.A.) (p. 157) as well as the Doctor of Philosophy (Ph.D.) in Business Administration (p. 148) with a concentration in Marketing. See the Business Administration section of this publication for descriptions of these programs.

Master of Business Administration

Director of Graduate Studies in Business: Dr. Nicole Ponder

200 McCool Hall Box 5288 Mississippi State, MS 39762 Telephone: 662-325-1891 E-mail: gsb@business.msstate.edu Websites: http://www.business.msstate.edu/gsb/mba.php (http://www.distance.msstate.edu/mba/) http://www.distance.msstate.edu/mba

The College of Business offers the general M.B.A. degree as well as the M.B.A. with a concentration in Project Management. Both of the programs are offered on the Starkville campus as well as online. The M.B.A. program prepares students for successful careers in the business world by providing

- 1. in-depth knowledge of the business world including awareness of current business trends and challenges posed by the rapidly changing global economy and understanding of the ethical and social responsibilities of business;
- 2. enhanced skills in speaking and writing effectively, analyzing data and synthesizing information, working effectively with individuals and teams, utilizing technologies to support and communicate decisions, and making and recognizing well-reasoned decisions;
- 3. the ability to integrate acquired business knowledge in order to present and defend appropriate solutions to challenging business dilemmas and demonstrate effective leadership skills in a business setting.

Admission

An applicant for the M.B.A. program should hold a bachelor's degree from a fully recognized four-year institution of higher learning that enjoys unconditional accreditation by appropriate regional accrediting agencies. All general requirements stated in this publication must be met.

An applicant for the M.B.A. program must take the Graduate Management Admission Test (GMAT) or the Graduate Record Examination (GRE). Admission to the M.B.A. program requires a competitive GPA and a competitive GMAT or GRE score administered within the last five years.

In addition, a student must submit a statement of purpose, transcripts, three letters of recommendation, and a current résumé. The College of Business does not allow unclassified graduate students to take courses. Students must be accepted to a degree program prior to registering for courses.

Applicants will not be permitted to take graduate-level MBA courses prior to official admission to the program. Applicants may choose to take undergraduate prerequisite courses prior to official admission into the MBA program; however, doing so in no way guarantees admission to the MBA program.

Our full-time, on-campus program accepts applications for the summer semester **only**. The deadline for submitting all application materials, including the GMAT, is March 1.

Our part-time, distance program accepts applications for fall, spring, and summer.

International Applicants

An international applicant not holding a degree from a U.S. institution must submit an indicator of English proficiency including one of the following: a TOEFL score or an IELTS score, administered within the last two years.

Transfer of Credit

Up to 6 hours of graduate transfer credits may be accepted toward fulfilling the requirements for the master's degree, provided the credits have been earned in a recognized (regionally accredited) institution and are consider applicable to the student's graduate program. These credits are considered

part of the student's program and must adhere to the eight-year time limit restriction. Grades of C or below are not acceptable, nor are extension credits from other institutions.

Academic Performance

A grade of B or better is required on all undergraduate prerequisite courses. A student must also achieve a grade of B or better in MGT 8123. In addition, the MSU requirements for satisfactory progress in a graduate program will be applied; these requirements are found at /graduate/academic-policies/academic-requirements/ (p. 44).

Master of Business Administration

Foundation

Cara Cauraaa

Foundation coursework ¹		
MGT 8113	Leadership Skills for Managerial Behavior	3
MKT 8153	Strategic Marketing Management	3
FIN 8113	Corporate Finance	3
ACC 8213	Financial Statement and Management Accounting Report Analysis for Decision Making	3
MGT 8123	Strategic Business Consulting ²	3
MKT 8213	Supply Chain and Operations Management	3
MGT 8103	Strategic and Entrepreneurial Management	3
BQA 6423	Business Decision Analysis	3
Electives		6
Total Hours		30

¹ Students are required to complete foundation courses or the equivalent prerequisite courses which may be satisfied in part or total by prior undergraduate or graduate preparation in business. Please contact the M.B.A. office for specific foundation course information.

² Capstone course for the M.B.A. program and constitutes the M.B.A. comprehensive examination. A grade of B or better in this course is required for passage of the M.B.A. comprehensive examination.

Master of Business Administration with Project Management Concentration

Total Hours		33
IE 6573	Process Improvement Engineering	3
IE 6533	Project Management	3
or IE 6333	Production Control Systems I	
IE 8583	Enterprise Systems Engineering	3
Concentration courses:		
BQA 6423	Business Decision Analysis	3
MGT 8103	Strategic and Entrepreneurial Management	3
MKT 8213	Supply Chain and Operations Management	3
MGT 8123	Strategic Business Consulting	3
ACC 8213	Financial Statement and Management Accounting Report Analysis for Decision Making	3
FIN 8113	Corporate Finance	3
MKT 8153	Strategic Marketing Management	3
MGT 8113	Leadership Skills for Managerial Behavior	3
Core Courses		

The project management concentration in the M.B.A. degree program is an interdisciplinary program between the College of Business and the College of Engineering.

Graduate Minor in Business Administration

A minor may be obtained by taking 9 hours of coursework in an approved discipline.

Graduate Minor in Business Analytics

The College of Business offers a minor in Business Analytics to help MSU students prepare for careers in analytics across business disciplines. This minor offers interdisciplinary coursework in information systems, business quantitative analysis, and accounting. Each course i the minor goes beyond traditional business courses by focusing aspects of the learning on important nuances associated with a successful analytics career. The graduate

business analytics minor is available to any MSU student, regardless of major. The Minor in Business Analytics is primarily designed to complement the Master of Business Administration, Master of Science in Information Systems, Master of Public Accountancy, and master of Taxation degrees.

The minor requires students to complete 9 credit hours, is comprised of 6 required credit hours, and 3 elective credit hours, listed below.*

Students interested in the Data Analytics Minor should contact the COB's Graduate Studies in Business office in 200 McCool Hall.

Required:		6
BIS 8413	Data Analytics	
BQA 6413	Business Forecasting and Predictive Analytics	
Choose one of the following:		3
ACC 8043	Fraud Examination and Data Analysis	
BIS 8313	Advanced Database Design Administration	
EC 6643	Economic Forecasting and Analysis	
Total Hours		9

*Some of these courses require meeting prerequisites, which would increase the number of credit hours required.

College of Education

Dean: Dr. Teresa Jayroe Associate Dean (Research): Dr. Dan Gadke Associate Dean (Academics): Dr. Kimberly Hall Assistant Dean: Dr. Mitzy Johnson Administrative Director and Head of Meridian Campus: Dr. Terry Cruse Head of Education Division, Meridian Campus: Dr. Kim Hall 309 Allen Hall Box 9710 Mississippi State, MS 39762 Telephone: 662-325-3717 Fax: 662-325-8784 Website: http://www.educ.msstate.edu (http://www.educ.msstate.edu/)

Degree Programs

Department	Degree and Major	Concentration	Thesis	Non-Thesis	Starkville	Meridian	Distance
Counseling, Educational Psychology, and Foundations	Master of Science - Counselor Education	Clinical Mental Health		Х	Х	Х	
Counseling, Educational Psychology, and Foundations	Master of Science - Counselor Education	Rehabilitation		X	X	X	
Counseling, Educational Psychology, and Foundations	Master of Science - Counselor Education	School Counseling		X	X	x	
Counseling, Educational Psychology, and Foundations	Master of Science - Educational Psychology	General Educational Psychology	Х	Х	х		
Counseling, Educational Psychology, and Foundations	Master of Science - Educational Psychology	Psychometry		х	Х		

Counseling, Educational Psychology, and Foundations	Educational Specialist - Education	Counselor Education		Х	X	Х	
Counseling, Educational Psychology, and Foundations	Educational Specialist - Education	School Psychology		Х	X		
Counseling, Educational Psychology, and Foundations	Doctor of Philosophy - Counselor Education				X		
Counseling, Educational Psychology, and Foundations	Doctor of Philosophy - Counseling/ School Counseling				X		
Counseling, Educational Psychology, and Foundations	Doctor of Philosophy - Educational Psychology	General Educational Psychology			X		
Counseling. Educational Psychology, and Foundations	Doctor of Philosophy - Educational Psychology	School Psychology			X		
Curriculum, Instruction, and Special Education	Master of Arts in Teaching - Middle Level Alternative Route (ADMISSION CURRENTLY SUSPENDED.)			X			X
Curriculum, Instruction, and Special Education	Master of Arts in Teaching - Secondary Teacher Alternate Route			Х		х	X
Curriculum, Instruction, and Special Education	Master of Arts in Teaching - Special Education			Х			Х
Curriculum, Instruction, and Special Education	Educational Specialist - Education	Elementary Education	Х	Х	Х	Х	
Curriculum, Instruction, and Special Education	Master of Science- Elementary Education			X	X	X	
Curriculum, Instruction, and Special Education	Master of Science - Secondary Education			Х	Х		Х
Curriculum, Instruction, and Special Education	Master of Science - Special Education			Х	Х		
Curriculum, Instruction, and Special Education	Educational Specialist - Education	Secondary Education	Х	Х	Х		
Curriculum, Instruction, and Special Education	Educational Specialist - Education	Special Education	Х	Х	Х		

Curriculum, Instruction, and Special Education	Doctor of Philosophy - Curriculum & Instruction	Elementary Education			Х		
Curriculum, Instruction, and Special Education	Doctor of Philosophy - Curriculum & Instruction	Secondary Education			X		
Curriculum, Instruction, and Special Education	Doctor of Philosophy - Curriculum & Instruction	Special Education			х		
Educational Leadership	Master of Arts in Teaching - Community College Education			х	х	x	х
Educational Leadership	Master of Science - Educational Leadership	School Administration		Х	Х	Х	Х
Educational Leadership	Master of Science - Educational Leadership	Teacher Leadership		Х	Х	Х	
Educational Leadership	Master of Science - Educational Leadership	Student Affairs & Higher Education		Х	Х		
Educational Leadership	Master of Science - Workforce Education Leadership			X			X
Educational Leadership	Educational Specialist - Education	School Administration		Х	Х	Х	
Educational Leadership	Educational Specialist - Education	Teacher Leadership		Х	Х	Х	
Educational Leadership	Doctor of Philosophy - Community College Leadership						X
Educational Leadership	Doctor of Philosophy - Educational Leadership	Higher Education Leadership			X		
Educational Leadership	Doctor of Philosophy - Educational Leadership	P-12 School Leadership			X		
Instructional Systems and Workforce Development	Master of Science - Instructional Technology	Distance Education	х	х	Х		х
Instructional Systems and Workforce Development	Master of Science - Instructional Technology	Instructional Design	Х	Х	Х		Х

162 Graduate Catalog

Instructional Systems and Workforce Development	Master of Science - Instructional Technology	Multimedia	Х	Х	Х	Х
Instructional Systems and Workforce Development	Educational Specialist - Education	Technology	Х	X	X	
Instructional Systems and Workforce Development	Doctor of Philosophy - Instructional Systems & Workforce Development				x	X
Instructional Systems and Workforce Development	Veterans' Certificate					Х
Kinesiology	Master of Science - Kinesiology	Exercise Physiology	Х	Х	Х	
Kinesiology	Master of Science - Kinesiology	Sport Administration	Х	Х	Х	
Kinesiology	Master of Science - Kinesiology	Sport Pedagogy	Х	Х	Х	
Kinesiology	Doctor of Philosophy - Kinesiology	Exercise Science			X	
Kinesiology	Doctor of Philosophy - Kinesiology	Sport Studies			Х	
Music	Master of Music Education - Music Education	Choral Music		Х	Х	
Music	Master of Music Education - Music Education	Elementary Music		Х	X	
Music	Master of Music Education - Music Education	Instrumental Music		Х	X	

Counseling, Educational Psychology, and Foundations

Department Head: Dr. Daniel Gadke Graduate Coordinator (COE): Dr. Charles Palmer Graduate Coordinator (EPY): Dr. Daniel Gadke Meridian Campus Division: Dr. Jeffrey Leffler 508 Allen Hall Box 9727 Mississippi State, MS 39762 Telephone: 662-325-3426 E-mail (Starkville): dgadke@colled.msstate.edu E-mail (Meridian): jleffler@meridian.msstate.edu Website: (dgadke@colled.msstate.edu http://www.cep.msstate.edu/)

Department Programs in Counseling

The Department of Counseling, Educational Psychology, and Foundations offers graduate programs in clinical mental health counseling, rehabilitation counseling, and school counseling.

The Master of Science degree programs in clinical mental health counseling, rehabilitation counseling, and school counseling are planned programs consisting of 60 semester hours. The concentration in rehabilitation counseling prepares graduates for certification as a Certified Rehabilitation Counselor in all fifty states, as well as a Licensed Professional Counselor (LPC) in the state of Mississippi.

Counseling doctoral applications are due February 1. Applications for master's and educational specialist programs are due March 1. Applications will be considered until full enrollment is attained. Applications may be reviewed at other times for general educational psychology. For further information, write to the Graduate Coordinator.

The department prepares students for careers as school counselors, student affairs professionals in higher education, and as counselors in rehabilitation, college counseling centers, and other mental health community agencies. Teaching and research assistantships are available.

Counseling Program Accreditation

The M.S. programs in Counseling are Clinical Mental Health, Rehabilitation, and School and are accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

The doctoral level Counselor Education and Supervision program is also accredited by CACREP. The school counseling program is also accredited by the National Council for Accreditation of Teacher Education (NCATE).

Graduate study in counseling offers preparation in counseling at three degree levels.

- 1. The Master of Science (M.S.) degree in Counselor Education with concentrations in clinical mental health counseling; rehabilitation counseling; student affairs; college counseling; and school counseling
- 2. The Educational Specialist (Ed.S.) degree in Education with concentrations in counseling and school psychology provide advanced coursework sought by students seeking licensure or higher levels of certification
- 3. The Doctor of Philosophy (Ph.D.) degree in Counselor Education and Supervision

Admission Criteria for Counseling Programs

Applications for master's and educational specialist programs are due by March 1. Counseling doctoral applications are due by February 1. Applications will be considered until full enrollment is attained. Applications may be reviewed at other times for general educational psychology. For further information, write to the Graduate Coordinator.

A student accepted into the M.S. degree program in counseling must hold a baccalaureate degree and a minimum GPA of 3.00 on the last 60 hours of undergraduate work. Satisfactory Graduate Record Examination (GRE) scores (verbal, quantitative, and analytic writing) taken within the past five years must be submitted.

A student accepted into the Ed.S. degree program with a concentration in counseling must hold a master's degree in counseling or related field (as determined by program concentration), a minimum GPA of 3.30 on all graduate work, and satisfactory GRE scores (verbal, quantitative, and analytical writing).

A student accepted into a Ph.D. program must hold a master's degree from a CACREP- or CORE-accredited program in counseling or meet CACREP curriculum requirements as part of the doctoral program of study. Satisfactory results of the Graduate record Examination (GRE) taken with the past five years must be submitted.

Applicants for all counseling degree programs must also produce all other application requirements detailed by the Graduate School (e.g., letters of recommendation, statement of purpose).

Students admitted to a counseling program must maintain continuous enrollment. A student who is not enrolled or is inactive for one calendar year must be re-screened for readmission into the department prior to re-enrollment in the University (see the Readmission section under General Requirements for Admission in this publication).

Provisional Admission for Counseling Programs

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionallyadmitted student is eligible for a change to regular admission status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). These graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Satisfactory Academic Performance

In addition to the requirements of Mississippi State University for graduate students, a student in any of the counseling programs is required to earn a grade of B or better in each skills course before being permitted to progress to the next course in the sequence. These "gatekeeper" courses include:

COE 8023	Counseling Theory	3
COE 8013	Counseling Skills Development	3
COE 8053	Practicum	3
COE 8150	Academic School Year Field Experience Practicum	1-9
COE 8730	Internship	6

Unsatisfactory performance in graduate-level coursework is defined as a grade of U, D, or F in any course and/or more than two grades below a B after admission to the program. The grade of C, while not considered a failing grade, is seen as indicative of *minimal* academic performance. Only two grades of C are allowed during a student's work on a degree. Unsatisfactory performance also includes failing the master's comprehensive examination twice, failing the written doctoral preliminary/comprehensive examination twice, failing the oral doctoral preliminary/comprehensive examination twice, or failing the doctoral dissertation defense twice. Any of these or a combination of these failures will result in termination of the student's graduate program in counseling.

Department Programs in Educational Psychology

The department prepares students for careers as behavioral science researchers and evaluators, school psychologists, and faculty positions in behavioral science of school psychology training programs. Teacher, service, and research assistantships are available.

Educational Psychology Program Accreditations

The school psychology program degrees (Ed.S., Ph.D.) are approved by the National Association of School Psychologists (NASP). The Ph.D. degree is accredited by the American Psychological Association (APA).

There are two concentrations in Educational Psychology, general educational psychology and school psychology, with the following degree options:

- 1. The Master of Science (M.S.) degree with concentrations in general educational psychology, school psychometry (non-terminal), or applied behavior analysis.
- 2. The Educational Specialist (Ed.S.) degree with a major in Education and concentration in school psychology. The Ed.S. degree is the minimum requirement to work as a school psychologist.
- 3. Doctor of Philosophy (Ph.D.) degree with concentrations in general educational psychology and school psychology.

General Educational Psychology Concentration

The concentration in General Educational Psychology is designed to prepare an individual for employment in research, teaching, and service settings. The four-year doctoral program involves coursework in psychological foundations, learning, motivational processes as well as research, statistics, and measurement.

The M.S. in Educational Psychology with a concentration in General Educational Psychology is a planned program consisting of 35 hours.

The Ph.D. degree in Educational Psychology with a concentration in General Educational Psychology requires a minimum of 91 hours of coursework beyond the baccalaureate degree.

Applications are due March 1 each year. For further information, please contact the Graduate Coordinator.

School Psychology/Psychometry Concentration

The School Psychology/Psychometry concentrations are based on a scientist-practitioner model with a behavioral focus. In addition to training assessment, training is provided in consultation, academic interventions, behavior assessment, system-wide and individualized positive behavior interventions and supports, applied behavior analysis, and single-case research methodology so students in the program can identify, prevent, and remedy students' academic, behavioral, and psychosocial problems.

M.S. in Educational Psychology with Concentration in School Psychometry

The M.S. in Educational Psychology with a concentration in School Psychometry is a non-terminal degree designed to begin in the fall semester and be completed in three years. The concentration in School Psychometry leads to AA licensure from the Mississippi Department of Education. The degree is currently a 33-hour program with a 300-hour practicum. All students in this program must successfully pass the master's comprehensive examination. Students in the M.S. program are expected to continue their education at MSU in pursuit of either the educational specialist or doctoral degree.

M.S. in Educational Psychology with Concentration in Applied Behavior Analysis

The M.S. in Educational Psychology with a concentration in Applied Behavior Analysis (ABA) is a terminal degree designed to begin in the fall semester and be completed in two years. The concentration in ABA leads to certification as a Board Certified Behavior Analyst (BCBA). The degree program is currently a 40-hour program. All students in the program must pass a master's comprehensive examination.

Applications are due March 1 each year. For further information, contact the Graduate Coordinator.

Ed.S. in Education with Concentration in School Psychology

The Ed.S. program in Education with a concentration in School Psychology is approved by the National Association of School Psychologists (NASP). Students accepted into the Ed.S. program in School Psychology should either hold a Master's degree in Psychometry or earn a Master's degree in Psychometry or earn a Master's degree in Psychometry en route to the completion of the Ed.S. degree. For students entering the program with only an undergraduate degree, the Ed.S. concentration in School Psychology is designed to be completed in four years. A minimum of 82 semester hours beyond the baccalaureate degree is necessary to earn an educational specialist degree from the Department of Counseling, Educational Psychology and Foundations. The Ed.S. School Psychology students must also pass three examinations including the PRAXIS II in School Psychology (i.e., students must obtain a passing score as outlined by the National Association of School Psychologists), Master's written comprehensive exam, and oral comprehensive exam. Students are also required to complete a 1200-hour internship in the P-12 school setting.

The deadline for applications to the Ed.S. program is January 15. For further information, contact the Graduate Coordinator.

Ph.D. in Educational Psychology with Concentration in School Psychology

The Ph.D. program in Educational Psychology with a concentration in School Psychology is accredited by the National Association of School Psychologists (NASP) and the American Psychological Association (APA). Students accepted into the Ph.D. program in School Psychology should either hold a master's degree in Psychometry (or related field) or will obtain a master's degree in School Psychometry or master's degree in a related field within the first 3 years in the program. For students entering the program with only an undergraduate degree, the Ph.D. concentration in School Psychology is designed to be completed in five years. A minimum of 120 semester hours beyond the baccalaureate degree is necessary to earn a doctorate from the Department of Counseling and Educational Psychology. For students entering the program with an advanced degree, the Ph.D. program with a concentration in School Psychology will require a minimum of three years of formal coursework. In addition, doctoral students in the School Psychology concentration are required to present a minimum of one refereed presentation at a regional or national conference, submit one manuscript to a refereed journal, or seek to publish one book chapter or formal test review. Doctoral School Psychology students must also pass three examinations including the PRAXIS II in School Psychology (i.e., students must obtain a passing score as outlined by the National Association of School Psychologists), doctoral written comprehensive exam, and doctoral oral comprehensive exam. Also, students are required to complete a 2000-hour internship (APA-accredited preferred).

The deadline for applications to the Ph.D. program is January 15. For further information, please contact the Graduate Coordinator.

Admission Criteria for Educational Psychology Major

The following are admission criteria for admission to the Educational Psychology degree program (additional requirements may be required).

- 1. An overall GPA on the bachelor's degree of at least 2.75
- 2. Recent Graduate Record Examination (GRE) verbal, quantitative, and analytical writing scores
- 3. External recommendations
- 4. An interview is generally required

Students admitted to the Educational Psychology graduate degree program must maintain continuous enrollment. A student who is not enrolled or is inactive for one calendar year must be re-screened for readmission to the department prior to re-enrollment in the University.

Prerequisite Undergraduate Courses for School Psychology and Psychometry Concentrations

Students should have the following undergraduate courses before entering the concentration in either School Psychology or Psychometry:

- 1. Psychological basis of behavior (e.g., Introductory Psychology)
- 2. Developmental psychology (e.g., Child Development)
- 3. Education, learning, or cognition (e.g., Theories of Learning)

A student who has not met these prerequisite course requirements may enroll in the program and take these undergraduate courses as he/she progresses through the degree program. As students move through the Ed.S. or Ph.D. program with a concentration in School Psychology, they are required to complete the requirements for the M.S. degree in Psychometry and obtain an AA license in Psychometry from the Mississippi State Department of Education.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionallyadmitted student is eligible for a change to regular admission status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). These graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Satisfactory Academic Performance

A student in any of the educational or school psychology programs is required to earn a grade of B or better in core courses before he or she is permitted to progress to the next course in the sequence. Unsatisfactory performance in graduate level coursework is defined as a grade of U, D, or F in any course and/or more than two grades below a B after admission to the program. Unsatisfactory performance also includes failing the Master's comprehensive examination twice, failing the written preliminary/comprehensive examination twice, failing the doctoral dissertation defense twice. Any of these or combination of these failures will result in termination of the student's graduate program in either the general educational psychology or school psychology concentration.

Graduate Degree Requirements

Requirements for each counseling-related major and major/concentration degree program offered by the department are listed below.

Master of Science in Counselor Education with Clinical Mental Health Counseling Concentration

Prerequisites and Core Courses

Total Hours		60
Approved electives		12
COE 8803	Crisis Response in Counseling	3
or COE 8783	Counseling the Chemically Dependent Family	
COE 8773	Counseling the Chemically Dependent Client	3
COE 8703	Principles of Clinical Mental Health Counseling	3
COE 8633	Psychosocial Rehabilitation	3
COE 8303	Family Counseling Theory	3
COE 8203	Placement and Career Development Counseling	3
COE 8073	Cultural Foundations in Counseling	3
COE 6903	Developmental Counseling and Mental Health	3
Concentration Requirements		
COE 8730/8740	Internship (requires a 600-clock hour internship)	6
COE 8063	Research Techniques for Counselors	3
COE 8053/8150	Practicum (requires a 100/600-clock hour practicum)	3
COE 8043	Group Techniques and Procedures	3
COE 8023	Counseling Theory	3
COE 8013	Counseling Skills Development	3
EPY 8263	Psychological Testing in Educational and Related Settings	3

Master of Science in Counselor Education with Rehabilitation Counseling Concentration

Prerequisites and Core Courses		
EPY 8263	Psychological Testing in Educational and Related Settings	3
COE 8013	Counseling Skills Development	3
COE 8023	Counseling Theory	3
COE 8043	Group Techniques and Procedures	3
COE 8053/8150	Practicum (requires a 100/600-clock hour practicum)	3
COE 8063	Research Techniques for Counselors	3
COE 8730/8740	Internship (requires a 600-clock hour internship)	6
Concentration Requirements		
COE 6373	Vocational Assessment of Special Needs Persons	3

42

COE 8073Cultural Foundations in CounselingCOE 6903Developmental Counseling and Mental HealthCOE 8303Family Counseling TheoryCOE 8633Psychosocial RehabilitationCOE 8703Principles of Clinical Mental Health CounselingCOE 8353Vocational Rehabilitation CounselingCOE 8363Psychological Aspects of DisabilityCOE 8373Medical Aspects of DisabilityCOE 8383Job Placement in RehabilitationApproved electivesFamily Counseling	60
COE 6903Developmental Counseling and Mental HealthCOE 8303Family Counseling TheoryCOE 8633Psychosocial RehabilitationCOE 8703Principles of Clinical Mental Health CounselingCOE 8353Vocational Rehabilitation CounselingCOE 8363Psychological Aspects of DisabilityCOE 8373Medical Aspects of Disability	6
COE 6903Developmental Counseling and Mental HealthCOE 8303Family Counseling TheoryCOE 8633Psychosocial RehabilitationCOE 8703Principles of Clinical Mental Health CounselingCOE 8353Vocational Rehabilitation CounselingCOE 8363Psychological Aspects of Disability	3
COE 6903Developmental Counseling and Mental HealthCOE 8303Family Counseling TheoryCOE 8633Psychosocial RehabilitationCOE 8703Principles of Clinical Mental Health CounselingCOE 8353Vocational Rehabilitation Counseling	3
COE 6903Developmental Counseling and Mental HealthCOE 8303Family Counseling TheoryCOE 8633Psychosocial RehabilitationCOE 8703Principles of Clinical Mental Health Counseling	3
COE 6903Developmental Counseling and Mental HealthCOE 8303Family Counseling TheoryCOE 8633Psychosocial Rehabilitation	3
COE 6903Developmental Counseling and Mental HealthCOE 8303Family Counseling Theory	3
COE 6903 Developmental Counseling and Mental Health	3
	3
COE 8073 Cultural Foundations in Counseling	3
COE 8073 Cultural Foundations in Counseling	3

Master of Science in Counselor Education with School Counseling Concentration

Prerequisites and Core Courses ¹

Total Hours		60
Approved Electives ¹		9
EPY 8253	Child & Adolescent Development & Psychopathology	
EPY 6113	Principles of Behavior Analysis	
COE 8913	Counseling Children	
One of the following:		
COE 8923	Seminar in School Counseling	
COE 8903	School Counseling Services	
Concentration Requirements		9
COE 8740	Academic Year Field Experience Semester II-Internship	
COE 8150	Academic School Year Field Experience Practicum	
OR		
COE 8730	Internship (requires a 600-clock hour internship)	
COE 8053	Practicum (requires a 100/600-clock hour practicum)	
Field Experience:		
COE 8703	Principles of Clinical Mental Health Counseling	
COE 8633	Psychosocial Rehabilitation	
COE 8303	Family Counseling Theory	
COE 8073	Cultural Foundations in Counseling	
COE 6903	Developmental Counseling and Mental Health	
COE 8063	Research Techniques for Counselors	
COE 8043	Group Techniques and Procedures	
COE 8203	Placement and Career Development Counseling	
COE 8023	Counseling Theory	
COE 8013	Counseling Skills Development	
EPY 8263	Psychological Testing in Educational and Related Settings	
EDV 0060	Powehological Tasting in Educational and Polated Sattings	

1

If 45 credit hours of Prerequisite and Core Courses are taken, the student will take 6 hours of electives.

Master of Science in Counselor Education with College Counseling Concentration

Prerequisites and Core Courses

EPY 8263	Psychological Testing in Educational and Related Settings	3
COE 8013	Counseling Skills Development	3
COE 8023	Counseling Theory	3
COE 8043	Group Techniques and Procedures	3
COE 8053/8150	Practicum (requires a 100/600-clock hour practicum)	3
COE 8063	Research Techniques for Counselors	3
COE 8730/8740	Internship (requires a 600-clock hour internship)	9

Concentration Requirements

Total Hours		60
Approved electives		6
HED 8113	Administrative Leadership in Student Affairs & Higher Education	3
COE 8573	College Counseling Services	3
HED 8543	Legal Issues in Student Affairs	3
COE 8533	Literature of Student Affairs	3
HED 8523	Student Development Theory	3
COE 8633	Psychosocial Rehabilitation	3
COE 8303	Family Counseling Theory	3
COE 8073	Cultural Foundations in Counseling	3
COE 8203	Placement and Career Development Counseling	3

Educational Specialist Requirements

In the Ed.S. degree program, all counseling students from a non-CACREP program will be required to complete all coursework that is required by MSU's CACREP master's program in counseling. These courses may be included in the student's Ed.S. program of study. Students from an academic discipline that was not counseling in nature may be required to complete the equivalent of a master's degree as part of the Ed.S. program of study.

For additional information about the Ed.S. degree with an concentration in counseling, see the departmental handbook.

Educational Specialist in Education with Counselor Education Concentration - Thesis

Total Hours		30
Other graduate-level coursework re	equired by concentration area	20
COE 8000	Thesis Research/ Thesis in Counselor Education & Educational Psychology	6
EPY 6214	Educational and Psychological Statistics (or equivalent statistics course)	4

Total Hours

Educational Specialist in Education with Counselor Education Concentration - Non-Thesis

Total Hours		30
Other graduate-level coursework requir	red by concentration area	20
COE 7000	Directed Individual Study in Counselor Education & Educational Psychology	6
EPY 6214	Educational and Psychological Statistics (or equivalent statistics course)	4

Doctor of Philosophy in Counselor Education

COE 8063	Research Techniques for Counselors	3
EPY 8214	Intermediate Educational and Psychological Statistics	4
EPY 9213	Multivariate Analysis in Educational Research	3
EPY 9263	Applied Research Seminar	3
HED 8133	Curriculum and Instruction in Higher Education	3
COE 9013	Counseling Supervision	3
COE 9023	Advanced Counseling Theory	3
COE 9033	Advanced Seminar	3
COE 9043	Advanced Group Work and Systems	3
COE 9053	Advanced Multicultural Counseling	3
COE 9083	Advanced Assessment Techniques for Counseling	3
COE 9000	Dissertation Research/ Dissertation in Counselor Education & Educational Psychology	20
COE 9740	Advanced Doctoral Practicum (300 clock hours)	3
COE 9750	Internship (600 clock hours)	6
Select one of the following:		3
EDF 9443	Single-Subject Research Designs for Education	
EDF 9453	Introduction to Qualitative Research in Education	
HI 8923	Historiography and Historical Method	

Approved electives	3-15
Total Hours	81

Ph.D. students in counseling may also complete 12-18 hours in a minor area which would be considered elective hours. For additional information about the Ph.D. degrees in counseling and in school counseling, see the departmental handbook.

Doctor of Philosophy in Student Counseling and Guidance

Total Hours		81
Approved electives		3-15
HI 8923	Historiography and Historical Method	
EDF 9453	Introduction to Qualitative Research in Education	
EDF 9443	Single-Subject Research Designs for Education	
Select one of the following:		3
COE 9750	Internship (600 clock hours)	6
COE 9740	Advanced Doctoral Practicum (300 clock hours)	3
COE 9000	Dissertation Research/ Dissertation in Counselor Education & Educational Psychology	20
COE 9083	Advanced Assessment Techniques for Counseling	3
COE 9053	Advanced Multicultural Counseling	3
COE 9043	Advanced Group Work and Systems	3
COE 9033	Advanced Seminar	3
COE 9023	Advanced Counseling Theory	3
COE 9013	Counseling Supervision	3
HED 8133	Curriculum and Instruction in Higher Education	3
EPY 9263	Applied Research Seminar	3
EPY 9213	Multivariate Analysis in Educational Research	3
EPY 8214	Intermediate Educational and Psychological Statistics	4
COE 8063	Research Techniques for Counselors	3

Ph.D. students in counseling may also complete 12-18 hours in a minor area which would be considered elective hours. For additional information about the Ph.D. degrees in counseling and in school counseling, see the departmental handbook.

Doctoral Minor in Counseling

Total Hours	12
Counseling course	3
Environmental specialty course	3
Cultural foundations in counseling course	3
Counseling theory course	3

A doctoral student will meet with the intended minor professor for an interview. The minor professor will determine specific courses to be included in the minor program of study.

Master of Science in Educational Psychology with General Educational Psychology Concentration

Major Core

-		
EPY 6214	Educational and Psychological Statistics	4
EPY 8253	Child & Adolescent Development & Psychopathology (or related elective)	3
EPY 8263	Psychological Testing in Educational and Related Settings	3
Concentration Requirements		
EPY 8293	Cognitive and Affective Development	3
EPY 8223	Psychological Foundations of Education	3
EDF 8363	Function and Methods of Research in Education	3
or PSY 8513	Psychological Research	
EPY 6033	Application of Learning Theories	3
EPY 8214	Intermediate Educational and Psychological Statistics	4

EPY 6073	Personal and Motivational Factors in Education	3
Related Electives or Thesis Hours		6
If thesis option is chosen, student must take	6 hours of:	
EPY 8000	Thesis Research/ Thesis in Educational Psychology	
If non-thesis option is chosen, student must	take:	
EDF 9453	Introduction to Qualitative Research in Education	
and ONE course from the list below:		
EPY 6553	Creativity/Innovation	
EPY 8533	Practicum in Teaching Educational Psychology	
EPY 9313	Education Evaluation Methods	
EPY 9723	Seminar in Contemporary Educational/School Psychology	
PSY 8313	Developmental Psychology	
PSY 6983	Psychology of Aging	
PSY 6713	Language and Thought	
PSY 6403	Biological Psychology (Other courses with advisor approval)	

Total Hours

35

Master of Science in Educational Psychology with Psychometry Concentration

Major Core		
EPY 6214	Educational and Psychological Statistics	4
EPY 8263	Psychological Testing in Educational and Related Settings	3
EPY 8253	Child & Adolescent Development & Psychopathology	3
Concentration Requirements		
EPY 6113	Principles of Behavior Analysis	3
EPY 6123	Applications of School Psychology	3
EPY 6133	Data-based Decision Making for Interventions in the School Setting	3
EPY 8493	Social-Emotional and Behavioral Assessment	3
EPY 8690	Supervised Experiences in School Psychology I	3
EPY 8703	School Psychology	3
EPY 8723	Individual Assessment for Educational and Related Settings	3
EPY 8773	Assessment and Interventions for Academic Skills Deficits	3
EPY 8933	Integrated Psycho-Educational Assessment	3
EPY 9703	Contemporary, Legal, Ethical, and Professional Issues in School and Educational Psychology	3
EPY 9713	Advanced Psychological Consulting: Theory and Practice	3
Total Hours		43

Master of Science in Educational Psychology with Applied Behavior Analysis Concentration

Major Core		
EPY 6214	Educational and Psychological Statistics	4
EPY 8263	Psychological Testing in Educational and Related Settings	3
EPY 8253	Child & Adolescent Development & Psychopathology	3
Concentration Requirements		
EPY 6113	Principles of Behavior Analysis	3
EPY 6223	Applications of Applied Behavior Analysis	3
EPY 8493	Social-Emotional and Behavioral Assessment	3
EPY 8763	Advanced Applied Behavior Analysis	3
EPY 9603	Legal, Ethical, and Professional Issues in Behavior Analysis	3
EPY 9443	Single Subject Research Designs in Education	3
EPY 9613	Consultation, Supervision, & Personnel Management in Applied Behavior Analysis	3
EPY 8390	Applied Behavior Analysis Practicum	6

EPY 8713

Total Hours

Doctor of Philosophy in Educational Psychology with General Educational Psychology Concentration

Major Core		46
EPY 6214	Educational and Psychological Statistics	
EPY 8214	Intermediate Educational and Psychological Statistics	
EPY 8263	Psychological Testing in Educational and Related Settings	
EPY 8293	Cognitive and Affective Development	
EPY 8513	Psychometric Theory	
EPY 9000	Dissertation Research /Dissertation in Educational Psychology	
EPY 9213	Multivariate Analysis in Educational Research	
EPY 9723	Seminar in Contemporary Educational/School Psychology	
EDF 9373	Educational Research Design	
General Educational Psychology Concent	ration Regirements	
Choose one Education course: EDF or EDX of	or EDE course in consult with advisor	3
EPY 6033	Application of Learning Theories	3
EPY 6073	Personal and Motivational Factors in Education	3
EPY 8223	Psychological Foundations of Education	3
EDF 8363	Function and Methods of Research in Education	3
or PSY 8513	Psychological Research	
EDF 9453	Introduction to Qualitative Research in Education	3
EDF 9463	Qualitative Data Collection in Education	3
EPY 8533	Practicum in Teaching Educational Psychology	3
EPY 9263	Applied Research Seminar	3
EDF 9473	Qualitative Data Analysis and Presentation in Education	3
Choose any two courses in PSY in consultation	on with advisor. Some recommended courses include:	6
PSY 6983	Psychology of Aging	
PSY 6713	Language and Thought	
PSY 6403	Biological Psychology (or equivalent)	
PSY 8613	Advanced Social Psychology (or equivalent)	
PSY 8313	Developmental Psychology	
Choose any two EPY courses in consult with	advisor. Recommended ones include:	6
EPY 6553	Creativity/Innovation	
EPY 8523	Psychology of the Gifted	
EPY 9313	Education Evaluation Methods	
EPY 8253	Child & Adolescent Development & Psychopathology (or equivalent)	
EPY 8113	History and Systems of Psychology	
Elective in consult with advisor		3

Total Hours

Doctor of Philosophy in Education Psychology with School Psychology Concentration

Major Core		46
EPY 6214	Educational and Psychological Statistics	
EPY 8214	Intermediate Educational and Psychological Statistics	
EPY 8263	Psychological Testing in Educational and Related Settings	
EPY 8293	Cognitive and Affective Development (or equivalent)	
EPY 8513	Psychometric Theory	
EPY 9000	Dissertation Research /Dissertation in Educational Psychology	
EPY 9213	Multivariate Analysis in Educational Research	
EPY 9723	Seminar in Contemporary Educational/School Psychology	

3 **40**

91

EDF 9373	Educational Research Design	
School Psychology Concentration Requ	irements	
EPY 6113	Principles of Behavior Analysis	3
EPY 6123	Applications of School Psychology	3
EPY 6133	Data-based Decision Making for Interventions in the School Setting	3
EPY 8123	Assessment of Infants, Toddlers, and Special Populations	3
EPY 8133	Crisis Prevention and Intervention in Schools and Related Settings	3
EPY 8493	Social-Emotional and Behavioral Assessment	3
EPY 8690	Supervised Experiences in School Psychology I	9
EPY 8703	School Psychology	3
EPY 8723	Individual Assessment for Educational and Related Settings	3
EPY 8763	Advanced Applied Behavior Analysis	3
EPY 8773	Assessment and Interventions for Academic Skills Deficits	3
EPY 8790	Supervised Experiences in School Psychology II	9
EPY 8890	Supervised Experiences in School Psychology: III	3
EPY 8933	Integrated Psycho-Educational Assessment	3
EPY 9443	Single Subject Research Designs in Education	3
or EDF 9443	Single-Subject Research Designs for Education	
EPY 9703	Contemporary, Legal, Ethical, and Professional Issues in School and Educational Psychology	3
EPY 9713	Advanced Psychological Consulting: Theory and Practice	3
EPY 9730	Doctoral Internship in School Psychology	18
COE 8073	Cultural Foundations in Counseling	3
EPY 8113	History and Systems of Psychology	3
EPY 8253	Child & Adolescent Development & Psychopathology	3
PSY 6403	Biological Psychology (or equivalent)	3
PSY 8613	Advanced Social Psychology (or equivalent)	3
Total Hours		142

Educational Specialist Concentration in School Psychology

Supervised Experiences in School Psychology: III	
Assessment of Infants, Toddlers, and Special Populations	
	3
Cultural Foundations in Counseling	3
Crisis Prevention and Intervention in Schools and Related Settings	3
Single Subject Research Designs in Education	3
Internship in School Psychology	12
Supervised Experiences in School Psychology II	6
Supervised Experiences in School Psychology I	3
Advanced Applied Behavior Analysis	3
Directed Individual Study in Educational Psychology	3
	Advanced Applied Behavior Analysis Supervised Experiences in School Psychology I Supervised Experiences in School Psychology II Internship in School Psychology Single Subject Research Designs in Education Crisis Prevention and Intervention in Schools and Related Settings Cultural Foundations in Counseling Assessment of Infants, Toddlers, and Special Populations

Doctoral Minor in School Psychology

Introduction to school psychology course	3
Behavior and personality assessment of children and youth course	3
Typical and atypical development of children and youth course	3
School-based and psychological interventions for children and youth course	3
Total Hours	12

The doctoral student will meet with the intended minor professor for an interview and to obtain approval from the School Psychology faculty for enrolling in the School Psychology minor coursework. The minor professor will determine specific courses to be included in the minor program of study.

Students with a minor in School Psychology will be required to pass a minor examination. The School Psychology faculty will determine the content of the written minor examination. The minor examination is completed during a four-hour examination period. A student who fails the minor examination cannot apply to take another examination until four months have elapsed from the date of the original examination. Two failures of the minor examination will result in the student's dismissal from further consideration as a student with a minor in School Psychology.

Curriculum, Instruction, and Special Education

Department Head: Dr. Janice Nicholson

Graduate Coordinator: Dr. Rebecca Robichaux-Davis--Elementary Education; Dr. Missy Hopper--Secondary Education; Dr. Sandy Devlin--Special Education; Dr. Jeff Leffler--Meridian

310 Allen Hall Box 9705 Mississippi State, MS 39762 Telephone: 662-325-3703 E-mail: contactCISE@colled.msstate.edu Website: http://www.cise.msstate.edu (http://www.cise.msstate.edu/)

Admission Criteria

General Admission Criteria

The Department of Curriculum, Instruction, and Special Education (CISE) offers Master of Science degrees in Elementary Education, Secondary Education, and Special Education. The Department also offers the the Master of Arts in Teaching–Secondary (MATS) and the Master of Arts in Teaching-Special Education (MATX) degrees. The Educational Specialist degree is offered with a major in Education and concentrations in Elementary Education, Secondary Education, and Special Education.

The Doctor of Philosophy is offered in Curriculum and Instruction with concentrations in Elementary Education, Secondary Education, and Special Education. Graduate programs in the Department of Curriculum, Instruction, and Special Education require applicants to hold or be eligible to obtain a Class A teaching certificate in the appropriate teaching field.

A student applying for admission to a degree program in Curriculum, Instruction, and Special Education must submit a complete application packet to the Graduate School by the following deadlines:

Summer	April 1
Fall	July 1
Spring	November 1

Applications not meeting the admission deadline will be held for completion and review for up to two semesters. After that time, the applicant must reapply.

A complete admission packet consists of: application to the graduate degree program; documentation of Class A teacher's certificate or eligibility for licensure (exceptions noted above); three letters of recommendation; statement of purpose (must include number of years and overview of teaching experience, if applicable); and official transcripts from each college or university attended. Official GRE scores are required for all programs except the MATS and MATX. Applicants to an MAT degree program are required to have passing scores on the Praxis Core and appropriate specialty-area test. Doctoral-program applicants must also include in their packet two scholarly writing samples, a statement of support from a current graduate faculty member in the program, and a curriculum vitae or résumé. Applicants must also document three years of teaching experience or other relevant experience. Applicants to doctoral programs must be interviewed before an admission decision is made. Minimum grade point averages required for admission to each degree are listed below.

- · Master's degree: minimum GPA 2.75 on last half of baccalaureate degree
- Educational Specialist degree: minimum GPA 3.20 on master's degree
- Doctoral degree: minimum GPA 3.40 on previous graduate degree(s)

All new students admitted into a graduate program in CISE must attend the CISE Graduate Student Orientation.

Contingent Admission

Contingent admission status is reserved for those students who are applying to a degree program during the semester they are graduating with another degree and the overall GPA is pending. Otherwise, the admission packet must be complete and all admission requirements met before admission will be considered.

Provisional Admission

The Department of Curriculum, Instruction, and Special Education follows the University's Provisional Admission policy (p. 45).

Residency Requirement

There is no general residency requirement for the master's degree. Residency for the specialist degree is a minimum of 30 weeks. A degree cannot be completed in two summer sessions or equivalent, neither in one regular semester and one summer session. For doctoral students there is no specific on-campus residence requirement. However, students are required to complete one-half of required coursework and all dissertation credits from Mississippi State University.

Academic Performance for All Programs

The Department of Curriculum, Instruction, and Special Education defines satisfactory performance in graduate level coursework as a grade of S on thesis/dissertation hours and a GPA of at least 3.00 on all coursework attempted. CISE follows Graduate School policies relating to academic performance. In the event a student's performance warrants dismissal from a graduate program, the CISE Graduate Coordinator will petition the Dean of the College of Education to dismiss the student from the graduate program. The student will be notified of the action by certified mail. If a student earns a grade below a B in a course on his or her plan of study, the course cannot be dropped from the plan of study.

Accelerated Program

Highly qualified undergraduates on STEM degree pathways are encouraged to consider applying to the STEM MAT-S Accelerated Program. The program is designed to transition individuals into a career as a professional educator. Students can to earn up to 15 hours of graduate level coursework during their final year of undergraduate studies; with graduate level courses applied to both undergraduate credit and graduate credit simultaneously. After the student completes their STEM undergraduate degree they take two summer courses earning temporary licensure, accept a teaching position, complete a paid internship with a university supervisor, graduate with a master's degree in education and earn a 5 year renewable teaching license.

Master of Science in Elementary Education

Total Hours		24
EDE 8473	The Elementary Social Studies Curriculum	3
RDG 8713	Teaching Struggling Readers and Writers	3
EDE 8763	Elementary and Middle Level Mathematics Education	3
EDE 8733	Teaching Physical, Life, and Earth Science in the Elementary and Middle School Classroom	3
EDE 8633	The Teaching of Writing	3
EDE 8623	Content Area Literacy and Disciplinary Literacy Instruction	3
or EDE 8713	Educating Young Adolescents	
EDE 8313	Theory and Development of Early Childhood Education	3
EDF 8363	Function and Methods of Research in Education	3
Core Courses		

This program requires a minimum of of 33 semester hours of coursework beyond the bachelor's degree, which includes 9 semester hours of electives and a written comprehensive exam. The focus of the program is on Elementary Education with coursework addressing the core content areas, Literacy, Mathematics, Science, and Social Studies in the elementary classroom.

The written comprehensive examinations for the Master of Science degree are scheduled twice a year. The dates are the second Tuesday of October and February. Students can take the comprehensive examination when they are within 6 hours of completing their degree or are in their terminal semester, have an overall graduate GPA of 3.00, and have completed the courses that will be covered on the comprehensive examination.

Master of Science in Secondary Education

Total Hours		33
Three electives chosen from ei	ther education or content area approved by advisor	9
Two content courses (mathema	atics, science, English, foreign language, social studies, reading, etc. as approved by advisor)	6
RDG 8000-level elective		3
EDS 8663	Improving Instruction in Secondary Schools	3
EDS 8653	Issues of Accountability in Schools	3
EDS 8613	Middle and Secondary School Curriculum	3
EDS 8683	Dispositions and Reflective Practice in Teaching	3
EDF 8363	Function and Methods of Research in Education	3
Core Courses		

This program requires a minimum of 33 semester hours of coursework beyond the bachelor's degree and a written comprehensive exam. The focus of the program is on secondary education with supporting coursework from related fields and the teaching discipline. The written comprehensive examinations for the Master of Science degree are scheduled twice a year. The dates are the second Tuesday of October and February. Students can take the comprehensive examination when they are within 6 hours of completing their degree or are in their terminal semester, have an overall graduate GPA of 3.00, and have completed the courses that will be covered on the comprehensive examination.

A student's program of study must be filed in the Department of Curriculum, Instruction, and Special Education by the end of the first semester.

Master of Science in Special Education

The Master of Science in Special Education requires a minimum of 30 hours of coursework beyond the bachelor's degree. Students must also pass a written comprehensive examination. The program is specifically intended to prepare classroom and resource teachers for public schools and institutions for students with disabilities. Additional endorsements in working with students who are gifted and talented or those who have severe/multiple disabilities are available. Programs can be combined to include multiple endorsements.

The written comprehensive examinations for the Master of Science degree are scheduled three times a year. The dates are the second Tuesday in June, October, and February. Students can take the comprehensive examination when they are within 6 hours of completing their degree or are in their terminal semester, have an overall graduate GPA of 3.00, and have completed the courses that will be covered on the comprehensive examination.

Master of Arts in Teaching - Secondary Education

EDS 8243Advanced Planning and Managing of Learning3EDS 6403Evaluation in Learning in Secondary Schools3EDS 8623Principles of Effective Instruction in Secondary Schools3EDX 8173Special Education in the Regular Classroom3EDS 8103Advanced Methodologies in Middle and Secondary Education3RDG 8653Teaching Reading in the Secondary Schools3EDS 8886Dimensions of Learning I6EDS 66x3Methods in Secondary Teaching3EDS 8613Middle and Secondary School Curriculum3
EDS 6403Evaluation in Learning in Secondary Schools3EDS 8623Principles of Effective Instruction in Secondary Schools3EDX 8173Special Education in the Regular Classroom3EDS 8103Advanced Methodologies in Middle and Secondary Education3RDG 8653Teaching Reading in the Secondary Schools3EDS 8886Dimensions of Learning I6
EDS 6403Evaluation in Learning in Secondary Schools3EDS 8623Principles of Effective Instruction in Secondary Schools3EDX 8173Special Education in the Regular Classroom3EDS 8103Advanced Methodologies in Middle and Secondary Education3RDG 8653Teaching Reading in the Secondary Schools3
EDS 6403Evaluation in Learning in Secondary Schools3EDS 8623Principles of Effective Instruction in Secondary Schools3EDX 8173Special Education in the Regular Classroom3EDS 8103Advanced Methodologies in Middle and Secondary Education3
EDS 6403Evaluation in Learning in Secondary Schools3EDS 8623Principles of Effective Instruction in Secondary Schools3EDX 8173Special Education in the Regular Classroom3
EDS 6403Evaluation in Learning in Secondary Schools3EDS 8623Principles of Effective Instruction in Secondary Schools3
EDS 6403 Evaluation in Learning in Secondary Schools 3
EDS 8243 Advanced Planning and Managing of Learning 3

Total Hours

The MATS program is an alternate route secondary licensure program of study that consists of 30 semester hours of graduate-level coursework. It is designed for a candidate with a bachelor's degree in a content discipline who wishes to prepare for a career as a teacher. All admitted MATS students applying for a teaching license must have taken the ACT with a minimum composite score of 21 or have passing Praxis Core. Passing scores, as set by MOE, on the Praxis 11-Specialty Area Test are also required for licensure. MATS students must also pass a certified background check prior to admission.

Students in the MATS will complete the comprehensive examination in the final semester or final 6 hours of enrollment by registering for and passing the Praxis Principles of Learning and Teaching (PLT) examination through ETS.

Master of Arts in Teaching - Special Education

EDX 6173	Introduction to Contingency Management	3
EDX 8173	Special Education in the Regular Classroom	3
EDX 6193	Advanced Planning in Special Education	3
EDX 6813	Introduction to Assessment Issues in Special Education	3
EDX 8013	Fundamentals of Teaching Individuals with Intellectual and Developmental Disorders	3
EDX 8023	Fundamentals of Teaching Individuals with Learning Disabilities	3
EDX 8053	Fundamentals of Teaching Individuals with Emotional and Behavioral Disorders	3
EDX 8233	Special Education Internship I	3
EDX 8243	Special Education Internship II	3
EDE 8163	Teaching Middle Level Mathematics Content	3
or EDS 6633	Mathematics Education Pedagogy	
RDG 8113	Middle Level Literacy Instruction	3
or RDG 8123	Supporting the Middle Level Literacy Learner	
or RDG 8133	Middle Level Content Area Literacy Instruction	

or RDG 8653

Teaching Reading in the Secondary Schools

Total Hours

The Master of Arts in Special Education (M.A.T.X.) is an alternate route licensure program of study that consists of 33 semester hours of graduate-level coursework and is designed for a person seeking a career as a special education teacher. In addition to the criteria for admission to a Master of Science degree program in CISE (with the exception of a teaching license), M.A.T.X. candidates must pass the Praxis CORE and Praxis II Specialty Area Test required for special education licensure by the Mississippi Department of Education and pass a certified background check.

Educational Specialist with Major in Education and Concentration in Elementary or Secondary Education

Total Hours		30
Other graduate-level coursework		23
EDE /EDS 7000	Directed Individual Study in Elementary Education	3
EPY 6214	Educational and Psychological Statistics	4

Total Hours

The written comprehensive examinations for the Educational Specialist degree are scheduled twice a year. The dates are the second Tuesday of June and February. Students can take the comprehensive examination when they are within 6 hours of completing their degree or are in their terminal semester, have an overall graduate GPA of 3.00, and have completed the courses that will be covered on the comprehensive examination.

Educational Specialist with Major in Education and Concentration in Special Education

The Educational Specialist degree with a major in Education and concentration in Special Education requires a minimum of 31 hours of coursework above the Master's degree in Special Education including EPY 6214 and EDX 7000. Available electives must be approved by the student's advisor. The program is designed to provide students advanced coursework in the field, to allow them to add additional endorsements, or to be better prepared to take on a wide range of positions within their school districts. A student must hold an AA licensure in Special Education.

EPY 6214Educational and Psychological StatisticsEDX 7000Directed Individual Study in Special Education (Specialist Field Study)EDX 8133Readings and Research in Exceptional EducationEDX 8123Organization and Supervision of Special EducationElectives50% of coursework must be at 8000-level or above	31
EDX 7000Directed Individual Study in Special Education (Specialist Field Study)EDX 8133Readings and Research in Exceptional Education	18
EDX 7000 Directed Individual Study in Special Education (Specialist Field Study)	3
	3
EPY 6214 Educational and Psychological Statistics	3
	4

The written comprehensive examinations for the Educational Specialist degrees are scheduled three times a year. The dates are the second Tuesday in June, October, and February. Students can take the comprehensive examination when they are within 6 hours of completing their degree or are in their terminal semester, have an overall graduate GPA of 3.00, and have completed the courses that will be covered on the comprehensive examination.

Doctor of Philosophy in Curriculum and Instruction

The program for the Doctor of Philosophy in Curriculum and Instruction is designed for experienced professionals in higher education environments interested in leading and managing various aspects of universities, state higher education agencies, and related fields.

Educational and Psychological Statistics	4
Intermediate Educational and Psychological Statistics	4
Multivariate Analysis in Educational Research	3
Function and Methods of Research in Education (may be taken in master's work)	3
Educational Research Design	3
Introduction to Qualitative Research in Education	3
	3-6
Qualitative Data Collection in Education	
Qualitative Data Analysis and Presentation in Education	
Single-Subject Research Designs for Education	
	3
Comparative Education	
Issues in Education	
History of Education in the United States	
	Intermediate Educational and Psychological Statistics Multivariate Analysis in Educational Research Function and Methods of Research in Education (may be taken in master's work) Educational Research Design Introduction to Qualitative Research in Education Qualitative Data Collection in Education Qualitative Data Analysis and Presentation in Education Single-Subject Research Designs for Education Comparative Education Issues in Education

33

Total Hours		90
Dissertation credit hours		20
Additional major area coursework (may include master's and educational specialist coursework) ¹		24
EDE /EDS /EDX 9221	Professional Practice in Teacher Education	1
or EDX 8133	Readings and Research in Exceptional Education	
EDE 8893/EDS 8643	Directed Readings in Teacher Education	3
EDE /EDS /EDX 9413	Practicum in College Teaching	3
EDE /EDS /EDX 9553	Teaching and Teacher Education	3
Directed Individual Study: EDE 7000 or ED	S 7000 or EDX 7000	6
Major Area Courses		
PHI 8101	Case Studies in Scientific Research Ethics	1
Ethics Course		
EPY 8223	Psychological Foundations of Education	
EDF 9313	Philosophy of Education	

The program requires a minimum of 90 semester hours of coursework beyond the bachelor's degree.

¹ Additional 24 hours of major-area and supporting coursework including 12 hours in the concentration and up to 12 hours in a minor area. Concentrations include Elementary Education, Secondary Education, and Special Education. At least two-thirds of the total hours of coursework on the plan of study, exclusive of dissertation hours, must be courses at the 8000 level or above. (Admission to concentrations in General Education; Early Childhood Education; and Reading Education has been suspended.)

Other Requirements

Demonstration of competence in the application of research and statistics through the research skill requirement; written and oral comprehensive examinations; and a dissertation.

See the CISE Graduate Handbook for information about the doctoral comprehensive examination.

Completion Requirements for All Programs

All graduate students must attend the CISE graduate orientation or complete the online orientation quiz. All graduate students submitting a thesis or dissertation must attend the thesis/dissertation workshops conducted by the Library within the year in which they are completing the dissertation and before receiving the graduate coordinator's signature. All students seeking the Doctor of Philosophy degree must satisfy the research skills requirement before taking the written comprehensive examination.

For further information concerning the degree programs offered by CISE, students should refer to the Department of Curriculum, Instruction, and Special Education Graduate Handbook (www.cise.msstate.edu (http://www.cise.msstate.edu/)).

Master of Arts in Teaching - Middle Level (Admission to this program is currently suspended.)

Core Courses		
EDE 8113	Middle Level Management and the Young Adolescent	3
EDE 8123	Foundations for Teaching Middle Level Mathematics	3
RDG 8113	Middle Level Literacy Instruction	3
EPY 8473	Middle Level Assessment and Evaluation	3
RDG 8123	Supporting the Middle Level Literacy Learner	3
EDE 8133	Middle Level Internship I	3
EDF 8553	Research in the Classroom	3
EDE 8143	Middle Level Internship II	3
RDG 8133	Middle Level Content Area Literacy Instruction	3
EDE 8153	Professional Roles of the Middle Level Educator	3
Select one of the following:		3
EDE 8163	Teaching Middle Level Mathematics Content	
EDE 8173	Teaching Middle Level Social Studies	
EDE 8183	Teaching Middle Level Sciences	

Selec	one graduate-level diversity elective	
-------	---------------------------------------	--

Total Hours

The M.A.T.M. program is an alternate route licensure program of study that consists of 36 semester hours of graduate-level coursework. It is designed for those who wish to prepare for a career as a middle-level teacher. In addition to the criteria for admission to a Master of Science degree program (with the exception of a teaching license), M.A.T.M. candidates must pass the Praxis Core and Praxis II Specialty Area Test required for middle-level licensure by the Mississippi Department of Education, possess either 21 hours in a single content area or pass the secondary education Praxis II Specialty Area test for a specific content area, and pass a certified background check.

Students in the M.A.T.M. will complete the comprehensive examination in the final semester of enrollment by registering for and passing the appropriate Praxis II Principles of Learning and Teaching examination through ETS.

Educational Leadership

Department Head: Dr. Eric Moyen Graduate Coordinator: Dr. Stephanie King 245 Allen Hall Box 6037 Mississippi State, MS 39762 Telephone: 662-325-0969

E-mail: edleadership@colled.msstate.edu

The Department of Educational Leadership offers the following degrees:

Community College Programs

- Master of Arts in Teaching in Community College Education
- Master of Science in Workforce Education Leadership
- Doctor of Philosophy in Community College Leadership

Educational Leadership Programs

- Master of Science in Educational Leadership with a concentration in (1) School Administration, (2) Student Affairs & Higher Education, or (3) Teacher Leadership
- Educational Specialist in Education with a concentration in (1) School Administration or (2) Teacher Leadership
- Doctor of Philosophy in Educational Leadership with a concentration in (1) P-12 School Leadership or (2) Higher Education Leadership

A student applying for admission to a degree program in the Department of Educational Leadership must submit a complete admission packet to the Graduate School and adhere to the following deadlines:

M.A.T. in Community College Education: For Spring, Summer, and Fall admission, follow the Graduate School deadlines

M.S. in Workforce Education Leadership: For Spring, Summer, and Fall admission, follow the Graduate School deadlines

Ph.D. in Community College Leadership: For Spring--N/A; for Summer--March 15; for Fall--N/A

M.S. in Educational Leadership - School Administration and Teacher Leadership concentrations: Spring--N/A; Summer--May 1; Fall--N/A

M.S. in Educational Leadership - Student Affairs and Higher Education concentration: Spring--N/A; Summer--N/A; Fall--March 1

Ed.S. in Education - School Administration and Teacher Leadership concentrations: Spring--N/A; Summer--March 1; Fall--N/A

Ph.D. in Educational Leadership - P-12 School Leadership concentration: Spring--October 1; Summer--March 1; Fall--March 1

Ph.D. in Educational Leadership - Higher Education Leadership concentration: Spring--N/A; Summer--N/A; Fall--March 1

A complete admission packet includes the following:

- · Application to the graduate degree program
- · Statement of purpose
- Three letters of recommendation (student must supply the names and contact information for those providing the recommendations)
- · GRE scores that are five years old or less (required for specific programs only)
- · Official transcripts from each college or university attended

In order for applications to be evaluated for admission, the department may require additional information for each program area.

General Admission Requirements

Degree Programs in Community College Leadership

Minimum Grade Point Average

Master's degrees - 2.75 on last half of bachelor's degree

Doctoral degree - 3.40 on first master's degree (or other graduate degree if GPA is higher)

Additional admission requirements

Doctoral degree – at least one year of full-time equivalent work experience in a community college setting and current employment in higher education; on-campus interview and writing sample; curriculum vitae.

Master of Arts in Teaching in Community College Education - Indication of teaching specialty (e.g., History) in statement of purpose

Degree Programs in Educational Leadership

Minimum Grade Point Average

Master's degree – 2.75 on last half of bachelor's degree for the Teacher Leadership concentration; 3.00 for the School Administration and Student Affairs and Higher Education concentrations

Educational Specialist degree - 3.00 on Master's degree

Doctoral degree - 3.40 on previous graduate degree(s)

Additional admission requirements

Master's (School Administration concentration) and Educational Specialist (School Administration concentration) degrees – copy of valid teacher's license, evidence of a minimum of three years teaching experience, résumé, and interview (one letter of recommendation must be from current school administrator)

Master's (Student Affairs and Higher Education concentration) - current résumé and interview

Master's (Teacher Leadership concentration) and Educational Specialist (Teacher Leadership concentration) - copy of valid teacher's license, full-time P-12 classroom teacher experience, résumé, and interview (one letter of recommendation must be from current school administrator)

Doctoral degree - résumé and interview;

P-12 School Leadership concentration applicants must have evidence of current and continuing school administration work experience and an administrative license.

Higher Education Leadership applicants must have at least three years of higher education work experience.

Community College Programs

Master of Arts in Teaching in Community College Education (M.A.T.)

The Master of Arts in Teaching in Community College Education is an interdisciplinary degree program designed to prepare professionals for teaching in a community college setting. The degree prepares educators for service in rural community colleges and requires a minimum of 18 hours in the student's teaching field (e.g., History, Math, English). The professional education sequence consists of 12 hours. The education courses introduce students to the philosophy and culture of the community college and prepare them to teach non-traditional and first-generation students. Sensitivity to diversity and adult learning theory is also included in the curriculum. The program is offered through the Center for Distance Education but is not completely online since most courses in the teaching field are only offered on campus.

Admission Criteria

To be eligible for admission to the program, the applicant must hold a bachelor's degree from an accredited institution, meet the basic requirements specified for graduate students at Mississippi State University, demonstrate interest in the mission of community colleges, and demonstrate academic proficiency based on the application materials.

Master of Science in Workforce Education Leadership

The Master of Science in Workforce Education Leadership is a distance learning program designed to prepare professionals for employment in workforce education in post-secondary educational institutions and social services entities, advancing the knowledge base of workforce preparation, workforce development education, and professional development. The program is offered through the Center for Distance Education and is completely online.

Admission Criteria

To be eligible for admission to the program, the applicant must hold a bachelor's degree from an accredited institution, meet the basic requirements specified for graduate students at Mississippi State University, demonstrate interest in the mission of community college and/or workforce issues, and demonstrate academic proficiency based on the application materials.

Doctor of Philosophy in Community College Leadership

The Ph.D. degree program in Community College Leadership is designed to prepare professionals for leadership positions in community colleges. The degree program is designed to prepare the next generation of community college leaders. The program consists of courses in history and philosophy of the community college, leadership and organizational theory, leading and managing a community college, and research and statistics. The program is offered through the Center for Distance Education and is fully online.

Admission Criteria

Deadline for admission is March 1 for summer. To be eligible for admission to the program, the applicant must hold a master's degree from an accredited institution, meet the basic requirements specified for graduate students at Mississippi State University, demonstrate interest in the mission of community colleges, and demonstrate academic proficiency based on the following indicators:

- 1. Grade point average (GPA) of 3.40 on first master's degree (or other graduate degree if GPA is higher)
- 2. GRE score results
- 3. Names and contact information for three people to provide a reference (it is highly recommended that references submit a letter along with the reference form)
- 4. An on-campus interview and writing sample
- 5. At least one year of full-time equivalent work experience in a community college setting and current employment in higher education
- 6. Curriculum vitae
- 7. Statement of purpose of 500-1000 words to include reason(s) for wanting to be in the program, research interests, and career goals and aspirations
- 8. Official transcripts from each college or university attended

Educational Leadership Programs

Master of Science in Educational Leadership with a concentration in School Administration

Program candidates in the School Administration concentration learn to analyze data, evaluate instruction, improve student achievement, make strategic decisions, creatively solve problems, involve families in their children's education, empower others, supervise staff, promote change, establish positive school culture, understand budgets, and manage resources. The program is nationally accredited by the Educational Leadership Constituent Council (ELCC) and approved for administrative licensure by the Mississippi Department of Education. Graduates are prepared for a wide range of professional positions in education, including principal, assistant principal, coordinator, and director.

Master of Science in Educational Leadership with a concentration in Teacher Leadership

Program candidates in the Teacher Leadership concentration area learn to analyze data, evaluate instruction, improve student achievement, make strategic decisions, creatively solve problems, promote collaborative learning, empower others, supervise staff, and promote change. Teacher Leadership candidates also focus on developing positive school culture by supporting and improving pedagogy among P-12 instructors. Following the degree, graduates will be skilled at helping other teachers better understand their subject matter, how they teach it, how to monitor student learning, how to think systematically about curriculum and pedagogy, and how to develop healthy learning communities. Graduates are prepared for a wide range of professional positions in education, including curriculum coordinator, lead teacher, instructional coach, and teacher-mentor.

Master of Science in Educational Leadership with a concentration in Student Affairs & Higher Education

Program candidates in the Student Affairs & Higher Education concentrations are prepared for careers in higher education management, administration, and leadership with a particular emphasis on the college student experience and services related to supporting college student success.

Admission Criteria for the M.S. in Educational Leadership

To be eligible for admission to the program, the applicant must hold a bachelor's degree from an accredited institution, meet the basic requirements specified for graduate students at Mississippi State University, and demonstrate academic proficiency based on the following indicators:

- 1. Grade point average (GPA) of 2.75 on a 4.00 scale on the last half of the bachelor's degree for School Administration and Teacher Leadership; 3.00 for Student Affairs & Higher Education
- 2. Letter of endorsement from current school administrator and two other letters of reference for School Administration and Teacher Leadership OR three letters of recommendation for Student Affairs & Higher Education
- 3. Statement of purpose
- 4. Copy of valid teacher's license (School Administration and Teacher Leadership only)

- 5. Evidence of three years of teaching experience (School Administration only); evidence of full-time P-12 classroom teaching experience (Teacher Leadership only)
- 6. Current résumé
- 7. Interview

Educational Specialist in Education with a concentration in School Administration

The Educational Specialist degree with a major in Education and concentration in School Administration requires a minimum of 30 hours of coursework above the Master's degree including EPY 6214 and EDL 7000 and a comprehensive examination for individuals. The program has two tracks. One is a 30-hour track designed for individuals who hold a Master's degree in School Administration and administrator license. Graduates are prepared for professional positions in education including school district level positions. The second track is intended for students who do not hold administrator licensure. The program of study for this track requires a minimum of 37 credit hours of coursework above the Master's degree including EPY 6214 and EDL 7000. The program is designed to provide administrative licensure by the Mississippi Department of Education. Graduates are prepared for a wide range of professional positions in education, including principal, assistant principal, coordinator, and director.

Educational Specialist in Education with a concentration in Teacher Leadership

The Educational Specialist degree in Education with a concentration in Teacher Leadership is designed to prepare graduates for professional positions in education including school and district-level positions. For individuals who hold a Master's degree in School Administration and an administrator license, the program requires a minimum of 30 hours of coursework above the Master's degree. If the student holds a Master's degree in an area other than School Administration, the program of study requires a minimum of 37 credit hours of coursework above the Master's degree. Graduates are prepared for a wide range of professional positions in education, including curriculum coordinator, lead teacher, instructional coach, and teacher-mentor.

Program candidates in the Teacher Leadership concentration area learn to analyze data, evaluate instruction, improve student achievement, make strategic decisions, creatively solve problems, promote collaborative learning, empower others, supervise staff, promote change, and establish a positive school culture. Teacher leadership candidates also focus on developing positive school culture by supporting and improving pedagogy among P-12 instructors. Graduates will be skilled at helping other teachers better understand their subject matter, how they teach it, how to monitor student learning, how to think systematically about curriculum and pedagogy, and how to develop healthy learning communities.

Admission Criteria

To be eligible for admission to the program, the applicant must hold a master's degree from an accredited institution, meet the basic requirements specified for graduate students at Mississippi State University, demonstrate interest in the mission of P-12 schools, and demonstrate academic proficiency based on the following indicators:

- 1. Grade point average (GPA) of 3.00 on master's degree
- 2. Letter of endorsement from current school administrator and two other letters of reference
- 3. Statement of purpose
- 4. Copy of valid teacher's license
- 5. Evidence of three years of teaching experience (School Administration); evidence of full-time P-12 classroom teaching experience (Teacher Leadership)
- 6. Current résumé
- 7. Interview

Doctor of Philosophy in Educational Leadership with a concentration in P-12 School Administration

The program for the Doctor of Philosophy degree in Educational Leadership with a concentration in P-12 School Administration is designed for experienced professional administrators interested in leading and managing P-12 schools, school districts, educational associations, foundations, and state departments of education. It is designed to prepare educators in P-12 school leadership and higher education leadership. The program includes a combination of required focused courses, research courses, and other organized learning experiences for leading and managing schools, school districts, higher education institutions, educational associations, foundations, state educational agencies, and other P-12 or higher education environments.

Doctor of Philosophy in Educational Leadership with a concentration in P-12 Leadership

The program for the Doctor of Philosophy degree in Educational Leadership with a concentration in P-12 Leadership is designed to prepare experienced professional educators in P-12 school leadership and higher education leadership. The program includes a combination of required focused courses, research courses, and other organized learning experiences for leading and managing schools, school districts, higher education institutions, educational associations, foundations, state educational agencies, and other P-12 or higher education environments.

Doctor of Philosophy in Educational Leadership with a concentration in Higher Education Leadership

The program for the Doctor of Philosophy degree in Educational Leadership with a concentration in Higher Education Leadership is designed for experienced professionals in higher education environments interested in leading and managing various aspects of colleges and universities, state higher education agencies, foundations, and related associations.

Admission Criteria

To be eligible for admission to the program, the applicant must hold a master's degree from an accredited institution, meet the basic requirements specified for graduate students at Mississippi State University, and demonstrate academic proficiency based on the following indicators:

- 1. Grade point average (GPA) of 3.40 on a 4.00 scale on previous graduate degree(s)
- 2. GRE score results
- 3. Letter of endorsement from superintendent and two other letters of reference for P-12 School Leadership OR three letters of recommendation for Higher Education Leadership
- 4. Statement of purpose
- 5. Administrator's license and evidence of current and continuing school administration experience for P-12 Leadership, evidence of three years higher education work experience for Higher Education Leadership
- 6. Résumé
- 7. Interview

Doctor of Education (Ed.D.) with a concentration in P-12 School Leadership

The Doctor of Education (Ed.D.) program offers a terminal degree designed to prepare scholar-practitioners serving in P-12 leadership positions. By combining educational theory with action research, students learn how to critically examine problems and provide solutions to needs at the building and district levels. Graduates will possess the content knowledge and research skills to improve schools in the P-12 educational system. The **P-12 School** Leadership concentration is designed to prepare educators in the P-12 School Leadership arena for leadership at the building and district levels.

Community College Programs

Master of Arts in Teaching in Community College Education

Core Courses

Total Hours		30
Select 18 hours of courses with the same prefix.		18
Teaching Specialty/Content A	rea	
EDF 8363	Function and Methods of Research in Education	3
CCL 8173	Community College Teaching and Learning	3
CCL 8313	Community College Instructional Assessment	3
CCL 8113	Community College History/Philosophy	3

Master of Science in Workforce Education Leadership

Core Courses

CCL 8113	Community College History/Philosophy	
CCL 8343	Community Development and Resources	
CCL 8133	Leadership Theory and Practice in the Community College	
CCL 8153	Human Resources Administration	
CCL 8143	Program Planning and Development	
EDF 8363	Function and Methods of Research in Education	
CCL 8173	Community College Teaching and Learning	
CCL 8193	Issues in Community College and Workforce Leadership	
Any two TKT courses at the 6000 level or a	bove.	6

Total Hours

Doctor of Philosophy in Community College Leadership

Core Courses

Select one of the following:

30

24

	CCL 8113	Community College History/Philosophy	
	or CCL 8373	Community College Curriculum Improvement	
	CCL 8123	Community College Finance	
	CCL 8233	Community College Legal Issues	
	CCL 8333	Community College Administration	
	CCL 8283	Leadership in Community College Administration	
	CCL 8353	Applications of Organizational Theory and Behavior in Community College Leadership	
	CCL 8153	Human Resources Administration	
In	terdisciplinary Courses		6
	HED 8673	Planning and Institutional Research in Higher Education	
	CCL 8343	Community Development and Resources	
R	esearch Courses		14
	EPY 6214	Educational and Psychological Statistics	
	EPY 8214	Intermediate Educational and Psychological Statistics	
	EDF 9373	Educational Research Design	
	EDF 9453	Introduction to Qualitative Research in Education	
D	issertation		20
	CCL 9000	Dissertation Research/ Dissertation in Community College Leadership	
A	dditional Requirements, if needed		
С	CL 8213	Internship in Community College Leadership ¹	3
Т	otal Hours		61-64

1 Required of students lacking community college work experience.

Educational Leadership Programs

Master of Science in Educational Leadership with a concentration in School Administration

Required Courses

Total Hours		33
A culminating assessment is als	so held during the second summer term	
EDL 8613	School Leadership Internship II	3
EDL 8513	School Leadership Internship I	3
EDL 8723	Leadership for Positive School Culture	3
EDL 8713	School Business and Facilities	3
EDL 8633	Human Resources Leadership for Schools	3
EDL 8623	Leading Curriculum, Instruction and Assessment	3
EDL 8523	Educating Diverse Learners	3
EDF 8443	Evaluation of School Programs	3
EDL 8433	Using Data for School Improvement	3
EDL 8423	School Leadership	3
EDL 8413	School Legal and Ethical Perspectives	3
•		

Total Hours

Master of Science in Educational Leadership with a concentration in Student Affairs & **Higher Education**

Prerequisites and Core Courses		
COE 8023	Counseling Theory	3
COE 8013	Counseling Skills Development	3
HED 8573	Applied Assessment in Student Affairs & Higher Education	3
Concentration Requirements		
HED 8553	Student Affairs in Higher Education	3
HED 8523	Student Development Theory	3

Total Hours		42
HED 8010	Practicum	6
Fieldwork Experience		
Approved Electives		3
HED 8593	Administrative Competency in Stu Affairs & Higher Ed: Technology, Communication, & Crisis	3
HED 8583	Administrative Competency in Stu Affairs & Higher Ed: Budgets & Supervision	3
HED 8623	Diversity, Globalization and the College Student	3
HED 8113	Administrative Leadership in Student Affairs & Higher Education	3
HED 8563	Assessment Strategy in Student Affairs & Higher Education	3
HED 8543	Legal Issues in Student Affairs	3

Master of Science in Educational Leadership with a concentration in Teacher Leadership

Total Hours		30
EDL/EDF/EDE/EDS/EPY Elective		3
EDL 8343	Effective and Reflective Practitioner for Teacher Leadership	3
EDL 8333	Teaching Practice and Learning Environment for Teacher Leadership	3
EDL 8323	Differentiation of Instruction for Teacher Leadership	3
EDL 8313	Assessing Content Knowledge for Teacher Leadership	3
EDL 8723	Leadership for Positive School Culture	3
EDL 8623	Leading Curriculum, Instruction and Assessment	3
EDL 8523	Educating Diverse Learners	3
EDL 8433	Using Data for School Improvement	3
EDL 8423	School Leadership	3

Total Hours

Educational Specialist in Education with a concentration in School Administration

Individuals holding a Master's degree in School Administration and Administrator License

EPY 6214	Educational and Psychological Statistics	4
EDL 7000	Directed Individual Study in Educational Leadership	6
Graduate-level coursework with at least 15 hours at the 8000-level		20
Total Hours		30

A comprehensive examination is required.

Educational Specialist in Education with a concentration in School Administration

Individuals without Administrator License

30
6
4

Total Hours

A comprehensive examination is required.

Educational Specialist in Education with a concentration in Teacher Leadership

EPY 6214	Educational and Psychological Statistics	4
EDL 7000	Directed Individual Study in Educational Leadership ¹	3
or EDL 8353	Teacher Leadership Internship	
Graduate-level coursework (a program minimum of 15 hours at the 8000-level is required)		11
EDL 8313	Assessing Content Knowledge for Teacher Leadership	3
EDL 8323	Differentiation of Instruction for Teacher Leadership	3

15-17

Total Hours		30
EDL 8343	Effective and Reflective Practitioner for Teacher Leadership	3
EDL 8333	Teaching Practice and Learning Environment for Teacher Leadership	3

Total Hours

1 Student may take 3 or 6 hours of EDL 7000.

Individuals holding a Master's degree in School Administration and an administrator license are required to complete a minimum of 30 credit hours of coursework above the Master's degree.

Individuals holding a Master's degree in an area other than School Administration are required to complete a minimum of 37 credit hours of coursework above the Master's degree.

Doctor of Philosophy in Educational Leadership with a concentration in P-12 School Leadership

Required courses

Select a minimum of 5 of the following:		
EPY 6214	Educational and Psychological Statistics	
EPY 8214	Intermediate Educational and Psychological Statistics	
EPY 9213	Multivariate Analysis in Educational Research	
EPY 9263	Applied Research Seminar	
EDF 9373	Educational Research Design	
EDF 9463	Qualitative Data Collection in Education	
EDF 9473	Qualitative Data Analysis and Presentation in Education	
EDA 8473	Introduction to Research in Educational Leadership	
Dissertation Research		20
EDA 9000	Dissertation Research /Dissertation in Educational Leadership (hours and credits to be arranged; minimum of 20 hours required)	
Major Required Courses		30
EDA 8223	Seminar in Administration	
or HED 8223	Seminar in Administration	
EDA 8283	Educational Leadership	
or HED 8283	Educational Leadership	
EDA 8353	Applications of Theory to Educational Administration	
or HED 8353	Applications of Theory to Educational Administration	
EDA 8383	Ethical Decision Making in Educational Administration	
or HED 8383	Ethical Decision Making in Educational Administration	
EDA 8413	Human Resources Administration in Education	
EDA 8423	Law and Ethics in Educational Leadership	
EDA 8433	The Superintendency	
EDA 8443	Politics and Policy in Educational Leadership	
EDA 8453	Instructional Leadership	
EDA 8463	Technology and Communication in Educational Leadership	
EDA 8163	Public School Finance	
EDA 8190	Workshop in Educational Administration and Supervision	
EDA 8293	Professional Development of Educational Personnel	
EDA 8273	Educational Administration and Supervision	
Select four of the following:		12
EDF 8323	Comparative Education	
EDF 8393	History of Education in the United States	
EPY 8223	Psychological Foundations of Education	
EDF 8353	Principles of Curriculum Development	
EDF 8383	Issues in Education	
EDF 9313	Philosophy of Education	
Additional assurance if useded		2.0

Additional courses, if needed

Total Hours		80-88
EDA 8190	Workshop in Educational Administration and Supervision	
EDA 8323	Educational Facilities Design	
EDA 8210	Internship in Supervision and Administration (required of students lacking school district- level work experience)	

Doctor of Philosophy in Educational Leadership with a concentration in Higher Education Leadership

Select a minimum of 5 of the follo	wing:	
EPY 6214	Educational and Psychological Statistics	
EPY 8214	Intermediate Educational and Psychological Statistics	
EPY 9213	Multivariate Analysis in Educational Research	
EPY 9263	Applied Research Seminar	
EDF 9373	Educational Research Design	
EDF 9463	Qualitative Data Collection in Education	
EDF 9473	Qualitative Data Analysis and Presentation in Education	
Dissertation Research		2
EDA 9000	Dissertation Research /Dissertation in Educational Leadership	
or HED 9000	Dissertation Research /Dissertation in Higher Education	
Major Required Courses		2
HED 8223	Seminar in Administration	
or EDA 8223	Seminar in Administration	
HED 8283	Educational Leadership	
or HED 8283	Educational Leadership	
HED 8353	Applications of Theory to Educational Administration	
or EDA 8353	Applications of Theory to Educational Administration	
HED 8383	Ethical Decision Making in Educational Administration	
or EDA 8383	Ethical Decision Making in Educational Administration	
HED 8123	Organization and Governance in Higher Education	
HED 8683	Policy Issues in Higher Education	
HED 8643	Advanced Legal Principles in Higher Education	
HED 8653	Finance and Higher Education	
Select 4 of the following		1
HED 8673	Planning and Institutional Research in Higher Education	
HED 8623	Diversity, Globalization and the College Student	
HED 8133	Curriculum and Instruction in Higher Education	
HED 8633	History of American Higher Education	
HED 8523	Student Development Theory	
CCL 8113	Community College History/Philosophy	
Additional Course(s)		3-
HED 8613	Academic Scholarship in Higher Education	

Doctor of Education with a concentration in P-12 School Leadership

EDA 8163	Public School Finance	3
EDA 8223	Seminar in Administration	3
EDA 8423	Law and Ethics in Educational Leadership	3
EDA 8433	The Superintendency	3
EDA 8443	Politics and Policy in Educational Leadership	3
EDA 8453	Instructional Leadership	3
EDA 8463	Technology and Communication in Educational Leadership	3

Total Hours		57
EDA 8643	Doctoral Capstone 3	3
EDA 8633	Doctoral Capstone 2	3
EDA 8623	Doctoral Capstone 1	3
EDA 8563	Program Evaluation	3
EDA 8483	Survey Research	3
EDA 8493	Action Research	3
EDA 8473	Introduction to Research in Educational Leadership	3
EDA Elective 2		3
EDA Elective 1		3
EDA 8413	Human Resources Administration in Education	3
EDA 8353	Applications of Theory to Educational Administration	3
EDA 8283	Educational Leadership	3

Instructional Systems and Workforce Development

Department Head: Dr. Marty Bray

Graduate Coordinator: Dr. Chien Yu 100 Industrial Education Building Box 9730 Mississippi State, MS 39762 Telephone: 662-325-2281 Fax: 662-325-7599 E-mail: cyu@colled.msstate.edu (esm229@msstate.edu)

Master of Science in Instructional Technology (MSIT) Program Coordinator: Dr. Sang Joon Lee

Starkville and Online Campuses 259 IED Building Telephone: 662-325-2281 E-mail: slee@colled.msstate.edu

Educational Specialist (Ed.S.) Program Coordinator: Dr. Mabel Okojie

214A IED Building Telephone: 662-325-2281 E-mail: MOkojie@colled.msstate.edu

Doctor of Philosophy (Ph.D.) in Instructional Systems and Workforce Development Program Coordinator: Dr. James Adams

Starkville and Online Campuses 214B IED Building Telephone: 662-325-2281 E-mail: JAdams@colled.msstate.edu

Veterans' Certificate Program Coordinator: Dr. James Adams

Distance Campus 256 IED Building Telephone: 662-325-2281 E-mail: jadams@colled.msstate.edu

The Department of Instructional Systems and Workforce Development (ISWD) offers graduate coursework leading to master's degrees in Technology (MST) and Instructional Technology (MSIT). The master's programs are offered with a thesis option, requiring a minimum of 30 semester credit hours for the MST program and 33 semester credit hours for the MSIT program; the non-thesis option is also offered. The educational specialist degree may be earned with a major in Education and a concentration in Technology. A doctor of philosophy degree program in Instructional Systems and Workforce Development is also available. In addition, the department offers a Veterans' Certificate Program. For more information, contact the Department of Instructional Systems and Workforce Development.

Admission Criteria

Prerequisites for admission into the graduate program include all the general requirements of the Graduate School. International students must obtain a minimum TOEFL score of 550 PBT (79 iBT) or a minimum IELTS score of 6.5.

A student applying for admission into the Department of Instructional Systems and Workforce Development must submit the complete application packet to the Graduate School no later than:

Applying For	Domestic Deadline	International Deadline
Summer first 5-week	April 1	March 1
Summer second 5-week	April 1	March 1
Summer 10-week	April 1	March 1
Fall	July 1	May 1
Spring	November 1	September 1

No applications are accepted after these deadlines for the respective admission semester.

A complete admission packet consists of the following items:

Ph.D. Program

- 1. Application to the graduate degree program
- 2. Three letters of recommendation (preferably from faculty and administrators who can comment about your scholarly ability)
- 3. Statement of purpose (a minimum of one page single-spaced). In the statement, please make sure to address the following.
 - · Describe the purpose of applying for the Ph.D. degree in this program area
 - · Identify your research interest
 - Discuss your career goals

4. Official scores from all sections of the Graduate Record Examination (GRE) or Graduate Management Admissions Test (GMAT). Applicants with a graduate GPA of 3.50 or higher on previous graduate work from an accredited institution may qualify for a waiver of the GRE/GMAT requirement.

- 5. Official transcripts from all colleges and universities attended
- 6. A copy of professional résumé

Ph.D. applicants who pass the initial screening will be contacted for an online interview.

Master's and Educational Specialist (Ed.S.) Programs

- 1. Application to the graduate degree program
- 2. Three letters of recommendation (preferably from faculty and administrators who can comment about your scholarly ability)
- 3. Statement of purpose (a minimum of one page, single-spaced). In the statement, please make sure to address the following.
 - · Describe the purpose of applying for the degree in this program area
 - Discuss your career goals
- 4. Official transcripts from all colleges and universities attended

Full admission to any departmental graduate program requires a minimum undergraduate GPA of 2.75 or higher from a four-year accredited institution or a minimum graduate GPA of 3.00 or higher on previous graduate work from an accredited institution.

Provisional Admission

If an applicant does not fully meet the requirements of the program, it may be possible for that student to be admitted provisionally. If admitted provisionally, the student must attain a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University after admission to the program. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 GPA is not attained, the student shall be dismissed from the graduate program.

Contingent Admission

A student may be admitted to departmental graduate programs with conditional requirements identified by the department (e.g., writing requirement). If a prospective student has met all admission requirements and is in the final semester of previous degree work, the student may be eligible for contingent admission. If the student is admitted contingently, s/he has to fully complete the conditional requirements no later than the third semester after admission to the program.

Readmission Criteria

The Department of Instructional Systems and Workforce Development requires that a student who has not been enrolled for three consecutive semesters must submit a readmission application that includes:

- Three letters of recommendation (if they are older than three years since the last application), and
- A revised statement of purpose that:
- 1. describes the purpose of reapplying
- 2. discusses the applicant's career goals
- 3. explains how circumstances have changed making academic improvement a realistic goal
- 4. identifies the applicant's research interest (Ph.D. students only).

Academic Performance

Unsatisfactory performance is defined as any of the following:

- Failure to maintain a B average in graduate courses attempted after admission to the program (i.e., program and non-program courses)
- A grade of U, D, or F in any one course
- More than 6 credit hours of C grades
- · Failure of the preliminary/comprehensive examination
- · Unsatisfactory evaluation of a thesis or dissertation
- · Failure of the research defense
- · Any other failure of a required component of one's program of study

Any one of these or a combination will constitute the basis for review for possible dismissal. If unsatisfactory performance is determined, the graduate coordinator, the major professor, and the dean will review the student's record and determine a course of action: immediate dismissal or the establishment of a probationary period in which corrective action must take place. It is the major professor's responsibility to ensure that any student who has performed unsatisfactorily be recommended for termination from the degree program before the beginning of the subsequent semester.

Appeal of dismissal can be made by submitting a written appeal statement to the graduate coordinator and/or department head. If the dismissal, upon the student's appeal, is upheld by the graduate coordinator and/or department head, the student can then submit a written appeal to the Dean of the College of Education. If the student is not satisfied with the decision of the Dean, he/she may choose to submit a final appeal of the dismissal to the Provost.

Accelerated Program

Highly qualified undergraduates at Mississippi State University are encouraged to apply to the Accelerated Program in ISWD. This program permits students to earn up to 9 hours of graduate-level coursework during the final year of undergraduate studies. Students take graduate-level courses and earn both undergraduate credit and graduate credit simultaneously. Upon completion of the graduate course(s), undergraduate credit is also awarded.

Students need to consult with a potential graduate advisor or the graduate coordinator in ISWD to ensure graduate credit could be applied to a program of study for the M.S. degree. Interested students should contact the graduate coordinator, Dr. Chien Yu, and consult Accelerated Programs (p. 48) for complete information.

In addition to the University requirements, the Department of Instructional Systems and Workforce Development also requires the following information from applicants:

- 1. A minimum of 90 hours toward the bachelor's degree
- 2. A statement of purpose (500-750 words, e.g., why applying for the program)

Master of Science in Instructional Technology (M.S.I.T.) - Thesis

Required Courses

TECH 8693	Multiple Perspectives on Instructional Systems and Technology	
TECH 8703	Trends and Issues in Instructional Systems	
TECH 8713	Research in Instructional Systems & Workforce Development	
TECH 8793	Directed Project and Portfolio Development	
TECH 8843	Foundations of Instructional Systems and Technology	
Concentration (choose one concentration		12

Concentration (choose one concentration)

Instructional Design Concentration:

15

Total Hours		33
TKT 8000	Thesis Research/ Thesis in Technology Teacher Education	6
Thesis Option		
TECH 8643	Multimedia Design II	
TECH 8743	Interactive Media	
TECH 8543	Multimedia Design I	
TECH 8443	Theory of Multimedia Learning	
Multimedia Concentration:		
TECH 8863	Grant Writing Essentials	
TECH 8823	Design, Delivery, & Management of Distance Education	
TECH 8853	Learning Technologies in Distance Education	
TECH 8813	Foundations of Distance Education	
Distance Education Concentration:		
TECH 8723	Instructional Design II	
TECH 8623	Instructional Design I	
TECH 8533	Evaluation and Assessment in Instructional Systems & Technology	

Total Hours

At least 12 hours must be from 8000-level courses. A written comprehensive examination and an oral comprehensive examination in defense of the thesis are required.

Master of Science in Instructional Technology (M.S.I.T.) - Non-Thesis

Required Courses		15
TECH 8693	Multiple Perspectives on Instructional Systems and Technology	
TECH 8703	Trends and Issues in Instructional Systems	
TECH 8713	Research in Instructional Systems & Workforce Development	
TECH 8793	Directed Project and Portfolio Development	
TECH 8843	Foundations of Instructional Systems and Technology	
Concentration (choose one con	centration)	12
Instructional Design Concentrat	tion:	
TECH 8523	Project Management in Instructional Design	
TECH 8533	Evaluation and Assessment in Instructional Systems & Technology	
TECH 8623	Instructional Design I	
TECH 8723	Instructional Design II	
Distance Education Concentrati	ion:	
TECH 8813	Foundations of Distance Education	
TECH 8823	Design, Delivery, & Management of Distance Education	
TECH 8853	Learning Technologies in Distance Education	
Multimedia Concentration:		
TECH 8443	Theory of Multimedia Learning	
TECH 8543	Multimedia Design I	
TECH 8643	Multimedia Design II	
TECH 8743	Interactive Media	
Non-Thesis Option Electives		6
Total Hours		33

At least 15 hours must be from 8000-level courses. A written comprehensive examination is required.

Educational Specialist in Education (Ed.S.) with Concentration in Technology - Thesis

T () ()		
Additional courses selected wit	h approval of the student's graduate committee and the graduate coordinator	21
TKT 8000	Thesis Research/ Thesis in Technology Teacher Education	6
EPY 6214	Educational and Psychological Statistics	4

One-half or more of the hours must be from 8000-level courses. A final written comprehensive examination and thesis defense are required.

Educational Specialist in Education (Ed.S.) with Concentration in Technology - Non-Thesis

Total Hours		31
Additional courses selected	with approval of the student's graduate committee and the graduate coordinator	24
TKT 7000		3
EPY 6214	Educational and Psychological Statistics	4

At least 15 hours must be from 8000-level course. A final written comprehensive examination is required.

Doctor of Philosophy (Ph.D.) in Instructional Systems and Workforce Development

Research and Statistics Requirement

Total Hours		80
	be arranged)	20
TKT 9000	Dissertation Research /Dissertation in Technology Teacher Education (hours and credits to	20
	isor for list of approved general electives)	12-18
Approved technology electives (see a		24-30
TECH 8233	Analysis of Workforce Education Programs and Survey Research in Workforce Development	
TECH 8213	Content and Methods of Teaching in Career and Technology Education	
TECH 8263	Philosophy and Administration of Career and Technology Education	
Select one of the following:		3
Postsecondary Courses		
TECH 6263	Diversity in Work and Educational Environments	
TECH 8273	Contemporary Issues in Curriculum Planning in ISWD	
TECH 9213	Foundations, Trends and Issues in Workforce Development, Technology and Leadership Education	
Select two of the following:		6
Foundations Courses		
EDF 9473	Qualitative Data Analysis and Presentation in Education	
EDF 9463	Qualitative Data Collection in Education	
EDF 9453	Introduction to Qualitative Research in Education	
EDF 9443	Single-Subject Research Designs for Education	
EPY 9263	Applied Research Seminar	
EDF 9373	Educational Research Design	
EPY 9213	Multivariate Analysis in Educational Research	
Select three of the following:		9
EPY 6214	Educational and Psychological Statistics	
EPY 8214	Intermediate Educational and Psychological Statistics	

1

A technology elective is any 6000, 7000, 8000 or 9000-level course with a TECH/TKT prefix that is not included in the required courses. If a student takes more than the required number of courses in research, foundations, or postsecondary, those courses will be classified as an approved free elective.

Minor courses are optional.

All department requirements must be completed, and all College of Education requirement courses must be completed to satisfy degree requirements prior to graduation.

The Doctor of Philosophy in Instructional Systems and Workforce Development (TSWD) is located within the College of Education and is designed to provide students with knowledge of instructional technology, research design methodologies to conduct research, foundations of education, and postsecondary education. Each student is assigned a major professor and a committee. A formal program of study is developed by the student with the advice and concurrence of the student's major professor and other committee members no later than the student's second semester of enrollment.

A minimum of 90 semester hours of post-baccalaureate credit is necessary to meet the ISWD doctoral degree. In order for the program to reflect students' content areas in research and foundation levels, students are required to take two required research and statistics courses and two required foundations courses from the Department of Instructional Systems and Workforce Development (ISWD). The hours taken in these required classes will

serve to meet the requirements for Research, Foundations, and Postsecondary and will not be reflective of the 24-30 hours needed to complete the Technology requirements. Two-thirds or more of the hours on the doctoral program of study, exclusive of dissertation credits, must be in 8000-9000 level courses or their equivalent. Approved 7000 Directed Individual Study courses count toward this requirement. Ordinarily no more than 6 semester hours of graduate credit earned in DIS courses or 6 semester hours of special problem courses may be included on the student's approved program of study. No more than 9 semester hours of a combination of DIS and special problem courses may be included on the student's approved program of study. Twenty hours of dissertation research, written and oral preliminary examinations, a dissertation, and an oral examination in defense of the dissertation are required.

Completion Requirements

All graduate students submitting a thesis or dissertation must attend the thesis/dissertation workshops conducted by the Library for the Department of Instructional Systems and Workforce Development prior to the application for the written comprehensive examination. All students seeking the doctor of philosophy degree must satisfy research skills requirements before taking the written preliminary examination.

Veterans' Certificate Program

The Veterans' Certificate Program is offered at the undergraduate and graduate levels. The certificate is designed for anyone at any level who would like to serve veterans. Employees of colleges and universities, corporations, government at all levels, and other professionals who are interested in serving veterans should obtain this certificate. As part of the University's ongoing commitment to veterans, the certificate provides the knowledge, skills, and competencies that individuals will need to support veterans as they transition to civilian life.

The curriculum is designed to increase the capabilities of individuals within the federal and state governments, educational institutions, and private corporations who work with veterans' issues. Individuals working in the educational benefits area will find this program of particular value. The attainment of the Veterans' Certificate could be used as a precursor to position advancement within any governmental agency, federal or state, that deals with matters relevant to veterans.

For more information, contact the Department of Instructional Systems and Workforce Development, Box 9730, Mississippi State, MS 39762 or by email at iswd@colled.msstate.edu. Information is also available at iswd.msstate.edu.

Prerequisite	
TKB 3133	
Required Courses	
TKT 4403/6403	
TKT 4413/6413	
TKT 4423/6423	
TKT 4433/6433	
Total Hours	0

Kinesiology

Department Head: Dr. Stanley P. Brown Graduate Coordinator: Dr. Adam Knight 216 McCarthy Gym Box 6186 Mississippi State, MS 39762 Telephone: 662-325-2963 Website: kinesiology.msstate.edu (http://www.kinesiology.msstate.edu/)

Graduate study is offered in the Department of Kinesiology leading to the Master of Science degree (concentrations in Exercise Physiology, Sport Pedagogy, and Sport Administration) and Doctor of Philosophy degree (concentrations in Exercise Science and Sport Studies). Graduate assistant positions are available. To secure additional information, contact the departmental Graduate Coordinator.

Master of Science in Kinesiology

The Master of Science program offers four concentrations: Exercise Physiology, Sport Administration, Sport Pedagogy, and Disability Studies. The concentration in Exercise Physiology prepares students for careers in fitness and allied health care professions. The concentration in Sport Administration prepares students for careers in the sport industry, including positions with professional, collegiate, and recreational sport organizations. The concentration in Sport Pedagogy prepares students for leadership roles as coaches and physical educators. Initial license in Physical Education and Coaching is required for the Sports Pedagogy concentration. The concentration in Disability Studies prepares students for careers in physical activity promotion for persons with disabilities. These concentrations also prepare students for advanced study at the doctoral level.

Admission Criteria

The following items are required in applying to the master's programs in the Department of Kinesiology:

- 1. A completed MSU Graduate School application form
- 2. Official transcripts from all institutions attended since high school
- 3. Graduate Record Examination (GRE) General Test scores
- 4. Three professional letters of recommendation. Ideally, the individuals writing the letters should be in a position to specifically comment about the applicant's academic ability (e.g., former professors or advisors)
- 5. A written statement of purpose, which should reflect a strong sense of career direction and highlight the applicant's qualifications, skills, and professional experience
- 6. A résumé or curriculum vitae

Admission is a competitive process. Positions within the programs are limited, and more individuals may apply than are able to be accepted. Competitive applicants will have a GPA of 3.00 or better in their final 60 undergraduate hours as well as acceptable scores on the verbal, quantitative, and analytical sections of the GRE exam.

An international student applying for admission must score a minimum of 550 PBT (79 iBT) on the Test of English as a Foreign Language (TOEFL) or a minimum of 6.5 on the International English Language Testing Systems (IELTS) in addition to meeting all other admission criteria.

Doctor of Philosophy in Kinesiology

The Doctor of Philosophy programs offers two concentrations: Exercise Science and Sport Studies. The degree is a research-focused program designed to prepare professionals with the cognitive and research skills needed to be productive scholars. The focus of the Exercise Science concentration is the scientific study of how biological systems function during physical activity, exercise and sports, emphasizing applications to both clinical and healthy populations. The Sport Studies concentrations involves studying sport from an interdisciplinary perspective, encompassing the fields of sport management, sport pedagogy, sport philosophy, and sport sociology, among others.

Admission Criteria

Prior to formally applying to the doctoral program, students should familiarize themselves with the research interests of graduate faculty members in the Department of Kinesiology and identify a faculty member whose research agenda aligns with their interests. A prospective applicant should then contact that faculty member to discuss his/her "fit" with the faculty member's research interests. If possible, prospective applicants are encouraged to visit the MSU campus. When an informal understanding is reached regarding the student's suitability to enter the doctoral program under the guidance of the faculty member, the student may then formally apply to the Graduate School. This does not guarantee a student admission to the doctoral program, but it is a necessary step prior to the formal application.

The following items are required to formally apply to the doctoral degree programs in the Department of Kinesiology:

- 1. A completed MSU Graduate School application form
- 2. Official transcripts from all institutions attended since high school; students must have completed a master's degree prior to being admitted to the doctoral program
- 3. Graduate Record Examination (GRE) General Test scores
- 4. Three professional letters of recommendation; at least two letters should be from university professors from whom the student has taken courses or worked with in a research capacity
- 5. A written statement of purpose, which should clearly explain the applicant's research interests and highlight how these interests align with faculty members in the department, particularly the faculty member who the applicant wishes to serve as his/her advisor
- 6. An academic writing sample (e.g., a published research article, thesis, or other academic paper)
- 7. A curriculum vitae

An international student applying for admission must score a minimum of 550 PBT (79 iBT) on the Test of English as a Foreign Language (TOEFL) or a minimum of 6.5 on the International English Language Testing Systems (IELTS) in addition to meeting all other admission criteria.

Application deadlines in the Department of Kinesiology are as follows:

Fall/Summer admission	March 1
Late Application Deadline for Fall admission	June 1
Spring admission	October 15

Applications are reviewed periodically each semester, and applicants should generally expect to receive a reply within 30 days of the application deadline. Because of the competitive nature of admissions, it is recommended that individuals apply as far in advance of a deadline as possible. Students who wait until the late application deadline to apply may find there are no remaining spaces available in the program.

Academic Performance

Students in the Department of Kinesiology must meet University and College of Education academic performance requirements in order to remain in good standing. These requirements are found elsewhere in the Mississippi State University *Graduate Catalog*. Students are strongly encouraged to familiarize themselves with academic performance requirements.

Master's Degree Completion Requirements

The Master of Science in Kinesiology degree requires a minimum of 33 hours of graduate credit. The student will develop, in cooperation with the major professor and other committee members, a program of study during the first semester in the program.

The student pursuing Option 1 (Thesis) is required to complete 6 credit hours of thesis work as part of the 33 required hours. A thesis committee, consisting of at least three graduate faculty members, including the student's major professor and at least one more graduate faculty member from the Department of Kinesiology, must be established. Upon completion of the thesis, the student must provide copies for the department head, major professor, and committee members.

A student pursuing Option 2 or 3 (Non-Thesis) must successfully complete written comprehensive examinations prior to graduation. The student must be within 6 hours of graduation (coursework completion) or in the last semester of study and in good standing to be eligible to apply for comprehensive examinations.

Master of Science in Kinesiology with Exercise Physiology Concentration

Research Core		6
KI 8303	Research in Kinesiology	
KI 8313	Interpretation of Data in Kinesiology	
Exercise Physiology Core		9
EP 8203	Advanced Exercise Physiology	
EP 8243	Cardiorespiratory Exercise Physiology	
EP 8263	Exercise Metabolism	
Electives		
Select four of the following:		12
EP 8253	Doping and Supplement Use in Sports	
EP 8283	Environmental Exercise Physiology	
EP 8443	Neuromuscular Mechanisms in Exercise	
EP 8453	Biomechanics of Human Movement	
EP 8503	Occupational Physiology	
Select one of the three following concluc	ling options. ¹	6
Option 1: Thesis (6 hours)		
KI 8000	Thesis Research/ Thesis in Kinesiology	
Option 2: Directed Individual Study (6 hours		
KI 7000	Directed Individual Study in Kinesiology	
Additional 3-hour course		
Option 3: Internship (6 hours)		
KI 8710	Internship	
Additional 3-hour course		
Total Hours		33

¹ Students who select the Thesis Option must pass a thesis defense. Students in the Directed Individual Study or Internship Option must pass a comprehensive examination.

Master of Science in Kinesiology with Sport Administration Concentration

Research Core		6
KI 8303	Research in Kinesiology	
KI 8313	Interpretation of Data in Kinesiology	
Sport Administration Core		18
SS 8123	Sport Management	
SS 8203	Funding of Sport	

Total Hours		33
KI 8710 Additional 3-hour course	Internship	
Option 3: Internship (6 hours)		
Additional 3-hour course		
KI 7000	Directed Individual Study in Kinesiology	
Ooption 2: Directed Individual Stu		
KI 8000	Thesis Research/ Thesis in Kinesiology	
Option 1: Thesis (6 hours)		
Select one of the three following of	concluding options.	
Concluding Options	2	6
Graduate-level course subject to a	approval of graduate advisor.	
Electives		3
SS 8883	Ethical Issues in Sport	
SS 8833	Event and Facility Management	
SS 8823	Sport Sponsorships	
SS 8803	Sport Law	

3

Student who select the Thesis Option must pass a thesis defense. Students in the Directed Individual Study or Internship Option must pass a comprehensive examination.

Master of Science in Kinesiology with Sport Pedagogy Concentration

Research Core		6
KI 8303	Research in Kinesiology	
KI 8313	Interpretation of Data in Kinesiology	
Sport Pedagogy Core		12
PE 6533	Developing Coaching Expertise	
PE 8113	Curriculum Construction in Physical Education	
PE 8163	Seminar in Physical Education	
PE 8203	Psychological Aspects of Sport	
Electives		
Select three of the following:		9
EP 6153	Training Techniques for Exercise and Sport	
EP 8253	Doping and Supplement Use in Sports	
EP 8443	Neuromuscular Mechanisms in Exercise	
EP 8453	Biomechanics of Human Movement	
SS 8203	Funding of Sport	
SS 8803	Sport Law	
SS 8883	Ethical Issues in Sport	
EDS 8243	Advanced Planning and Managing of Learning	
EDS 8623	Principles of Effective Instruction in Secondary Schools	
EDX 8173	Special Education in the Regular Classroom	
Concluding Options		
Select one of the three following concluding o	pptions ²	6
Option 1: Thesis (6 hours)		
KI 8000	Thesis Research/ Thesis in Kinesiology	
Option 2: Directed Individual Study (6 hours)		
KI 7000	Directed Individual Study in Kinesiology	
Additional coursework		
Option 3: Internship (6 hours)		
KI 8710	Internship	

Total Hours

² Students who select the Thesis Option must pass a thesis defense. Students in the Directed Individual Study or Internship Option must pass a comprehensive examination.

Master of Science in Kinesiology with Disability Studies Concentration

Research Core		6
KI 8303	Research in Kinesiology	
KI 8313	Interpretation of Data in Kinesiology	
Disabilities Study Core		12
KI 8603	Disability, Physical Activity and Health	
KI 8553	Exercise Management for Persons with Disabilities	
KI 8563	Motor Behavior in Special Populations	
KI 8543	Postural and Locomotor Rehabilitation	
Disability Supporting Area		6
Students should select 2 courses fr	om the following list in consultation with their advisors. Students interested in Assistive Technology	
may take only one of the following o	courses towards the degree: EDX 6353 or COE 6353.	
EDX 6103	Introduction to Teaching Students with Intellectual and Developmental Disabilities	
EDX 6623	Adaptations for Students with Physical/Multiple Disabilities.	
EDX 6353	Assistive Technology in Special Education	
COE 6353	Assistive Technology in the Rehabilitation Process	
COE 8363	Psychological Aspects of Disability	
COE 8373	Medical Aspects of Disability	
Electives		3
	visor and advisory committee. Students should be aware that prerequisites or restrictions may apply to in Assistive Technology may take only one of the following courses towards the degree: EDS 6353 or	
EP 8243	Cardiorespiratory Exercise Physiology	
EP 8263	Exercise Metabolism	
EP 8443	Neuromuscular Mechanisms in Exercise	
EP 8453	Biomechanics of Human Movement	
PE 6163	Principles and Methods of Secondary School Health and Physical Education	
PE 6883	School Health Education	
PE 8113	Curriculum Construction in Physical Education	
SS 8803	Sport Law	
SS 8833	Event and Facility Management	
SS 8883	Ethical Issues in Sport	
Concluding Options ¹		6
Select one of the three following op	tions.	
Option 1 Thesis		
KI 8000	Thesis Research/ Thesis in Kinesiology	
Option 2: Directed Individual Study		
KI 7000	Directed Individual Study in Kinesiology	
Additional coursework approved	by advisor (this additional coursework excludes KI 7000)	
Option 3: Internship		
KI 8710	Internship	
Additional coursework approved	by advisor (this additional coursework excludes KI 7000)	

Total Hours

63

¹ Students who select the Thesis Option must pass a thesis defense. Students in the Directed Individual Study or Internship Option must pass a comprehensive examination.

Doctor of Philosophy in Kinesiology with Exercise Science Concentration

College of Education Require	ed Course: University Instruction	3
HED 8133	Curriculum and Instruction in Higher Education	
Major Required Courses		
Research Methods and Statistic	cs (Select four courses, at least 12 hours, from the list)	12
ST 6213	Nonparametric Methods	
ST 8114	Statistical Methods	
ST 8214	Design and Analysis of Experiments	
ST 8253	Regression Analysis	
ST 8313	Introduction to Survey Sampling	
ST 8853	Advanced Design of Experiments I	
ST 8863	Advanced Design of Experiments II	
Directed Research		
KI 7000	Directed Individual Study in Kinesiology	3
KI 9000	Dissertation Research /Dissertation in Kinesiology	21
Exercise Science Concentrat	ion Requirements	3
KI 8913	Doctoral Seminar in Exercise Science	
Departmental Cognate (choo	se 12 hours from the following with approval of supervisory committee)	12
EP 8203	Advanced Exercise Physiology	
EP 8243	Cardiorespiratory Exercise Physiology	
EP 8253	Doping and Supplement Use in Sports	
EP 8263	Exercise Metabolism	
EP 8283	Environmental Exercise Physiology	
EP 8443	Neuromuscular Mechanisms in Exercise	
EP 8453	Biomechanics of Human Movement	
EP 8503	Occupational Physiology	
KI 8603	Disability, Physical Activity and Health	
KI 8543	Postural and Locomotor Rehabilitation	
KI 8553	Exercise Management for Persons with Disabilities	
KI 8563	Motor Behavior in Special Populations	
Outside Electives		9

Students choose a cognate field of study from an appropriate science-related discipline outside of the Department of Kinesiology. Choice of courses must be approved by the Supervisory Committee. Students may elect to take 3 additional credit hours to fulfill the requirements for a 12-hour minor in a specific area.

Total Hours

Doctor of Philosophy in Kinesiology with Sport Studies Concentration

College of Education Red	quired Course: University Instruction	3
HED 8133	Curriculum and Instruction in Higher Education	
Major Required Courses		
Research Methods and Sta	atistics (Select four courses, at least 12 hours, from the list)	12
ST 6213	Nonparametric Methods	
ST 8114	Statistical Methods	
ST 8214	Design and Analysis of Experiments	
ST 8253	Regression Analysis	
ST 8313	Introduction to Survey Sampling	
ST 8853	Advanced Design of Experiments I	
ST 8863	Advanced Design of Experiments II	

Students in the Sport Studies Concentration may take the following two courses and two others from the above list for their 12 hours of research and statistics:

AN 6143	Ethnographic Methods	
EDF 9453	Introduction to Qualitative Research in Education	
Directed Research		
KI 7000	Directed Individual Study in Kinesiology	3
KI 9000	Dissertation Research /Dissertation in Kinesiology	21
Sport Studies Concentration Require	rements	3
KI 8923	Doctoral Seminar in Sports Studies	
Departmental Cognate (12 credit ho	urs from the following list with approval of supervisory committee)	12
PE 6533	Developing Coaching Expertise	
PE 8113	Curriculum Construction in Physical Education	
PE 8163	Seminar in Physical Education	
PE 8203	Psychological Aspects of Sport	
SS 6403	Gender and Sport	
SS 8123	Sport Management	
SS 8203	Funding of Sport	
SS 8803	Sport Law	
SS 8823	Sport Sponsorships	
SS 8833	Event and Facility Management	
SS 8883	Ethical Issues in Sport	
KI 8603	Disability, Physical Activity and Health	
Outside Electives		9
Students choose a cognate field of stu	dy from an appropriate discipline outside the Department of Kinesiology. Choice of courses must	

Students choose a cognate field of study from an appropriate discipline outside the Department of Kinesiology. Choice of courses must be approved by the supervisory committee. Students may elect to take 3 additional credit hours to fulfill the requirement for a minor in a specific area.

Total Hours

Music Education

Department Head: Dr. Barry E. Kopetz Graduate Coordinator: Dr. Gary Packwood Music Building A PO Box 6240 Mississippi State, MS 39762 Telephone: 662-325-3070 http://music.msstate.edu/

The mission of the Department of Music at Mississippi State University is to contribute to the culture and education of our diverse state and region by providing quality training and opportunities through programs of teaching, research, and service. The department has the following goals:

- · Offers excellent instruction to its students, helping to produce future generations of music professionals and patrons
- Engages in meaningful research, performance, and other creative work, positively affecting students, colleagues, and audiences throughout our community and beyond

The department's first obligation is to provide music instruction and specialized pedagogical training for state-certified elementary and secondary school music teachers. This program of instruction is intended to preapre students for exemplary entry-level teaching performance and for admission to selective graduate schools. To this end, the Department of Music provides the following:

- · Curricula and advisement that encourage students to acquire a broad, liberal education
- · A comprehensive education in the art of music
- · A background in existing music curricula, curriculum design principles, materials, and methodologies
- · Preparation in general education, theory, history, and methodology

Master of Music Education

The Department of Music offers a Master of Music Education degree (M.M.E.). The M.M.E. is a practitioner's degree, focused on advancing the knowledge and skills of the classroom music educator in one of three specific concentrations: Choral Music, Elementary Music, or Instrumental Music. It

is a 32-hour degree consisting of a 14-hour core, 8 hours in the concentration (Choral Music, Elementary Music, or Instrumental Music) and 10 hours of electives. The M.M.E. is designed to be completed in three consecutive summers at MSU, culminating in a final project evaluated by the student's M.M.E. committee.

Admission

To be considered for admission, the applicant must meet all MSU Graduate School admission requirements, including the following:

- Must have earned a baccalaureate degree in Music Education or a related field
- Preferably have an undergraduate grade point average of 3.00 for admission to the graduate program
- Must submit three letters of recommendation, with at least two coming from individuals familiar with the applicant's academic work; letters should address the applicant's potential for successfully completing graduate studies
- Must submit a personal statement (500-1,000 words) describing the applicant's purpose for undertaking graduate study, including professional plans and career goals

Application is made through the Mississippi State Graduate School website (http://www.grad.msstate.edu/). In addition to the application, complete information regarding is available regarding graduate admissions and graduate academic policy. A complete application packet to the Graduate School must be received by March 1 for consideration for the following Summer term.

Academic Performance

The Department of Music defines satisfactory performance in graduate-level coursework as a GPA of at least 3.00 on all coursework attempted with no course receiving the grade of D or lower. Students may retake the first course for which they receive the grade of D. Failure to complete any required component of the M.M.E. can result in dismissal according to Graduate School policy.

The Department of Music follows Graduate School policy relating to academic performance. In the event a student's performance warrants dismissal from a graduate program, the Music Graduate Coordinator will petition the Graduate School to dismiss the student from the program. The student will be notified of the action by email.

Master of Music Education with a concentration in Choral Music, Elementary Music, or Instrumental Music

Major Required Courses		14
MUE 8363	Research in Music Education	
MU 8013	Seminar in Music History Research	
MU 8023	Seminar in Music Theory	
MUE 8033	Current Topics in Music Education	
MUE 9012	Final Project in Music Education	
Choose One Concentration		8
Choral Music Concentration	Courses	
MUE 8102	Advanced Vocal Pedagogy	
MUE 8112	Seminar in Choral Literature	
MUE 8122	Techniques of Choral Conducting	
MUE 8132	Choral Program Development and Curricular Structure	
Elementary Music Concentra	ation Courses	
MUE 8202	The Child Voice	
MUE 8212	Elementary Music Pedagogy	
MUE 8222	Media, Materials and Resources for the Elementary Music Specialist	
MUE 8232	Instructional Design for the Elementary Music Program	
Instrumental Music Concent	tration Courses	
MUE 8302	Advanced Woodwind Pedagogy	
MUE 8312	Seminar in Brass and Percussion Pedagogy	
MUE 8322	Wind Band Conducting and Rehearsal Techniques	
MUE 8332	Instructional Design for the Instrumental Music Program	
Electives		10
Choose 10 hours from COE, M	Music, or other advisor-approved graduate courses. The below electives are suggested.	
EDF 8553	Research in the Classroom	
EDS 8103	Advanced Methodologies in Middle and Secondary Education	

EPY 6214	Educational and Psychological Statistics	
MU 8402	Advanced Instrumental Arranging	
MU 8412	World Drumming	
MU 8422	Keyboard Skills for Music Educators	
MU 8482	Wind Band Literature	
MUA 8440	Individual Studio Instruction	
MUA 8450	Applied Composition	
MUA 8460	Applied Conducting	
MUE 8432	Guitar in the Classroom	
MUE 8472	Jazz Techniques for the Music Educator	
Total Hours		32

Total Hours

Note: A minimum of 15 hours is required at the 8000-level or above.

James Worth Bagley College of Engineering

Dean: Dr. Jason M. Keith

Associate Dean for Research and Graduate Studies: Dr. Kari Babski-Reeves 250 McCain Box 9544 Mississippi State, MS 39762 Telephone: 662-325-2270 Fax: 662-325-8573 E-mail: kari@bagley.msstate.edu or josie@bagley.msstate.edu Website: http://www.engr.msstate.edu (http://www.bagley.msstate.edu)

Degree and Certificate Programs

Department	Degree and Major	Concentration	Thesis	Non-Thesis	Starkville	Meridian	Distance
Aerospace Engineering	Master of Science - Aerospace Engineering		Х	Х	Х		Х
Aerospace Engineering	Doctor of Philosophy - Engineering	Aerospace Engineering			Х		Х
Agriculture and Biological Engineering	Master of Science - Biological Engineering		Х		Х		
Agriculture and Biological Engineering	Master of Science - Biomedical Engineering		Х		Х		
Agriculture and Biological Engineering	Doctor of Philosophy - Engineering	Biological Engineering			Х		
Agriculture and Biological Engineering	Doctor of Philosophy - Biomedical Engineering				х		
Dave C. Swalm School of Chemical Engineering	Master of Science - Chemical Engineering		Х	х	х		
Dave C. Swalm School of Chemical Engineering	Doctor of Philosophy - Engineering	Chemical Engineering			Х		х

Civil & Environmental Engineering	Master of Science - Civil Engineering		Х	х	x	Х
Civil & Environmental Engineering	Doctor of Philosophy - Engineering	Civil Engineering			X	Х
Computer Science & Engineering	Master of Science - Computer Science		Х	Х	X	Х
Computer Science & Engineering	Master of Science - Cyber Security and Operations	Cyber Defense		Х	X	Х
Computer Science & Engineering	Master of Science - Cyber Security and Operations	Cyber Operations		Х	X	Х
Computer Science & Engineering	Doctor of Philosophy - Computer Science				X	X
Electrical & Computer Engineering	Master of Science - Electrical and Computer Engineering		х	х	X	Х
Electrical & Computer Engineering	Doctor of Philosophy - Electrical and Computer Engineering				X	X
Industrial & Systems Engineering	Master of Science - Industrial Engineering	Human Factors & Ergonomics	Х	Х	Х	Х
Industrial & Systems Engineering	Master of Science - Industrial Engineering	Industrial Systems	X	Х	X	Х
Industrial & Systems Engineering	Master of Science - Industrial Engineering	Management Systems	Х	Х	Х	Х
Industrial & Systems Engineering	Master of Science - Industrial Engineering	Manufacturing Systems	Х	Х	X	Х
Industrial & Systems Engineering	Master of Science - Industrial Engineering	Operations Research	Х	Х	Х	Х
Industrial & Systems Engineering	Doctor of Philosophy - Industrial and Systems Engineering				X	X
Mechanical Engineering	Master of Science - Mechanical Engineering		Х	Х	Х	Х
Mechanical Engineering	Doctor of Philosophy - Engineering	Mechanical Engineering			X	Х
Interdisciplinary	Master of Engineering - Engineering		Х	Х		Х

202 Graduate Catalog

Interdisciplinary	Master of Science - Computational Engineering		Х	Х	X	Х
Interdisciplinary	Doctor of Philosophy - Computational Engineering				X	Х
Interdisciplinary	Doctor of Philosophy - Engineering	Applied Physics			X	
Interdisciplinary	Doctor of Philosophy - Engineering	Engineering Education			X	X

Certificate Programs

Note: The following certificates are not stand-alone programs and must be completed in conjunction with either an undergraduate or graduate degree program:

- Automotive Engineering
- Computational Biology
- Information Assurance Professional Certificate
- Materials Engineering

The Bagley College of Engineering (BCoE) was created at MSU in 1902 as the School of Engineering and was named for MSU alumnus James Worth Bagley (EE, B.S. 1961; M.S. 1966) in 2002. The BCoE seeks to increase doctoral enrollment and direct-admits qualified B.S. graduates to doctoral programs. The College is comprised of eight academic departments and offers 12 master's degrees and 12 doctoral degrees. Excellence in research is a high priority for BCoE faculty. The College is comprised of tenure-track faculty members and research faculty who play an active role in both teaching and research for graduate students. With several state-of-the-art research centers and laboratories to provide hands-on experience for master's and doctoral students, excellence extends beyond the classroom offerings. Information on BCoE research centers and laboratories may be accessed under General Information—Centers and Institutes in this publication. The BCoE also focuses on the placement of BCoE Engineering graduates with major multinational companies and top research universities. BCoE is committed to a diverse student study body and seeks to enrich graduate education by providing a multiplicity of views and perspectives that enhance research, teaching, and the development of new knowledge. Additional information about the Bagley College of Engineering is available at http://www.bagley.msstate.edu (http://www.bagley.msstate.edu/).

Academic Requirements

All graduate students in the BCoE must complete 50% of their degree coursework requirement at the 8000-level.

Doctor of Philosophy in Engineering with concentration in Engineering Education

Graduate Coordinator: Dr. Lesley Strawderman E-mail: strawderman@ise.msstate.edu

Required C	Courses
------------	---------

ENE 8003	Foundations in Engineering Education	3
ENE 8303	Pedagogy & Assessment in Engineering Education	3
EDF 8363	Function and Methods of Research in Education	3
EDF 9373	Educational Research Design	3
Statistics Requirement		6-7
Choose one of two sequences:		
ST 8114	Statistical Methods	
& ST 8253	and Regression Analysis	
IE 6623	Engineering Statistics II	
& ST 8603	and Applied Statistics	
Select graduate courses in EDF and EPY		6
Other engineering graduate courses		18
Select graduate elective courses	6	

Dissertation/Research

Total Hours

20 68-69

An oral comprehensive exam is required. Upon successful completion of the comprehensive exam and all coursework, all Ph.D. students must prepare and successfully defend the dissertation before a committee composed of faculty members of the University.

Aerospace Engineering

Department Head: Dr. Rani Sullivan (Interim) Graduate Coordinator: Dr. Adrian Sescu 330 Walker Engineering Building Box A Mississippi State, MS 39762 Telephone: 662-325-3623 E-mail: grad-coord@ae.msstate.edu Website: http://www.ae.msstate.edu/)

The Department of Aerospace Engineering offers graduate study leading to the degrees of Master of Science in Aerospace Engineering and Doctor of Philosophy with an Aerospace Engineering concentration. Online learning options for these degrees are also available (see http://www.bcoelearning.msstate.edu (http://www.bcoelearning.msstate.edu/)). Major areas of study are include the following:

- · Aeroacoustics
- · Aerodynamics
- Aeroelasticity
- Autonomous systems
- · Structures and composites
- · Computational fluid dynamics
- Design optimization
- · Fatigue and fracture
- · Fluid structure interaction
- · Guidance and control
- Nondestructive evaluation

Research in the Department of Aerospace Engineering is performed in state-of-the-art facilities. The Advanced Performance Composite Materials Laboratory focuses on innovative methodologies for structural health monitoring of composite structures. Capabilities include fatigue and fracture testing and non-destructive evaluation. Research in the Autonomous System Research Lab focuses on UAS control and monitoring systems to enable a high degree of autonomous, cooperative behavior in unmanned air and ground systems. Other department facilities include a low speed wind tunnel and a two-stage light gas gun. Faculty and students also conduct research at the Advanced Composites Institute, including the Marvin B. Dow Stitched Composites Development Center, the Raspet Flight Research Laboratory, and the Center for Advanced Vehicular Systems (CAVS), which is a member center of the High Performance Computing Collaboratory. Graduate research and teaching assistantships are available for highly-qualified students.

Accelerated Program

Highly qualified undergraduates in the Bagley College of Engineering are encouraged to consider applying to the Accelerated Program in Aerospace Engineering. This program permits students to earn up to 9 hours of graduate-level coursework and earn both undergraduate credit and graduate credit simultaneously. Students must consult with the Graduate Coordinator to ensure graduate credit could be applied to a program of study for the graduate degree. Interested students should see Accelerated Programs (p. 48) for complete information and contact the department's Graduate Coordinator.

In addition to the University requirements, applicants in the Department of Aerospace Engineering must also meet the following requirements:

- 1. Be enrolled at Mississippi State University in one of the eight Bagley College of Engineering programs
- 2. Have at least 85 hours earned toward their respective B.S. degree
- 3. Have an overall cumulative GPA of at least 3.50

An application package consists of the following items, which must be submitted to the Graduate Coordinator of the Aerospace Engineering Department:

- 1. Application form (NOTE: Students wishing to pursue a thesis in their M.S. program must have the support of an advisor prior to applying for the program).
- 2. One page résumé

 Contact information for three references (included on the application form). Ideal references are those who are knowledgeable about the academic abilities of the applicant. The department will contact these references to gather additional information as needed to determine the acceptability of the study into the program.

The Aerospace Engineering Graduate Coordinator will review applications three times a year to assess whether students possess those qualifications and interests that are indicative of successful completion of the Aerospace Engineering M.S. program.

Admission Criteria

In addition to meeting the requirements discussed in the General Requirements for Admission section of this publication, the minimum requirement for regular admission to the graduate program is a B.S. degree in Aerospace Engineering or a closely related field, with a 3.00/4.00 GPA for the junior and senior years. An applicant with a B.S. degree from a program that is not accredited by EAC/ABET (Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology) must submit GRE general-test scores. Applicants required to take the TOEFL examination (see Admission section for more details) must have a minimum score of 550 PBT (79 iBT) or an IELTS score of 6.5. Applicants for the Ph.D. program should have a M.S. degree in Aerospace Engineering or a closely related field. Exceptionally qualified applicants (GPA in excess of 3.50/4.00 for junior and senior years) may apply for direct admission to the Ph.D. program. Graduates from an EAC/ABET-accredited program will receive the highest consideration.

Contingent Admission

A student whose B.S. or M.S. degree is not in Aerospace or Mechanical Engineering may be granted contingent admission, depending on qualifications and experience. Typically, the contingency is removed by taking undergraduate prerequisite courses in the first few terms after admission. Specific conditions are handled on a case-by-case basis. For more information, please contact the Graduate Coordinator.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be granted admission as a degree-seeking graduate student with provisional status. Please refer to the Provisional Admission requirements (p. 45) section for more details. The minimum acceptable undergraduate grade point average for admission as a provisional student is 2.75/4.00 for the junior and senior years.

Academic Performance and Continued Enrollment

Continued enrollment in the graduate program in Aerospace Engineering is contingent upon satisfactory performance in the courses and research and satisfactory performance toward completion of the degree. Satisfactory performance is achieved when all four of the following criteria are fulfilled:

- 1. The student maintains a B average or better on
 - a. all undergraduate prerequisite courses;
 - b. all graduate courses completed;
 - c. all graduate courses included on the program of study.
- 2. The student has no more than one grade less than C.
- 3. If the student registers for research credits in a given term, he/she receives a Satisfactory (S) grade at the end of the term.
- 4. The student has a major advisor and a supervisory graduate committee by the end of the second term of enrollment.

Should the cumulative GPA (in any of the three categories of the first criterion) be less than a 3.00/4.00 at the end of a term, the student will be placed on probation. Should the student earn a second grade less than C, the student will be terminated immediately. Should the student receive an Unsatisfactory (U) grade on research credit hours attempted, he/she will be placed on probation.

The probationary period is defined to be one term (summer counts as one term if the student is enrolled). If at the end of the probationary period the student has not remedied his/her deficiency (i.e., has not achieved a 3.00 GPA, has not scheduled research credit hours and received a satisfactory grade), then his/her program of study will be terminated. A student may appeal termination of his/her program of study to the Aerospace Engineering graduate coordinator. If the appeal at the program level is unsuccessful, the student may then appeal to the college dean. If the appeal at the college level is unsuccessful, the student may then appeal to Academic Affairs.

Further Information

For information about the program or financial support, contact the Aerospace Engineering Graduate Coordinator (p. 203).

Master of Science in Aerospace Engineering - Thesis

Total Hours		30
Thesis research/dissertation		6
Additional graduate-level coursework		12
8XXX	Coursework at the 8000 level	12

A thesis master's degree student must pass a final thesis defense upon completion of all course requirements.

Master of Science in Aerospace Engineering - Non-Thesis

8XXX	Coursework at the 8000 level	15
Additional graduate-level coursework		15
Total Hours		30

A non-master's degree student must pass a coursework-based comprehensive examination.

Doctor of Philosophy with Aerospace Engineering Concentration

8XXX	Coursework at the 8000 level	15
Additional graduate-level coursework		15
Dissertation research/dissertation		20
Total Hours		50

The number of course hours required of a Ph.D. student depends on each student's needs; numbers shown above are typical beyond a Master's degree. In order to be admitted to candidacy for the Ph.D. degree, a student must pass a doctoral qualifying examination, have his/her dissertation topic approved, and sit for a candidacy examination. A final dissertation defense and an oral examination of the candidate are also required.

Agricultural and Biological Engineering

Department Head: Dr. Alex Thomasson Graduate Coordinator: Dr. Steven Elder 150 Agricultural Engineering Building Box 9632 Mississippi State, MS 39762 Telephone: 662-325-3282 E-mail: abe_head@abe.msstate.edu

Graduate study is offered in the Department of Agricultural and Biological Engineering leading to the degree of Master of Science in Biological Engineering or a Doctor of Philosophy in Engineering. Major areas of study include the following:

- · Agricultural machinery systems
- Precision agriculture
- · Animal waste management
- Sustainable design
- · Pesticide applications and protection
- Bioenvironmental systems
- · Seed processing and storage
- Aquacultural systems
- Agricultural modeling
- Bioenergy
- · Agricultural robotics and automation
- Agricultural big data and artificial intelligence
- · Agricultural sensors and remote sensing

The department has several major research laboratories, such as remote sensing (the Kimbrough Precision Agriculture and Remote Sensing Engineering Laboratory); water quality and environmental engineering; cotton ginning (the MAFES/ABE Mini-Gin, a fully operational cotton gin); and bioenergy. A limited number of graduate research and teaching assistantships are available.

Admission Criteria

Prerequisites for admission into the graduate program include all the general requirements of the Graduate School, an undergraduate engineering degree (or remedial engineering coursework), a satisfactory performance on the GRE for students with a degree from a program that is not EAC/ABET accredited, and identification of a departmental professor who is willing to serve as research director for the master's or Ph.D. project. International students must obtain a TOEFL score of 550 PBT (79 iBT) or IELTS score of 6.5 or higher.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Contingent Admission

If a student applying to the M.S. program does not have an undergraduate degree in engineering, the student will be required to complete or have previous credit in 51 hours of engineering, mathematics, and physical science courses. The student will be granted contingent admission until the course requirement has been satisfied. Similarly, a student applying to the Ph.D. program must have a B.S. or M.S. degree in engineering. The same set of courses will be required before the student is fully admitted into the Ph.D. program.

Academic Performance

Unsatisfactory performance in the graduate program in Biological Engineering is defined as any of the following

- Failure to maintain a B average in attempted graduate courses after admission to the program
- A grade of U, D, or F in any one course
- More than two grades below a B
- · Failure of the qualifying or preliminary exam (Ph.D. students only)
- · Failure of the research defense
- · Unsatisfactory evaluation of a thesis or dissertation
- · Failure of a required component of the program of study

Any one of these, or a combination of these, will constitute the basis for review for possible dismissal. The graduate coordinator will review the record, along with the student's graduate committee, and take a final course of action, which will be immediate dismissal or the establishment of a probationary period in which corrective action must take place. Appeal of dismissal can be made by submitting a written appeal statement to the department head. If the dismissal is upheld by the department head upon the student's appeal, the student can then submit a written appeal to the dean of the College of Engineering.

Master of Science in Biological Engineering

ST 8114Statistical Methods4Select at least one of the following:1ABE 8911Agricultural and Biological Engineering SeminarABE 8921Agriculturual and Bio Engineering SeminarABE XXXXGraduate courseAdditional graduate-level coursework16ABE 8000Thesis Research/ Thesis in Agricultural and Biological Engineering	Total Hours		30
Select at least one of the following: 1 ABE 8911 Agricultural and Biological Engineering Seminar ABE 8921 Agriculturual and Bio Engineering Seminar ABE XXXX Graduate course 3	ABE 8000	Thesis Research/ Thesis in Agricultural and Biological Engineering	6
Select at least one of the following: 1 ABE 8911 Agricultural and Biological Engineering Seminar ABE 8921 Agriculturual and Bio Engineering Seminar	Additional graduate-level coursework		16
Select at least one of the following: 1 ABE 8911 Agricultural and Biological Engineering Seminar	ABE XXXX	Graduate course	3
Select at least one of the following: 1	ABE 8921	Agriculturual and Bio Engineering Seminar	
	ABE 8911	Agricultural and Biological Engineering Seminar	
ST 8114 Statistical Methods 4	Select at least one of the following:		1
	ST 8114	Statistical Methods	4

A thesis and an oral comprehensive examination in defense of the thesis are required. The Master of Science in Biological Engineering requires 24 credit hours of coursework beyond the baccalaureate degree and 6 or more credit hours of thesis research/thesis.

Doctor of Philosophy in Engineering with concentration in Biological Engineering

Total Hours		68-80		
ABE 9000	Dissertation Research/ Dissertation in Agricultural and Biological Engineering	20-32		
ABE 8921	Agriculturual and Bio Engineering Seminar			
ABE 8911	Agricultural and Biological Engineering Seminar			
Select two of the following:		2		
Graduate-level mathematics course as approved by the committee				
8000-level coursework as approved by the committee				
Graduate-level coursework as approved by the committee				

A preliminary examination, a dissertation, and an oral examination in defense of the dissertation are required. Doctoral students are required to take or have credit in a graduate-level math course, complete a minimum of 48 credit hours of coursework beyond the baccalaureate degree and complete 20-32 hours of dissertation research.

Applied Physics

Graduate Coordinator: Dr. Henk F. Arnoldus Hilbun Hall 125 Box 5167

Mississippi State, MS 39762 Telephone: 662-325-2159 E-mail: hfa1@msstate.edu

An Interdisciplinary Program

An interdisciplinary program leading to the degree of Doctor of Philosophy in Engineering with a concentration in Applied Physics is available. A specific program, depending on the research interest of the student, is established by consultation between the student and his/her advisor.

Major areas of study include the following:

- · Computational physics
- Theoretical and experimental optics
- · Diagnostics using the techniques of conventional, imaging, and laser spectroscopy
- Experimental and theoretical nuclear structure physics
- Astrophysics
- Astrochemistry

Graduate research and teaching assistantships are available. For a complete listing of requirements and other pertinent information, please reference information provided in Physics and Astronomy (p. 133), College of Arts and Science, located in this publication.

Doctor of Philosophy in Engineering, Applied Physics Concentration

Total Hours		38
PH 9000	Dissertation Research /Dissertation in Physics (at least 20 hours)	20
Additional coursework in the	e area of specialization	
Other Requirements		
PH 8753	Quantum Mechanics II	3
PH 8743	Quantum Mechanics I	3
PH 8313	Electromagnetic Theory	3
PH 8243	Methods of Theoretical Physics II	3
PH 8233	Methods of Theoretical Physics I	3
PH 8213	Mechanics	3
Core Courses		

Ph.D. candidates must pass written preliminary examinations on the core courses and, if required by their graduate advisory committee or the Physics department head, on their Engineering or other applied courses. The written preliminary exam on Electromagnetic Theory also covers material from PH 6333 Electromagnetic Fields II.

After passing the written preliminary exams, Ph.D. candidates must then pass an oral preliminary examination on the proposed dissertation topic. A dissertation is required of all Ph.D. candidates.

Biomedical Engineering

Department Head: Dr. J. Alex Thomasson Graduate Coordinator: Dr. Steven Elder 100 Ag and Bio Engineering Building Box 9632 Mississippi State, MS 39762 Telephone: (662) 325-3282 E-mail: selder@abe.msstate.edu Website: http://www.abe.msstate.edu (http://www.abe.msstate.edu/)

An Interdisciplinary Curriculum

The interdisciplinary Biomedical Engineering program is administered through Agricultural and Biological Engineering for the College of Engineering. Programs of study and research leading to both the Master of Science and the Doctor of Philosophy degrees in Biomedical Engineering are available. Biomedical Engineering is the engineering discipline that applies engineering principles to study and finds solutions for problems associated with the human body, medicine, and the health care field. At MSU, students can concentrate on research in areas such as injury biomechanics and bio-inspired design, computational modeling, vascular calcification, hemodynamics and sickle cell disease, bone fracture healing, and cartilage regeneration.

Admission Criteria

Regular admission into the M.S. or Ph.D. programs requires the student meet the following criteria:

- · Meet the admission requirements of the Graduate School
- · Have earned a bachelor's degree in an engineering discipline
- Submit GRE scores
- · Receive a positive recommendation by the coordinating committee of the biomedical engineering graduate program
- · Be accepted as a student by a member of the biomedical engineering graduate faculty

The student must have a 3.00 grade point average or higher and, if applicable, a TOEFL score of 600 PBT (96 iBT) or IELTS score of 7.5 or greater. A student entering the Ph.D. program should have an M.S. in an engineering discipline. Special consideration may be given to exceptional students with a B.S. degree in engineering who may wish to bypass the M.S. in completing the requirements for the doctoral degree.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Contingent Admission

If a student applying to the M.S. program does not have an undergraduate degree in engineering or an approved C.S. degree, the student will be required to complete approximately 45-48 hours of prerequisite coursework in mathematics, the sciences, or engineering. The student will be granted contingent admission until the course requirement has been satisfied. If a student applying to the Ph.D. program does not have a B.S. or M.S. in engineering or C.S., the same set of 45-48 hours of courses will be required before the student is fully admitted.

Graduate Committees

The graduate committee for each M.S. and Ph.D. student will be composed of a minimum of four and five faculty members, respectively.

The following requirements for an M.S. graduate committee will apply:

- · Chair must be an MSU engineering faculty member
- · One member must be a clinician (CVM faculty, UMC faculty, or practicing clinician)
- Two or more members must be engineers
- · Two or more members must be MSU faculty members

The following requirements for a Ph.D. graduate committee will apply:

- · Chair must be an MSU engineering faculty member
- One member must be a clinician (CVM faculty, UMC faculty, or practicing clinician)
- Three or more members must be engineers
- Three or more members must be MSU faculty members

Academic Performance

Unsatisfactory performance in the graduate program in Biomedical Engineering is defined as any of the following:

- Failure to maintain a B average in attempted graduate courses after admission to the program
- A grade of D or F in any course
- More than two grades below a B
- · Failure of the qualifying or preliminary exam (Ph.D. students only)
- Failure of the thesis/dissertation defense
- Unsatisfactory evaluation of a thesis or dissertation
- Receiving a second grade of U in ABE 8000 Research/Thesis or ABE 9000 Research/Dissertation (A student who receives a grade of U will be
 placed on academic probation the following semester. A second grade of U in ABE 8000/9000 in the probationary semester or any thereafter will
 result in dismissal from the program.)

Any one of these or a combination of these will constitute the basis for review for possible dismissal. The graduate coordinator will review the record along with the student's graduate committee and take a final course of action which will be recommendation for immediate dismissal or the establishment of a probationary period in which corrective action must take place. Appeal of dismissal can be made by submitting a written appeal statement to the department head. If the dismissal is upheld by the department head upon the student's appeal, the student can then submit a written appeal to the dean of the College of Engineering.

For more information, contact the Biomedical Engineering Graduate Program Coordinating Committee, Department of Agricultural and Biological Engineering, Box 9632, Mississippi State, MS 39762 or by e-mail at abe-head@abe.msstate.edu. Information is also available at http://www.abe.msstate.edu. (http://www.abe.msstate.edu/)

Master of Science in Biomedical Engineering

ABE 8621	Methods of Biomedical Engineering Research	1
ABE 8801	Clinical Experience for Biomedical Engineering	1
BIO 6514	Animal Physiology	4
or BIO 6114	Cellular Physiology	
ST 8114	Statistical Methods	4
8000-level or higher coursework		6
Additional graduate-level coursework		8
Research/thesis		6
Total Hours		30

An oral comprehensive examination and a thesis are also required. The M.S. degree requires 24 semester hours of coursework above the baccalaureate degree .In addition, 6 or more thesis research credit hours are required.

Doctor of Philosophy in Biomedical Engineering

ABE 8621	Methods of Biomedical Engineering Research	1
ABE 8801	Clinical Experience for Biomedical Engineering	1
BIO 6514	Animal Physiology	4
or BIO 6114	Cellular Physiology	
ST 8114	Statistical Methods	4
8000-level or higher coursework		6
MA XXXX	Graduate-level mathematics course ¹	3
Additional graduate-level coursework		29
Dissertation research/dissertation		20-32
Total Hours		80

1

Or approved substitute, such as an additional graduate level statistics course.

The Ph.D. degree requires that the student pass a qualifying exam, a preliminary exam, a dissertation defense, and a minimum of 48 coursework hours beyond the B.S., and 20-32 dissertation research

Certificate Programs

The James Worth Bagley College of Engineering offers certificates in the following areas.

- Automotive
- Computational Biology

- Information Assurance
- Materials

Certificates are available to students who meet all admission requirements; students must be admitted to Mississippi State University in order to pursue certificates. Prerequisite courses are required in order to qualify for the certificate programs (normally satisfied at the undergraduate level). Some engineering certificate programs may be available to non-engineering graduate students. Please refer to the specific certificate of interest for prerequisite requirements and certificates available to non-engineering graduate students.

All certificates require that a student take a minimum of 15 hours of academic credit (five courses) in an approved certificate area and may be earned by completing selected courses from a list of qualifying courses designated by a representative faculty member or committee. Hours earned in acquiring a certificate **may** be counted toward completion of an advanced engineering degree. A graduate student must achieve a minimum cumulative GPA of 3.00 on courses taken to acquire a certificate. Upon satisfactory completion of the required coursework, the student will become a candidate for certification. The MSU transcript will indicate successful completion of the certificate program. Contact information is provided below for each certificate program.

Automotive Engineering

The Automotive Engineering Certificate enhances the education of a student in topical subject matter related specifically to automotive engineering. This certificate was developed in support of the automotive manufacturing companies in the State of Mississippi to provide students an opportunity to focus on engineering knowledge and issues related to the design of vehicle systems and their production. The program is multi-disciplinary, allowing students from all areas of engineering to participate. Coursework will be selected from Aerospace Engineering, Chemical Engineering, Civil and Environmental Engineering, Electrical and Computer Engineering, Computer Science Engineering, Engineering Mechanics, Industrial and Systems Engineering, and Mechanical Engineering Certificate and will be designated as a 3-hour Directed Individual Study (4000 for undergraduate students/7000 for graduate students) course. Membership in the student section (or appropriate level) of the Society of Automotive Engineers is strongly encouraged. An Automotive Engineering Committee comprised of faculty members from various engineering. For additional information, contact Dr. Randy Follett at follett@ece.msstate.edu.

Computational Biology

The Computational Biology Certificate combines coursework in computer science and biology to offer students a formal program of study to address how biological systems work by analyzing the data made available with high throughput biology. Students will gain fundamental skills in computing integrated with biology (i.e., application techniques to understand the structures, functions, dynamics, and evolution of living organisms) and will become competitive for high-end employment in emerging technical fields. The well-defined program will provide students with recognition of their training in the area and will allow students from diverse disciplines to learn together. The program will be administered by the Department of Computer Science and Engineering and the Office of the Dean of Engineering. The certificate is awarded by the Bagley College of Engineering and the College of Agriculture and Life Sciences. For additional information, contact Dr. Andy Perkins at perkins (perkins@msstate.edu)@msstate.edu (ap335@msstate.edu).

Information Assurance

The Information Assurance Certificate provides educational coursework in the areas of information assurance and data security. MSU is certified as a Center of Academic Excellence in Information Assurance (IA) by the National Security Agency; the IA program of instruction has been certified by the Committee on National Security Standards (CNSS) against the National Training Standard for Information Systems Security (INFOSEC) Professionals —NSTISSI No. 4011 and the National Training Standard for Information Systems Security Officers (ISSO)—NSTISSI No. 4014. The curriculum for the certificate conforms to the Federal training standards in this area. A faculty member from the Department of Computer Science and Engineering's Center for Computer Security Research (CCSR) will be appointed annually to administer the program. The certificate is jointly administered through the CCSR, the Dean of Engineering, and the College of Agriculture and Life Sciences. An application form is available at http://security.cse.msstate.edu/ IAcertificateappl.pdf. For additional information, contact Dr. Drew Hamilton at hamilton@cci.msstate.edu.

Materials

The Materials Certificate recognizes the completion of an organized plan of study in the interdisciplinary materials related areas. Courses for the certificate cover topics on advanced composites, biomaterials, materials processing, polymers, and electrical materials. Through the combination of research and engineering, students may choose to specialize their certificate in any two additional areas of study that include: aerospace, biomedical, chemistry, computer, environmental, forest products, mechanical, and physics. The Materials Engineering Working Group (MWG) will serve as the advisory committee to oversee and recommend courses in the certificate group. The Materials Certificate is administered by the Dean of Engineering. Additional information, including course selection, may be accessed at http://www.bagley.msstate.edu/research/materials/). (http://www.bagley.msstate.edu/research/materials/). (http://www.bagley.msstate.edu/research/workinggroups/materials/) For specific information, contact Dr. Rooban Thirumalai, Materials Engineering Coordinator, at rthirumalai@i2at.msstate.edu.

Dave C. Swalm School of Chemical Engineering

Department Director: Dr. Bill Elmore

Graduate Co-Coordinators: Dr. Bill Elmore and Dr. Dong Meng

330 Swalm Chemical Engineering Building Box 9595 Mississippi State, MS 39762 Telephone: 662-325-2480 E-mail: gradstudies@che.msstate.edu

Graduate study is offered in the Dave C. Swalm School of Chemical Engineering leading to the degree of Master of Science in Chemical Engineering. The School also cooperates in an interdisciplinary program leading to the degree of Doctor of Philosophy in Engineering with a concentration in Chemical Engineering. Prospective students are encouraged to visit the department's website (https://www.che.msstate.edu) to learn about faculty research interests and the graduate program.

Admission decisions are made by the graduate affairs committee (GAC) based on the applicant's academic transcripts, a personal essay (statement of purpose), research experience, letters of recommendation, and research interests. GRE scores are recommended but not required. International students must submit TOEFL/IELTS scores. Acceptable score ranges can be found in the Graduate Catalog. Applicants can find additional information on admission requirements and the admission procedure on the graduate school's admissions webpage.

Graduate research assistantships are available. For additional information, contact Dr. Bill Elmore (elmore@che.msstate.edu) or Dr. Dong Meng (meng@che.msstate.edu)

For those applicants not possessing a B.S. in Chemical Engineering, admission will be considered on a case-by-case basis. If admitted, those students will be required to complete the required prerequisites and the Chemical Engineering undergraduate core curriculum:

Prerequisites

Calculus sequence plus differential equations		
Calculus-based physics (one semester)		
Undergraduate Core Curriculum		
CHE 2114	Mass and Energy Balances	4
CHE 3113	Chemical Engineering Thermodynamics I	3
CHE 3123	Chemical Engineering Thermodynamics II	3
CHE 4113	Chemical Reactor Design	3
CHE 4313	Transport Phenomena	3

**CHE 3113 can be replaced with an equivalent course in Physical Chemistry or Thermal Physics. In place of Transport Phenomena, students can take both Fluid Flow Operation (CHE 3203) and Heat Transfer Operation (CHE 3213). Equivalent courses in Fluid Mechanics and Heat Transfer will serve as a replacement for Transport Phenomena. The Graduate Affairs Committee can waive/add course prerequisites based on student background and preparation.

Admission Criteria

M.S. in Chemical Engineering; Ph.D. in Engineering with Chemical Engineering Concentration

Admission criteria differ based on the graduate degree sought.

Direct Admission to the Ph.D. Program

Cumulative GPA of 3.20 on the last 64 hours of undergraduate coursework

Post M.S. - Ph.D. Program

Cumulative GPA of 3.00

M.S. Program

Cumulative GPA of 3.00 on the last 64 hours of undergraduate coursework

International students must have a TOEFL score of 550 PBT (79 iBT) or 6.5 on the IELTS for admission to all degree programs.

Provisional Admission

Provisional admission is typically not available to students applying for graduate admission to the Dave C. Swalm School of Chemical Engineering.

MS in Chemical Engineering

The program of study of a Master of Science in Chemical Engineering degree includes advanced courses in Chemical Engineering (12 hours), Mathematics & Statistics (6 hours), and elective courses selected based on student's career goals and interests. The MS program includes thesis option and courses-only (non-thesis) option. Students develop their program of study in consultation with the major professor and graduate committee.

Engineering PhD in Engineering with Chemical Concentration

The program of study for a PhD in Engineering with Chemical Engineering concentration includes completion of 56 (post BS degree) or 33 (post MS degree) credit hours in advanced courses in Chemical Engineering (12 hours), Mathematics & Statistics (6 hours), elective courses based on student's research interests (6 hours), and significant scholarly research (20 hours), presented in the dissertation. Students develop their program of study in consultation with the Major Professor and graduate committee. Direct PhD admits would have an option to earn at MS degree upon successfully completing course work (non-thesis) and thesis (thesis-option).

At least 50% of all courses must be at the 8000 (full graduate) level. Furthermore, 50% of courses must be taken at MSU and all thesis/dissertation hours must be taken at MSU.

Academic Performance

The Dave C. Swalm School of Chemical Engineering is committed to maintaining high standards for the graduate programs offered by the school. As a means to ensure satisfactory performance of all graduate students enrolled in the school, the guidelines for unsatisfactory performance are below:

- Failure to maintain an overall B average (3.00) in graduate courses attempted after admission to the program
- · More than two grades of C in graduate level courses
- A grade of D or F in a graduate level course
- · Failure of the qualifying exam
- · Unsatisfactory evaluation of a thesis or a dissertation
- Failure to maintain an overall B average (3.00) in prerequisite undergraduate courses
- · Official withdrawal from school due to academic difficulties

All students are expected to adhere to these standards. Failure to do so will result in the following actions by the Dave C. Swalm School of Chemical Engineering.

- A student who fails to maintain an overall B average in graduate courses will be given one semester to bring up her/his overall GPA in graduate level courses. If the student currently holds an assistantship from the school, said assistantship may be terminated. The student will be placed on probation for one semester. The graduate level courses taken during this probationary semester must be part of the graduate student's program of study and should constitute a full load. Failure to attain an overall B average in graduate courses at the end of this probationary semester will result in dismissal from the graduate program.
- A student who earns more than two grades below a B, or earns a D or F in any graduate level course will be dismissed from the graduate program of the Dave C. Swalm School of Chemical Engineering.
- A student who officially withdraws from school during the semester due to academic difficulties will be dismissed from the graduate program of the Dave C. Swalm School of Chemical Engineering.

Appeals Process

A student who is dismissed on the basis of academic performance from a graduate program offered by the Dave C. Swalm School of Chemical Engineering may appeal the decision. The appeals procedure is as follows:

- A student may appeal his/her dismissal from a graduate program by submitting a letter of appeal to the Appeals Committee. This letter should contain a detailed explanation of the circumstances leading to his/her dismissal (identified as one of seven points listed in academic performance policy) and should explain any extenuating circumstances leading to failure to maintain satisfactory academic progress.
- The Appeals Committee shall be composed of the following five members:
 - Director of the Swalm School of Chemical Engineering
 - Graduate Coordinator of Chemical Engineering
 - · Major professor for the student
 - A professor from another department within the College of Engineering (asked to serve by the Director and/or Graduate Coordinator of Chemical Engineering)
 - Associate Dean for Research and Graduate Studies for the College of Engineering
- The Appeals Committee will review the provided documentation and reach a consensus decision on whether to uphold or overturn the dismissal. If the appeal at the program level is unsuccessful, the student may then appeal to the college dean. If the appeal at the college level is unsuccessful, the student may then appeal to the rover and Vice President for Academic Affairs.

Accelerated Program

Highly qualified chemical engineering undergraduates (minimum grade point average of 3.5 or higher) in the Swalm School of Chemical Engineering are encouraged to apply to the Accelerated Program. This program permits students to earn up to 15 semester credit hours of graduate-level coursework during their final year of undergraduate studies (or, in exceptional cases, in the junior year, where the student has an exemplary academic record and meets all course prerequisites--e.g. in split-level 4000/6000 graduate courses). When completed successfully, the student will earn both undergraduate and graduate credit simultaneously. Students must meet with a potential graduate advisor to ensure graduate credit could be applied to a program of study for the graduate degree. See Accelerated Programs (p. 48) for complete information.

In addition to University requirements, Chemical Engineering also requires the following:

- A minimum of 60 hours toward the completion of the chemical engineering degree
- · A statement of professional interests and goals

In exceptional cases, where the above criteria are met mid-way through the junior year, the student may take split-level (i.e. 4000/6000) courses in the second semester of the junior year. 8000-level courses are reserved for students in the senior year after completing the equivalent undergraduate course (e.g. CHE 4134 Chemical Reactor Design taken in a fall semester followed by CHE 8123 Chemical Kinetics and Dynamics taken in the last semester of the senior year).

Students interested in applying to the Accelerated Chemical Engineering Program should contact either the School Director, Dr. Bill B. Elmore or Dr. Dong Meng for more details.

Doctor of Philosophy in Engineering with Chemical Engineering Concentration - Direct Admission

CHE XXXX	Graduate-level coursework	36
Dissertation esearch/dissertation		20
Total Hours		56
Doctor of Philosophy in Engineering - Post Master's		

Total Hours		32
Dissertation esearch/dissertation		20
CHE XXXX	Graduate-level coursework	12

Total Hours

A student entering with an M.S. from another institution must demonstrate that he/she has satisfied the Chemical Engineering graduate core courses; if not, all or a portion of the 12 hours of core coursework may be required.

Master of Science in Chemical Engineering - Thesis

CHE 8011	Chemical Engineering Seminar	1
Chemical Engineering Core		
CHE 8113	Advanced Chemical Engineering Thermodynamics (Fall)	3
CHE 8123	Chemical Kinetics and Dynamics (Spring)	3
CHE 8223	Advanced Process Computations (Fall)	3
CHE 8523	Advanced Transport Phenomena (Spring)	3
Mathematics/Statistics at the 6000/800	00-level	6
Technical electives at the 6000/8000 le	evel ¹	6
CHE 8000	Thesis Research/ Thesis in Chemical Engineering	6
Total Hours		31

1 Technical electives are chosen in conjunction with the research advisor.

Master of Science in Chemical Engineering - Non-Thesis

CHE 8011	Chemical Engineering Seminar	1
Chemical Engineering Core		
CHE 8113	Advanced Chemical Engineering Thermodynamics (Fall)	3
CHE 8123	Chemical Kinetics and Dynamics (Spring)	3
CHE 8223	Advanced Process Computations (Fall)	3

CHE 8523	Advanced Transport Phenomena (Spring)	3
Mathematics/Statistics at the 6000/8000-lev	el	6
Technical electives at the 6000/8000 level ¹		6
Additional graduate-level coursework		6
Total Hours		31

¹ Technical electives are chosen in conjunction with the research advisor.

Completion Requirements for M.S. Students

All M.S. thesis students must prepare and successfully defend his/her thesis before a committee composed of faculty members of the University. All M.S. thesis students will be required to prepare and submit a manuscript for publication as first author. This must occur prior to the thesis defense. All non-thesis MS students must satisfactorily complete a comprehensive examination.

Completion Requirements for Ph.D. Students

Qualifying Examination

The qualifying exam will consist of two stages: 1) a written comprehensive exam; and 2) an oral comprehensive exam.

- 1. Written Comprehensive Examination: Students will write a research proposal on the topic of their dissertation research. The deadline for proposal submission with be middle of the third semester (mid-October for Fall admits or mid-March for Spring admits). This will be read and approved by the research Advisor. Once approved by the Advisor, the student will present the proposed research topic to his/her dissertation committee. This constitutes the Oral Comprehensive.
- 2. Oral Comprehensive Examination: Upon passing the written exam with Advisor approval, the student will orally defend the proposal wither at the end of the 3rd semester or the beginning of the 4th semester. A vote by the dissertation committee will indicate passage of the comprehensive exam.

Successful completion of the comprehensive exam will result in the Ph.D. student being admitted to Ph.D. candidacy.

Publication requirement

Doctoral students will be required to prepare and submit a minimum of two publications prior to the dissertation defense, for which they are first author. One publication must be for a peer-reviewed journal while the other may be for a published conference proceeding.

Dissertation Defense

All PhD students must prepare and successfully defend the dissertation before a committee composed of faculty members of the University.

Civil and Environmental Engineering

Department Head: Dr. Isaac Howard (Interim)

Graduate Coordinator: Dr. Farshid Vahedifard 235 Walker Hall Box 9546 Mississippi State, MS 39762-9546 Telephone: 662-325-3050 E-mail: grad-coordinator@cee.msstate.edu Website: http://www.cee.msstate.edu (http://www.cee.msstate.edu/)

The Civil and Environmental Engineering Department offers programs of study leading to Masters and Doctoral degrees in Civil Engineering through the Department of Civil and Environmental Engineering (CEE) with specializations in the following areas:

- Construction Engineering and Management
- Construction Materials Engineering
- Environmental Engineering
- Geotechnical Engineering
- Structural Engineering
- Transportation Engineering
- Water Resources Engineering

The Kelly Gene Cook, Sr. Civil and Environmental Engineering Laboratories include research capabilities in the following areas.

- Construction Materials Evaluation
- Environmental Analysis of Water and Soils
- Structural Systems Analysis
- Soil Mechanics Evaluation
- Structural Systems Analysis
- Transportation System Modeling
- Water Resources Characterization

The basic requirements for graduate studies and degrees are established by Mississippi State University (MSU) and are found in the Graduate Bulletin. Additional requirements and procedures established by the CEE Faculty are described below. Where there is a conflict, the Bulletin takes precedence. For information about the graduate program contact: Graduate Coordinator (p. 214).

Review of Applications

Applications for the on-campus Master of Science (M.S.) in Civil Engineering degree program, and all campuses for the Doctor of Philosophy in Engineering with a Civil Engineering Concentration (Ph.D.) degree program are reviewed three times a year, <u>March 15</u> for Fall semester admission, <u>September 15</u> for Spring semester admission, and <u>January 15</u> for Summer semester admission. Applications for the off-campus M.S. degree program may be considered for review up to two months after the above deadlines.

Admission Criteria

Applicants are admitted to graduate study in the CEE upon approval of the Graduate School, the Departmental Graduate Coordinator, and the Department's Graduate Faculty. Admission is based on the criteria listed below.

Admission requires that the applicant be accepted by a faculty member in their sub-discipline area who is willing to serve as their major professor. Applicants are encouraged to appropriate faculty after completion of the application.

GRE scores are required for all applicants who do not have an EAC/ABET-accredited civil, construction, or environmental engineering degree. There is not a minimum required GRE score for admission as the admission decision is not based on any one single factor. However, the score should be competitive, and successful applicants to the CEE graduate program typically have a GRE score of 157 or higher on the Quantitative Reasoning section of the exam. (Note: GRE test scores are only valid for five years.)

Regular Admission

Prerequisites for regular admission into Civil Engineering and Environmental Engineering's graduate program include all of the general requirements of the Office of the Graduate School. Regular admission requires that the applicant have a Bachelor of Science (B.S., Master of Science (M.S.), or Master of Engineering (M.E.) in Civil Engineering. The qualifying degree program must provide the applicant with the core competencies of the subdiscipline in which the applicant wishes to focus their graduate studies. The minimum GPA for regular admission into the CEE graduate program is 3.00 on a 4.00 scale as computed for courses that comprise the last two academic years of the qualifying undergraduate degree. For applicants required to demonstrate English proficiency, they must obtain a minimum TOEFL (Test of English as a Foreign Language) score of 79 iBT. As an alternative, an international student may take the IELTS (International English Language Testing Systems) exam on which they must obtain a minimum score of 6.5.

Contingent Admission

Applicants meeting University requirements for admission but failing to meet the department's requirements for regular admission may be considered for contingent admission. Applicants who have undergraduate or graduate degrees in engineering-related disciplines may be admitted on contingent status. The minimum GPA required for contingent admission to the CEE graduate program is 2.75 (A=4.00). For applicants required to demonstrate English proficiency, they must obtain a minimum TOEFL score of 69 iBT. As an alternative, an international student may take the IELTS exam on which they must obtain a minimum score of 6.0. If the applicant tails to achieve the minimum score for regular admission, satisfactory completion of an "English as a Second Language" (ESL) course, ESL 5323, will be required. Those receiving contingent admission are eligible to receive Graduate Teaching and Graduate Research Assistantships. Within the first award enrollment period, the student must satisfy the requirements to obtain regular admission status. An assistantship award will be terminated if these requirements are not met. To be removed from contingent status, the student must successfully complete the specified requirements defined by their graduate committee with a grade of B or better for each course. Upon completion of the specified requirements, removal of the student from the contingent status will be documented in the Department through a letter by the major advisor co-signed by the Department Graduate Coordinator. This letter will be placed in the student's file, and OGS is made aware of the change of status.

Provisional Admission

Applicants failing to meet the requirements for regular or contingent admission may be considered for provisional admission. Applicants who have undergraduate or graduate degrees in engineering-related disciplines may be admitted on provisional status. The minimum GPA required for provisional admission to the CEE graduate program is 2.50 (A=4.00). For applicants required to demonstrate English proficiency, they must obtain a minimum TOEFL score of 53 iBT. As an alternative, an international student may take the IELTS exam on which they must obtain a minimum score of 4.5 If the applicant achieves a TOEFL score of 61 or above, or IELTS score of 5.5 or above, satisfactory completion of two ESL courses, ESL 5120 and ESL 5323, will be required. If not, satisfactory completion of ESL 5110, 5120, and ESL 5323 will be required. To be removed provisional status,

the student must complete their ESL requirement and earn a 3.00 GPA or higher on the first nine graduate credit hours taken after admission to the CEE graduate program and apply to their Program of Stud. Transfer credits cannot be used to satisfy theis requirement. Upon completion of the specified requirements, removal of the student from the provisional status will be reported to OS through a letter by the major advisor so-signed by the Department Graduate Coordinator While in the provisional status, a student is not eligible to hold a graduate assistantship.

Academic Performance

The graduate student has primary responsibility for understanding, and fully complying with, all MSU and CEE graduate policies regarding degree requirements and performance expectations relative to complete assignments as applicable to their graduate. It is also their responsibility to inquire and resolve any questions they may have regarding these same policies and performance expectations. Students cannot graduate while on provisional status, contingent status, or academic probation.

Academic Probation

Once admitted to the CEE graduate program, a student who fails to maintain a satisfactory academic record in terms of GPA, research progress (as applicable), and examinations will be considered to be on academic probation. At the end of each semester, CEE will evaluate the records of all CEE graduate students. A student not meeting graduation requirements may be placed on probation if any of the following conditions exist. Remediation of the deficiency and removal from probation requires action as defined below.

Deficiency Resulting in Probation and Remedial Action Required for Removal from Probation:

Deficiency: The overall GPA on all graduate credit hours completed drops below 3.00. Remedial Action: Achieve an overall GPA of 3.00 or above on all graduate credit hours completed within the next 9 credit hours completed.

Deficiency: Obtaining a grade below C on a course on the Program of Study. Remedial Action: Earn a grade of B or above on the course in which the lower grade was received or the course replacing it on the Program of Study.

Deficiency: Obtaining a grade of "U" in a research course (i.e., CE 8000 or CE 9000). Remedial Action: Earn a grade of "S" the next time research course hours (i.e., CE 8000 or CE 9000) are taken by complying with the remedial actions set forth by the major professor.

Deficiency: Failing to pass an examination administered by the graduate committee (i.e., thesis defense, comprehensive exam, qualifying exam, preliminary exam, or dissertation defense)

Remedial Action: Retake and pass the examination within the timeframe set forth by the graduate committee at the time it was failed.

The student will be advised in writing of their academic probation and remedial actions that they need to take to be removed from probation.

Dismissal

At the end of each semester, CEE will evaluate the records of all CEE graduate students. A student may be dismissed from the CEE graduate program if:

- they were admitted contingent status due to deficiencies in prerequisite coursework and fails to make satisfactory progress toward completion of prerequisites.
- they were admitted on provisional status and makes less than a B in completion of the first nine hours of graduate studies.
- they were on academic probation and unable to meet all requirements for good academic standing by the completion of the next nine hours of progress toward the degree.
- The student makes a grade of D or F in a graduate or undergraduate course attempted while in the CEE graduation program.
- A student making a second U grade.
- A student fails to achieve satisfactory results following the second attempt of any examination administered by the graduate committee.

Reapplying

Graduate students who have not registered for courses during three consecutive regular semesters (i.e., fall and spring semesters) will need to submit a new application to the Graduate School and be readmitted before they resume graduate studies.

Master's students may elect either the thesis or non-thesis option. The minimum credit hours that must be satisfactorily completed for either option are tabulated below.

Master of Science in Civil Engineering - Thesis

Graduate-level coursework 1, 2, 3, 4, 5

CE courses (12 hours including a minimum of 9 at the Full Graduate-level)

Engineering courses (a minimum of 15 hours)

CE 80	00 Thesis Research/ Thesis in Civil & Environmental Engineering	6
Total I	lours	30
1	A minimum of 12 hours on the Program of Study at the full-graduate level is required (courses numbered 7000 and 8000).	

- ² A maximum of 6 graduate hours in Business can be approved.
- ³ A maximum of 6 hours at the 7000-level can be approved.
- ⁴ A maximum of 9 hours taken as an Unclassified graduate student can be approved.
- ⁵ A total of 12 graduate hours may be transferred from another university.

Master of Science in Civil Engineering - Non-Thesis

Graduate-level coursework 1, 2, 3, 4,5

CE courses (18 hours including a minimum of 12 at the full graduate-level)

Engineering courses (a minimum of 18 hours)

Total Hours

- ¹ A minimum of 15 hours on the Program of Study at the full graduate-level is required (courses numbered 7000 and 8000).
- ² A maximum of 6 graduate hours in Business can be approved.
- ³ A maximum of 6 hours at the 7000-level can be approved.
- ⁴ A maximum of 9 hours taken as an Unclassified graduate student can be approved.
- ⁵ A total of 12 graduate hours may be transferred from another university.

1. Students cannot graduate while on provisional status, contingent status, or academic probation.

2. A graduate student cannot graduate with more than 6 credit hours of C grades earned for all courses since admission to the program, including those outside the program of study.

3. A student cannot graduate with an Incomplete ("I") grade, regardless of whether it is on the program of study or not. The Incomplete grade must be rectified so that a grade can be assigned and an overall GPA determined for graduation eligibility.

4. Students electing the thesis-option M.S. are expected to prepare at least one manuscript acceptable to the major professor submission to peerreviewed journals or conferences.

5. Thesis students are expected to successfully pass their thesis defense as administered by their graduate committee.

6. Non-thesis students must successfully pass a comprehensive (exit) examination administered by the graduate committee following the procedure set forth in the CEE Graduate Studies Policy.

7. The time limit on credits earned that can be accepted toward fulfilling the requirements for a Master of Science degree follows the requirements set forth in MSU's Graduate Catalog.

8. Transferred credits are those earned at another university. Shared credits are defined as those credits earned in another graduate program at MSU that are now being applied to an additional graduate degree program at MSU. As approved by the student's committee, a maximum of 12 credit hours of the coursework requirement can be met with transfer credits. Transferred credits shall not be previously used to satisfy the requirements of an earned degree. Also, with committee approval, up to 12 credit hours of the program may be shared between degree programs at the same level. The total of shared and transfer credit applied to the coursework requirement cannot exceed 12 credit hours. Students who transition from an Unclassified Admission status into the degree program may apply up to nine hours taken while Unclassified regardless of whether they are transferring or sharing credits.

Doctor of Philosophy in Engineering with Civil Engineering Concentration

1. Students cannot graduate while on provisional status, contingent status, or academic probation.

2. For students with an acceptable M.S. degree, a minimum of 24 hours of coursework approved by their committee and a minimum of 20 hours of research (CE 9000) are required.

3. For students admitted without an acceptable M.S. degree (i.e., Direct Admission Ph.D. students), there are three degree requirements options as outlined here:

1. Awarded a Ph.D. and a Non-Thesis Option M.S. by completing a required minimum 57 hours of credit coursework and 20 dissertation hours (CE 9000) for a total of 77 minimum credit hours. The student needs to submit a separate application and be admitted for dual enrollment in the M.S. program at least one semester before earning the M.S. degree.

33

33

218 Graduate Catalog

- 2. Awarded a Ph.D. and a Thesis-Option M.S. by completing a required minimum of 48 credit coursework, 6 thesis hours (CE 8000), and 20 dissertation hours (CE 9000) for a total of 74 minimum credit hours. The student needs to submit a separate application and be admitted for dual enrollment in the M.S. program at least one semester before earning the M.S. degree.
- 3. Awarded Ph.D. by completing a required minimum of 48 hours of credit coursework and 20 dissertation hours (CE 9000) for a total of 68 minimum credit hours.

In addition, of the courses completed, the following minimums are required:

- 12 hours in CE courses, 9 of which are at the full graduate-level (courses numbered 7000 and 8000).
- 12 hours at the full graduate-level, and
- 15 hours in Engineering.

4. A graduate student cannot graduate with more than 6 credit hours of C grades earned for all courses since admission to the program, including those outside the Program of Study.

5. A student cannot graduate with an Incomplete ("I") grade, regardless of whether it is on the program of study or not. The Incomplete grade must be rectified so that a grade can be assigned and an overall GA determined for graduation eligibility.

6. Students are required to pass three examinations:

- Qualifying Exam (Entrance Exam) This examination is taken before complete of 9 credit hours of coursework beyond M.S. (30 credit hours of coursework for Direct Admission Ph.D. students) after admission to the program. The examination will be in a format specified by the student's major professor. The student's major professor may require that the exam be taken earlier, given reasonable notice. The student must be enrolled during the semester in which the exam is taken.
- Written Preliminary Exam This examination is taken after the student completes, or is within 6 credit hours of completing, the coursework on the Program of Study approved by the graduate committee at the time of the examination. The examination will be in a format specified by the student's graduate committee.
- Oral Comprehensive Exam This examination is taken after the Written Preliminary Exam. After successfully passing the Written Preliminary and Oral Comprehensive Exams, the student becomes a Ph.D. Candidate. The examination will be in a format specified by the student's graduate committee.

7. The student is required to produce and defend a dissertation. The student must submit a draft dissertation to the graduate committee at least two weeks before its defense. The student must subsequently defend the dissertation, acceptably address all comments and required changes in the document, and submit a final dissertation acceptable to the graduate committee, MSU Library, and the Office of the Graduate School.

8. From the work completed during Ph.D. studies, students are required to prepare at least two manuscripts suitable for submission to peer-reviewed journals and acceptable to the major professor.

9. The time limit on credits earned that can be accepted toward fulfilling the requirements for a Ph.D. follows the requirements set forth in MSU's Graduate Catalog.

10. Transferred credits are those earned at another university. Shared credits are defined as those credits earned in another graduate program at MSU that are now being applied to an additional graduate degree program at MSU. As approved by the student's committee, a maximum of 50% of the coursework requirement can be met with transfer credits. Transferred credits shall not be previously used to satisfy the requirements of an earned degree. Also, with committee approval, up to 50% of the required credit hours of the program may be shared from a previous doctoral degree program. The total of shared and transfer credits applied to the coursework requirement cannot exceed 50% of the requirement. Students who transition from an Unclassified Admission status into the degree program may apply up to nine hours taken while Unclassified regardless of whether they are transferring or sharing credits. Dissertation research credit hours cannot be transferred unless there is an MOU in place governing the student's situation.

Computational Engineering

Graduate Coordinator: Dr. Adrian Sescu

Center for Advanced Vehicular Systems (CAVS) Box 9618 Mississippi State, MS 39762 Telephone: 662-325-5431 E-mail: cme-coordinator@hpc.msstate.edu

An Interdisciplinary Curriculum

The Computational Engineering graduate program is interdisciplinary, with faculty drawn from the academic departments of the College of Engineering and the College of Arts and Sciences, as well as the research faculty of the HPC². Programs of study and research leading to both the Master of Science degree and the Doctor of Philosophy degree are offered on the Starkville Campus and through Distance Education. There is an increased demand by industry, academia, and government for scientists and engineers with a foundation to create tools for computational analysis and design,

and with a strong domain knowledge for application of these tools to complex engineering problems. Such programs come with curricula covering a large range of subjects, so that they can produce scientists and engineers with broad backgrounds and viewpoints. These scientists and engineers can then be expected to understand the basic approaches to solving analytical problems and also using mathematical and computational tools required to arrive at solutions. The program is open to students with undergraduate degrees in engineering, computer science, mathematics, or a physical science. Research assistantships are available through research projects in the HPC².

Admission Criteria

To be admitted, the student must meet the admission requirements of the Office of the Graduate School and receive a positive recommendation from the Computational Engineering Graduate Coordinator. International students must have scored at least 550 PBT (79 iBT) on the Test of English as a Foreign Language (TOEFL) or 6.5 on the International English Language Testing System (IELTS). Students with a degree from a program that is not EAC/ABET accredited must have a satisfactory performance on the GRE.

Highly qualified undergraduate students may be considered for direct admission if the following criteria are met: a minimum equivalent GPA of 3.50/4.00 on the last 60 credit hours of undergraduate courses, or a first class with distinction degree classification for students from institutions where no GPA is reported, and a competitive GRE score for applicants from a non-ABET-accredited program.

Provisional Admission

A Master of Science applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. Provisional admission will not be considered for Ph.D. applicants. The following identify requirements in addition to those outlined by University policy in the *Graduate Catalog*. A provisionally-admitted student is eligible for a change to regular status after receiving a 3.30 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a B). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.30 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. While in the provisional status, a student is not eligible to hold a graduate assistantship.

Program of Study

The specific requirements for the degrees are governed by the requirements of the Office of the Graduate School, the College of Engineering, and by the student's graduate committee. The committee must include at least one Computational Engineering faculty member from each of the following areas:

- 1. a Computational Engineering application area,
- 2. high-performance computing, and
- 3. numerical mathematics.

The graduate committee will ensure that the student's program of study adequately addresses each of the three primary cross-disciplinary areas (an application area, high-performance computing, and numerical mathematics), and students are encouraged to include one or more courses in scientific visualization or data analytics. The composition of the graduate committee and the student's program of study must be approved by the Computational Engineering Graduate Coordinator.

Academic Performance

Continued enrollment in the program is contingent upon satisfactory performance in the courses and research and satisfactory performance toward completion of the degree. In addition to the University guidelines, satisfactory performance is achieved when all four of the following criteria are met:

- 1. The student maintains a B average or better on: a.) all graduate courses completed and b.) all graduate courses included on the program of study.
- 2. If the student registers for research credits in a given term, he/she receives a satisfactory (S) grade at the end of the term.
- 3. The student has a major advisor and supervisory graduate committee after the first two terms of enrollment.

In addition to the University guidelines for academic dismissal in the Graduate Catalog, a graduate student in the Computational Engineering program shall be dismissed if he or she receives two unsatisfactory (U) grades on research credit hours. A student will be placed on academic probation based on University guidelines in the Graduate Catalog, or if one of the following conditions are met:

- 1. A second C grade on the program of study
- 2. A grade of U on research credit hours

The probationary period is defined to be one term (summer is included if the student is enrolled). A probationary period of two terms may be considered for online students with a GPA below 3.0/4.0. If at the end of the probationary period the student has not remedied his/her deficiency (i.e., has not achieved a 3.00 GPA and/or has not scheduled research credit hours and received a satisfactory (S) grade) the student may be dismissed. For students enrolled in either the M.S. or Ph.D. program, all issues related to academic probation, dismissal, and appeal will be governed by University policy, as approved by Graduate Council and the Provost and outlined by the Graduate School in the Graduate Catalog.

Graduate Courses

Because of the interdisciplinary nature of the Computational Engineering program, courses listed under the "Courses" tab are typical of those used to assemble a program of study. Courses not listed can be used for graduate credit with the approval of the student's supervisory committee and the Computational Engineering Program Graduate Coordinator. The program of study must demonstrate the student has achieved a working knowledge of

1. a Computational Engineering application area,

- 2. high-performance computing, and
- 3. numerical mathematics

Master of Science in Computational Engineering - Thesis

8000-level coursework		12
Additional graduate-level course	ework	12
Research/thesis		6
CME 8000	Thesis Research/ Thesis in Computational Engineering	
Total Hours		30

Master of Science in Computational Engineering - Non-Thesis

Total Hours		33
CME 7000	Directed Individual Study in Computational Engineering	
Research project		3
Additional graduate-level coursework		15
8000-level coursework		15

Doctor of Philosophy in Computational Engineering

A Ph.D. in Computational Engineering requires the following credit hours beyond a B.S.

8000-level graduate courseowrk	24
Additional graduate-level coursework	24
Research/Dissertation	24
CME 9000	
Dissertation/Dissertation Research Hours in Computational Engineering	
Total Hours	72

Qualifying GPA credit hours from M.S. degree may be counted towards this requirement.

In addition to the coursework and research hours, includes a comprehensive examination, a dissertation, and dissertation defense. Each candidate for the doctoral degree must conduct research and in their dissertation defense on that research the student must:

- 1. demonstrate a mastery of the techniques of research and
- 2. make a very distinct contribution to the field of Computational Engineering.

The dissertation must conform to the policies and protocols of the Graduate School.

Computer Science and Engineering

Department Head: Dr. Shahram Rahimi Graduate Coordinator: Dr. T.J. Jankun-Kelly 300 Butler Hall Box 9637 Mississippi State, MS 39762-9637 Telephone: 662-325-2756 Fax: 662-325-8997 E-mail: office@cse.msstate.edu Website: http://www.cse.msstate.edu/)

Graduate study is offered in the Department of Computer Science and Engineering leading to the degrees of Master of Science in Computer Science, Master of Science in Cyber Security and Operations, and Doctor of Philosophy in Computer Science.

Master's and Ph.D. Degrees in Computer Science

The program of study of a Master of Science in Computer Science (MS CS) degree includes advanced courses in Computer Science that are selected according to the goals of the student. Master students may choose between a professional degree with a "General" concentration or a more specialized "Research" concentration. The program of study of a Doctor of Philosophy (PhD) degree in Computer Science includes advanced courses in Computer Science and significant scholarly research in Computer Science, presented in a dissertation. Starkville-campus and online programs are available.

The department's core research areas include the following:

- Artificial Intelligence
- Computational Science
- Graphics
- Human-Centered Computing
- Software Engineering
- Systems & Security

These core competencies support research applications in areas such as Bioinformatics, Visualization, Computer Security and Forensics, Human-Computer Interactions, Robotics, and High-Performance Computing. Faculty, research assistants, thesis students, and dissertation students participate in a wide variety of research projects. Many research projects are multi-disciplinary or multi-specialty in nature.

Master's Degree in Cyber Security and Operations

The Master of Science in Cyber Security and Operations (MS CYSO) is designed for students who wish to help meet the challenges posed by increasing cyber-threats. Using a multidisciplinary approach, the program is designed to provide students with a focused education within a broad analytical framework for evaluating; understanding; and solving cyber security problems. Either concentration will allow a thesis or non-thesis option. Starkville-campus and online programs are available.

The Cyber Defense concentration will focus on those aspects of cyber security needed to prepare an enterprise level system to protect itself. Material will prepare the students for developing cyber security policies to comply with existing and future laws, conducting risk assessment in enterprise to determine compliance with requirements and implementing security solutions for the enterprise.

The Cyber Operations concentration will focus on those aspects of cyber security that are needed to operate in the cyber domain. Material will prepare the student for advanced operations in the cyber domain such as Penetration Testing, After-Action Analysis, and Malware Analysis. This concentration is designed to satisfy the requirements for the Center of Academic Excellence in Cyber Operations program of the Department of Defense.

For a list of online tuition; instructional support; and other distance fees, please see the Controller's website (https://www.controller.msstate.edu/ accountservices/tuition/).

Requirements

MS CS and CYSO applicants are required to have a 3.00/4.00 GPA in overall undergraduate work and complete the GRE with a competitive score before admission. International students require a suitable demonstration of English proficiency. Candidates for the master's degree must have completed all pre-requisite courses or their equivalents. For additional details, consult the Computer Science Department's Graduate Handbook.

An entering PhD student with an MS degree should have a 3.50/4.00 grade point average on MS work, while a PhD student entering with only a BS degree (applicable only to Starkville students) is expected to have a 3.50/4.00 on overall undergraduate work. A student with a lower GPA may still be eligible for admission based on outstanding qualifications in other areas. A student must complete the GRE with a competitive score before admission; graduates of Mississippi State University with a 3.50 GPA do not have to take the GRE. International students require a suitable demonstration of English proficiency. Candidates for the PhD degree must have completed all prerequisite courses or their equivalents. Finally, a student must possess those qualifications and research interests that indicate to the Computer Science and Engineering Graduate Studies Committee that the applicant will be successful in the doctoral program. Online students doing research must identify a research area at application time. For additional details, consult the Computer Science Department's Graduate Handbook.

For a list of online tuition; instructional support; and other distance fees, please visit the Controller's website (https://www.controller.msstate.edu/ accountservices/tuition/).

Accelerated Program

Highly qualified undergraduates are encouraged to apply to the Accelerated Program. Doing so will enable the undergraduate student in a bachelor's degree program in Computer Science or Software Engineering to earn up to 9 hours of graduate-level coursework during the final year of their undergraduate studies. The student takes graduate-level courses and earns both undergraduate and graduate credit simultaneously. The student needs to consult with a potential graduate advisor to ensure graduate credit could be applied to a program of study for the graduate degree. Application to this program may be made as early as the end of the junior year (i.e., after completion of 90 or more hours of graded undergraduate courses). See

Accelerated Programs (https://www.cse.msstate.edu/undergrad/accelerated/) for more information. Students interested in applying should also contact the department's Graduate Coordinator, Dr. T.J. Jankun-Kelly, for more details.

Master of Science in Computer Science - Thesis

CS Core		4
CSE 8011	Graduate Seminar	
Select one of the following: 1	1, 2	
CSE 8813	Theory of Computation	
CSE 8843	Complexity of Sequential and Parallel Algorithms	
CSE 8833	Algorithms	
Primary Specialization ^{2, 3,}	, 4	9
CSE 6XXX Specialization	n Required Course	
CSE 6/8XXX Specialization	on Course	
CSE 8XXX Full Graduate	Specialization Course	
Secondary Specialization ²	2, 3, 4	6
CSE 6XXX Specialization	n Required Course	
CSE 6/8XXX Specialization	on Course	
Additional Coursework 3, 4	4	6
CSE 6/8XXX Graduate C	oursework, possibly including directed project	
Research/Thesis		6
CSE 8000	Thesis Research/ Thesis in Computer Science and Engineering	
Total Hours		31

Classes designated as theory in advance by the faculty can be used to substitute for the theory requirement on a case-by-case basis.

Any required courses in the Core or a Specialization previously completed by a student may be applied for completion and replaced with another free course of the student's and committee's choosing.

³ Courses applying directly to the student's specializations and approved by the student's Graduate Committee may be included, even if they are offered from another area or by another department. The majority of hours must be from CSE.

⁴ A minimum of 15 credit hours of the courses in the total program of study must be at the full graduate level (numbered 8000 or 9000).

Master of Science in Computer Science - Non-Thesis

Core Courses		4
CSE 8011	Graduate Seminar	
Select one of the following:	1, 2	
CSE 8813	Theory of Computation	
CSE 8843	Complexity of Sequential and Parallel Algorithms	
CSE 8833	Algorithms	
Primary Specialization 2, 3	5	9
CSE 6XXX Specialization	n Required Course	
CSE 6/8XXX Specializati	ion Course	
CSE 8XXX Full Graduate	•	
Secondary Specialization	2, 3, 5	6
CSE 6XXX Specialization	n Required Course	
CSE 6/8XXX Specializati		
Additional Coursework 3, 4	4, 5	12
CSE 6/8XXX Graduate C	Coursework, possibly including directed project	
Total Hours		31

¹ Classes designated as theory in advance by the faculty can be used to substitute for the theory requirement on a case-by-case basis.

² Any required courses in the Core or a Specialization previously completed by a student may be applied for completion and replaced with another free course of the student's and committee's choosing.

³ Courses applying directly to the student's specializations and approved by the student's Graduate Committee may be included, even if they are offered from another area or by another department. The majority of hours must be from CSE.

- ⁴ Students, in cooperation with their committee, can choose to do a directed project to replace some of these additional 12 hours. A directed project requires taking course CSE 8080 under the direction of the student's major professor or other member of the student's committee.
- ⁵ A minimum of 15 credit hours of the courses in the program of study must be at the full graduate level (numbered 8000 or 9000).

Students who complete a directed project present the results of the directed project to his/her Graduate Committee at the time of the comprehensive examination. All M.S. students must perform satisfactorily on an oral comprehensive examination. The master's comprehensive examination is held in conjunction with the student's project presentation.

Master of Science in Cyber Security and Operations with a Concentration in Cyber Defense or Cyber Operations - Thesis

CYSO Core ¹		10
CSE 8011	Graduate Seminar	
CSE 6243	Information and Computer Security	
CSE 6173	Cryptography	
CSE 6383	Network Security	
Choose One Concentration: ³		15
Cyber Defense ¹		
BIS 6113	Business Information Systems Security Management	
CSE 6273	Introduction to Computer Forensics	
Advanced Cyber Defense Ele	ectives ²	
Cyber Operations ¹		
CSE 6363	Software Reverse Engineering	
CSE 8753	Wireless Networks (ECE 8823 Wireless Networks)	
Advanced Cyber Operations E	Electives ²	
Thesis Option		6
CSE 8000	Thesis Research/ Thesis in Computer Science and Engineering	
Total Hours		31

¹ Any required courses in the Core or a Concentration previously completed by a student may be applied for completion and replaced with another free course of the student's and committee's choosing.

² Electives are listed in the CS Graduate Handbook.

³ A minimum of 15 credit hours of the courses in the total program of study must be at the full graduate level (numbered 8000 or 9000).

Master of Science in Cyber Security and Operations with a Concentration in Cyber Defense or Cyber Operations - Non-Thesis

CYSO Core ¹		10
CSE 8011	Graduate Seminar	
CSE 6243	Information and Computer Security	
CSE 6173	Cryptography	
CSE 6383	Network Security	
Choose One Concentration: 4		15
Cyber Defense ¹		
BIS 6113	Business Information Systems Security Management	
CSE 6273	Introduction to Computer Forensics	
Advanced Cyber Defense Electives ²		
Cyber Operations ¹		
CSE 6363	Software Reverse Engineering	
CSE 8753	Wireless Networks (ECE 8823 Wireless Networks)	
Advanced Cyber Operations Electives ²		
Non-Thesis Option		6
CSE or ECE electives ⁴		

Total Hours

- ¹ Any required courses in the Core or a Concentration previously completed by a student may be applied for completion and replaced with another free course of the student's and committee's choosing.
- ² Electives are listed in the CS Graduate Handbook.
- ³ Students, in cooperation with their committee, can choose to do a directed project to replace some or all of these additional 6 hours. A directed project requires taking course CSE 8080 under the direction of the student's major professor or other member of the student's committee.
- ⁴ A minimum of 15 credit hours of the courses in the total program of study must be at the full graduate level (numbered 8000 or 9000).

Doctor of Philosophy in Computer Science - Students admitted directly from Bachelor's Degree

CS Core ²	-	o -
		3-7
	students must have an MS degree to apply.	
CSE 8011	Graduate Seminar	
Select two of the followi		
CSE 8813	Theory of Computation	
CSE 8833	Algorithms	
CSE 8843	Complexity of Sequential and Parallel Algorithms	
Depth Requirement ^{2, 3}	3, 5	6-15
Student will complete 1	5 hours in a research area approved by their committee.	
CSE 6XXX Specialization	on Introductory Course	3
CSE 6/8XXX Specializa	tion Courses	6
CSE 8XXX Full Gradua	te Specialization Courses	6
Breadth Requirement	2, 3, 5	3-9
Students will complete a	an additional 9 hours outside of their research area. These hours should be from 3 different areas.	
CSE 6XXX Specialization	on Introductory Course	3
CSE 6/8XXX Specializa	tion Course	3
CSE 8XXX Full Gradua	te Specialization Course	3
Additional Coursewor		0-12
	s, students must complete 12 additional graduate credit hours.	
For direct admit student (numbered 8000 or 900	is, a minimum of 21 credit hours of the courses in the total program of study must be at the full graduate level 0). These totals exclude dissertation hours. Coursework outside CSE may count only at a student's committee's of non-dissertation hours must come from CSE.	
CSE 6/8XXX Gradua	te Coursework	
Dissertation ⁴		20
CSE 9000	Dissertation Research/ Dissertation in Computer Science and Engineering	
Total Hours		56-87
	ated as Theory in Advance by the faculty can be used to substitute for the theory requirement on a case-by-case basis	
	urses in the Core or a Specialization previously completed by a student may be applied for completion and replaced w the student's and committee's choosing.	ith another
³ Courses applyin	g directly to the student's Specializations or research and approved by the student's Graduate Committee may be inclu offered from another area or by another department. The majority f hours must be from CSE.	uded,
4		

⁴ A student may enroll in dissertation hours only with the approval of his/her major proessor, who is the instructor of record and will assign a grade (S or U).

⁵ A minimum of 21 credit hours of the courses in the total program of study excluding dissertation must be at the full graduate level (numbered 8000 or 9000).

Doctor of Philosophy in Computer Science - Students admitted with Master's Degree

CS Core ¹		3-4
Please note that online students must have a	an MS degree to apply.	
CSE 8011	Graduate Seminar	1
Required only if not completed during MS.		
Select one of the following: ²		
CSE 8813	Theory of Computation	

	al coursework hours are required for previous MS students.	
		U
	Coursework	0
CSE 6XXX	Specialization Introductory Course	
Students w	th a previous MS must complete an additional 3 hours from any area.	
Breadth Re	equirement ^{3, 4, 6}	3
	Full Graduate Specialization Courses	
	Specialization Introductory Course	
	th a previous MS must complete 6 hours in a research area approved by their committee.	
	uirement ^{3, 4, 6}	6
CSE 883	0	
CSE 884		

- ² Classes designated as Theory in advance by the faculty can be used to substitute for the theory requirement on a case-by-case basis.
- ³ Amy required courses in the Core or a Specialization previously completed by a student may be applied for completion and replaced with another free course of the student's and committee's choosing,
- ⁴ Courses applying directly to the student's Specializations or research and approved by the student's Graduate Committee may be included, even if they are offered from another area of by another department. The majority of hours must be from CSE.
- ⁵ A student may enroll in dissertation hours only with the approval of his/her major professor, who is the instructor of record and will assign a grade (S or U).
- ⁶ A minimum of 21 credit hours of the courses in the total program of study excluding dissertation must be at the full graduate level (numbered 8000 or 9000).

Examination Procedure

During preparation for the doctoral degree, the student will be required to complete three examinations and present an oral dissertation proposal. The examinations are the qualifying examination, typically taken during the student's first year of study; a preliminary examination, taken after the student has completed (or is within 6 hours of having completed) all coursework and has had a dissertation topic approved; and the final examination, taken when all other examinations and the dissertation have been completed.

At the time that the student takes the qualifying examination, the graduate faculty will conduct a review of the student's status in the program. This review will include, as a minimum, the following:

- performance on the qualifying examination
- progress and performance in courses
- · possible serious impediments to further progress toward the doctorate

Such a review could result in binding recommendations from the graduate faculty or strong recommendations that the student address a problem within a certain time frame or could even result in dismissal from the program.

Minor in Computer Science, Master's Degree Program

The Graduate Council requires that a student who wishes to earn a minor in computer science in a master's degree program complete at least 9 semester hours of computer science graduate credit, not to include CSE 6613. In addition, the Department of Computer Science and Engineering requires that the following requirements be satisfied:

- At least 3 semester hours must be at the full graduate (8000) level.
- At least 6 semester hours must be in one of the research focus areas, or theory.
- CSE 2383 or CSE 6753 or equivalent must have been completed by the student. This required background may have been completed during undergraduate study. CSE 6753 may count toward the minor.
- The student must pass a comprehensive examination over minor coursework, as determined by the minor professor. This may be in conjunction with an examination for the primary degree program.

The student must be accepted by a minor professor in the Department of Computer Science and Engineering and have the approval of both the minor professor and the Graduate Coordinator in Computer Science and Engineering of the minor program of study. The minor professor will be included in the student's supervisory committee.

Minor in Computer Science, Doctoral Degree Program

The Graduate Council requires that a student who wishes to earn a minor in computer science in a Ph.D. degree program complete at least 12 semester hours of computer science graduate credit, not to include CSE 6613. In addition, the Department of Computer Science and Engineering requires that the following requirements be satisfied:

- At least 3 semester hours must be at the full graduate (8000) level.
- · At least 6 semester hours must be in one of the research focus areas, or theory.
- CSE 2383 or CSE 6753 or equivalent must have been completed by the student. This required background may have been completed during undergraduate study. CSE 6753 may count toward the minor.
- The student must pass a comprehensive examination over minor coursework, as determined by the minor professor. This may be in conjunction with an examination for the primary degree program.

The student must be accepted by a minor professor in the Department of Computer Science and Engineering and have the approval of both the minor professor and the Graduate Coordinator in Computer Science and Engineering of the minor program of study. The minor professor will be included in the student's supervisory committee.

University policy on graduate minors is located in the Master of Science and Doctor of Philosophy sections in this publication.

Electrical and Computer Engineering

Department Head: Dr. Samee Khan Graduate Coordinator: Dr. Qian (Jenny) Du, Interim 216 Simrall Building Box 9571 Mississippi State, MS 39762 Telephone: 662-325-3912 Fax: 662-325-2298 E-mail: eegpd@ece.msstate.edu Website: http://www.ece.msstate.edu (http://www.ece.msstate.edu/)

Graduate study is offered in the Department of Electrical and Computer Engineering leading to the degrees of Master of Science and Doctor of Philosophy in Electrical and Computer Engineering. Both the M.S. and Ph.D. are available via BCoE Learning (online). Major areas of study include, but are not limited to the following:

- Communications
- Controls
- Computer Architecture and Digital Computing
- Electromagnetics
- Power and High Voltage
- Microelectronics and VLSI
- Signal, Image, and Speech Processing

Research facilities include the following:

- High Performance Computing Collaboratory (HPCC)
- Geosystems Research Institute (GRI)
- Center for Advanced Vehicular Systems (CAVS)
- MSU High Voltage Laboratory
- Emerging Materials Research Laboratory
- Microsystems Prototyping Laboratory

Note: Effective Fall 2012 semester, the Department of Electrical and Computer Engineering no longer offers separate electrical engineering (EE) or computer engineering (CPE) degrees at the graduate level.

Admission Criteria

In addition to meeting the requirements set forth by the Graduate School in the admission section of this publication, the basic requirements of the department for admission to the graduate program include the following:

- 3.00/4.00 GPA on a B.S. degree for admission to the M.S. degree program
- 3.50/4.00 GPA on a B.S. or M.S. degree for admission to the Ph.D. degree program
- 550 PBT TOEFL score (79 iBT) or 6.5 IELTS score for the student whose native language is not English (unless he/ she earned a degree from a U.S. institution)
- Satisfactory performance on the GRE for students with a degree from a program that is not EAC/ABET accredited

In addition to the requirements set forth by the Department for admission to the graduate program, highly qualified undergraduate students may be directly admitted to the Ph.D. program. Such direct admission requires a minimum undergraduate equivalent GPA of 3.50/4.00 on the last 60 credit hours of undergraduate courses, or a first class with distinction degree classification for students whose degrees are from institutions where no GPA is reported, and a satisfactory performance on the GRE for students with a degree from a program that is not EAC/ABET-accredited.

ECE M.S. students who wish to transfer to the Ph.D. program prior to completing the requirements for the Master of Science degree must submit a new application provided that they have a minimum graduate GPA of 3.80 on the first 15 credit hours of graduate courses taken at MSU.

Provisional Admission

Provisional admission is not typically available to applicants to the Department of Electrical and Computer Engineering.

Conditional Admission

Students who are fully funded by some external source (typically a scholarship program sponsored by the government of the student's home country) and who meet all other admission requirements, but lack only the TOEFL/IELTS score required for admission, may apply to be admitted conditionally, provided that the student's funding source will cover one year of English as a Second Language (ESL) study. After one year of ESL study, the student can apply for regular admission into the graduate program in Electrical and Computer Engineering providing that a TOEFL/IELTS score meeting admission requirements (79 TOEFL, 6.5 IELTS) has been obtained. Conditional admission is available only for the fall semester. During the time of ESL study, a conditionally admitted student may only take ESL courses; a conditionally admitted student may not take courses other than ESL courses, or engage in research activities, during the time of ESL study. To be considered for conditional admission, the student must include in their statement of purpose submitted with their application for admission a statement that they wish to be considered for conditional admission. Documentation of the source of funding indicating that the funding will cover a year of ESL study must also be submitted with the application materials.

Accelerated Program

Highly qualified MSU undergraduates in the Department of Electrical and Computer Engineering are encouraged to consider applying to the Accelerated Program. This program permits students to earn up to 9 hours of graduate-level coursework during their final year of undergraduate studies. Students in the Accelerated Program take graduate-level courses and earn both undergraduate credit and graduate credit simultaneously. Students need to consult with a potential graduate advisor to ensure graduate credit could be applied to a program of study for the graduate degree. Application to this program is made in the junior year (i.e., after completion of 60 or more hours of graded undergraduate courses). Students interested in applying should see Accelerated Programs (p. 48) for complete information and contact the department's graduate coordinator, Dr. James E. Fowler, for more details.

Academic Performance

To be in good academic standing, a student is expected to maintain a cumulative graduate GPA of 3.00 after admission to the program. If a graduate student's cumulative GPA falls below 3.00, the student will be placed on probation. While on probation, a student will not receive any type of financial support (TA, RA, fellowships, wages, etc.) and is required to raise his/her cumulative GPA to 3.00 by the end of the following semester of enrollment. While on probation, the student must enroll in 9 credit hours of coursework; Directed Individual Study courses are excluded.

A student will be dismissed from the graduate program if:

- in any semester subsequent to being on probation, the student's cumulative GPA falls again below a 3.00;
- a student makes grades of D, F, or more than two Cs;
- a student makes a grade of U in two consecutive semesters;
- a student fails twice the oral examination (M.S. level) or the preliminary examination (Ph.D. level);
- a student does not pass the Ph.D. qualifying exam in four attempts, within the first four semesters;
- a student receives an unsatisfactory evaluation of a thesis or dissertation;
- a student fails to take a remedial course in the required semester.

In case of a dismissal from the graduate program, a student may appeal his/her academic dismissal according to the following procedure:

- Within four weeks of being notified of the official dismissal, the student must present the request and related explanation in writing to the department head and/or graduate coordinator. The department head/coordinator will review the appeal with the departmental graduate committee and render a recommendation.
- If the appeal at the departmental level is unsuccessful, a student may then appeal to the college dean.
- If the appeal at the college level is unsuccessful, the student may then appeal to the Provost and Vice President for Academic Affairs.

Prerequisite and Core Courses

It is required that all graduate students take the following courses for credit as required remedial undergraduate coursework unless the transcript shows equivalent credit. Additional courses may be required.

ECE 3413	Introduction to Electronic Circuits	3
ECE 3424	Intermediate Electronic Circuits	4
ECE 3443	Signals and Systems	3
ECE 3714	Digital Devices and Logic Design	4
ECE 3724	Microprocessors	3-4
or ECE 4743	Digital System Design	

Program of Study

It is the responsibility of each graduate student to develop a suitable program of graduate study in conjunction with the student's major advisor and graduate advisory committee. Minimum requirements for the M.S. is 30 credit hours past the B.S. Minimum requirements for the Ph.D. is 48 credit hours past the M.S. or 66 credit hours past the B.S. for direct-admit Ph.D. students.

Master of Science in Electrical and Computer Engineering - Thesis

Graduate coursework with a minimum of 12 credit hours at the 8000 level

ECE 8000	Thesis Research/ Thesis in Electrical and Computer Engineering	6
Total Hours ¹		30

24

¹ Students can also take up to 6 hours in ECE 7000, and a minor area outside the department is optional (9 credit hours with a minimum of 3 credit hours at the 8000 level).

Students are required to orally defend their thesis. The thesis document (finished, not a draft) must be read and approved by the major professor and presented to the remaining committee members one week before the scheduled oral defense.

Master of Science in Electrical and Computer Engineering - Non-Thesis

Graduate coursework at the 8000 level	15
Other graduate-level coursework	15
Total Hours ¹	30

¹ Students can also take up to 6 hours in ECE 7000, and a minor area outside the department is optional (9 credit hours with a minimum of 3 credit hours at the 8000 level.)

Students in the non-thesis program must pass an oral examination. The oral examination consists of a comprehensive exam related to all the graduate level courses taken toward the degree.

Doctor of Philosophy in Electrical and Computer Engineering

ECE 8XXX	Graduate-level coursework	12
ECE XXXX	Additional graduate-level coursework ¹	12
ECE 9000	Dissertation Research /Dissertation in Electrical and Computer Engineering	24
Total Hours ¹		48

¹ Students can also take up to 6 hours in ECE 7000, and a minor area outside the department is optional (12 credit hours at the Ph.D. level with a minimum of 3 credit hours at the 8000 level).

A doctoral student is required to orally defend his or her dissertation. The dissertation document (finished, not a draft) must be read and approved by the major professor and presented to the remaining committee readers two weeks before the scheduled oral defense.

Doctor of Philosophy in Electrical and Computer Engineering - Direct-Admit

ECE 8XXX	Graduate-level coursework	21
ECE XXXX	Graduate-level coursework	21
ECE 9000	Dissertation Research /Dissertation in Electrical and Computer Engineering	24
Total Hours ¹		66

1

Students can also take up to 6 hours in ECE 7000, and a minor area outside the department is optional (12 credit hours at the Ph.D. level with a minimum of 3 credit hours at the 8000 level).

A doctoral student is required to orally defend his or her dissertation. The dissertation document (finished, not a draft) must be read and approved by the major professor and presented to the remaining committee readers two weeks before the scheduled oral defense.

Completion Requirements

Examinations

The ECE coursework-based Ph.D. qualifier requires doctoral students to earn a 3.50 GPA on the first 18 credit hours of ECE graduate coursework (at least 50% of the credit hours must be at the 8000-level). DIS courses are not considered for the Ph.D. qualifier. Full-time students are required to pass the qualifier by the end of the second year of enrollment in the doctoral program. Students who do not achieve this can submit a plan of action to the graduate coordinator for achieving the required GPA. If approved, the student can enroll in up to an additional 6 credit hours of ECE graduate courses to improve ECE course GPA to 3.50. Full-time students are required to improve their GPA by the conclusion of the following semester.

Additionally, doctoral students are required to pass the oral preliminary examination (dissertation-proposal defense). The oral preliminary examination may be taken only after the student has passed the qualifying examination; in addition, the student must have completed or be within 6 hours of completing the coursework. The oral preliminary exam consists of a presentation of current research activities toward the student's dissertation.

Engineering Education

Dr. Kari Babski-Reeves, Associate Dean for Research & Graduate Studies

106 McCain330 Walker Engineering Building Box 9544 Mississippi State, MS 39762 Telephone: 662-325-2270 Fax: 662-325-8573

Graduate Coordinator: Dr. Lesley Strawderman

260 McCain Hall Box 9571 Mississippi State, MS 39762 Telephone: 662-325-7214 E-mail: ene-grad-coord@msstate.edu

An Interdisciplinary Curriculum

The Ph.D. in Engineering with concentration in Engineering Education (ENE) incorporates theory and practice so that its students are prepared to be teachers and scholars in the emerging field of engineering education. Engineering education incorporates theory with applied practice to prepare its graduates for a wide range of careers.

- Engineering policy
- Corporate training management
- Educational technology development
- University assessment
- University administration
- Academia
- Research and scholarship

Graduates of the doctoral program will be able to conduct and direct research in engineering education, develop, review, and critique effective research designs, effectively teach engineering subjects, design and assess engineering programs, and address critical issues facing engineering education.

230 Graduate Catalog

The engineering education graduate program is interdisciplinary, with faculty drawn from the academic departments of the Bagley College of Engineering and the College of Education. Program of study and research leads to the Doctor of Philosophy in Engineering degree with concentration in Engineering Education and is offered on the Starkville campus.

Admission Criteria--An applicant for admission to graduate study must hold a bachelor's degree from a fully recognized four-year educational institution that has unconditional accreditation with appropriate accreditation agencies. He/she must meet the admission requirements of the Graduate School and receive a positive recommendation by the Engineering Education Program Committee. Admission is based primarily on past performance, letters of recommendation, Grade Record Examination (GRE) scores, and the applicant's demonstrated ability to be successful in the ENE Ph.D. program. Applicants with a bachelor's or master's degree from a program accredited by the Engineering Accreditation Commission (EAC) of ABET are preferred.

Regular admission to graduate study in the ENE Ph.D. program for students entering with only a Bachelor's degree requires a minimum grade point average (last four semesters of undergraduate work) of 3.50/4.00. Regular admission to graduate study in the ENE Ph.D. program for students entering with a Master's degree requires a minimum grade point average of 3.30/4.00 in the student's graduate work. When a student is deficient in one of the criteria cited, the student's application, nevertheless, may be considered for admission based on the strength of other materials contained in the student's application. However, reasonable minimum levels of performance must be achieved in both the applicant's GPA and GRE scores. International applicants not holding degrees form U.S. institutions must submit a Test of English as a Foreign Language (TOEFL) report of 575 PBT (84 iBT) or an International English Language Testing Systems (IELTS) score of 7.0 or higher to be considered for admission.

Provisional Admission--An applicant who has not fully met the GPA requirement stipulated by the University ma be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.50 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a B). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.50 GPA is not attained on the first 9 hours of graduate courses, the provisional student shall be dismissed from the graduate program. While in the provisional status, a student is not eligible to hold a graduate assistantship. The minimum acceptable undergraduate grade point average for admission as a provisional student is 3.00/4.00 for the junior and senior years.

Contingent Admission--A student not possessing a B.S. or M.S. degree in an engineering or computer science discipline may be granted contingent admission, depending on qualifications and experienced. A plan of action toward regular admission is formed by the ENE Graduate Coordinator and ENE Program Committee on a case-by-case basis. Typically, contingency is removed by completing undergraduate prerequisite courses in the first few terms after admission. Contingency-admitted students must maintain at least a 3.50/4.00 GPA on all undergraduate prerequisite courses prescribed by their contingency plan of action. For more information, please contact the ENE Graduate Coordinator.

The specific requirements for the Ph.D. in Engineering with concentration in engineering Education degree are governed by the requirements of the Graduate School, the Bagley College of Engineering, and by the student's graduate committee. he ENE Ph.D. student's graduate committee must include at least two Engineering Education faculty, one College of Education faculty member, and one faculty ember from their engineering technical subject area. The graduate committee will ensure that the student's program of study adequately addresses each of the three primary cross-disciplinary areas: engineering education, educational theory/cognitive science/psychology, and an engineering technical area. The Engineering Education Graduate Coordinator must approved the composition of the graduate committee.

Required Courses

Total Hours		68
ENE 9000	Dissertation Research /Dissertation in Engineering Education	20
Select graduate elective courses		6
Other Engineering graduate courses	S	18
Select graduate courses in EDF and	d EPY	6
Advanced Statistics Course (see Gr	aduate Coordinator for a list of approved courses)	3
IE 6623	Engineering Statistics II	3
Statistics Requirement		
EDF 9373	Educational Research Design	3
EDF 8363	Function and Methods of Research in Education	3
ENE 8303	Pedagogy & Assessment in Engineering Education	3
ENE 8003	Foundations in Engineering Education	3
•		

The Engineering Education Graduate Coordinator and the student's graduate committee must approve the student's program of study.

The Doctor of Philosophy in Engineering with concentration in Engineering Education, in addition to the coursework and research hours, includes an oral preliminary, a dissertation, and dissertation defense. Each candidate for the doctoral degree must conduct research and in their dissertation defense on that research demonstrate a master of the techniques of research and make a distinct contribution to the field of Engineering Education. The dissertation must conform to the rules of the Graduate School.

Students in the ENE PhD program are required to pass the oral comprehensive examination in accordance with the program requirements and all Graduate School policies. The student must have completed, or be within 6 hours of completing, their program of study coursework. The comprehensive

exam consists of topics from the student's completed program of study, a presentation of current research activities toward the student's dissertation, and a detailed plan/proposal of dissertation research to be done. Upon successful completion of the comprehensive exam and all coursework on the student's program of study, the student advances to PhD candidacy.

Ph.D. candidates ae required to pass a public dissertation defense to graduate. The Graduate Catalog lists dissertation defense requirements. Additionally, Ph.D. Candidates must submit two journal papers from their dissertation prior to graduation. The receive the ENE Graduate Coordinator's signature on the signature page, a Ph.D. candidate must provide proof of two journal submissions from the dissertation work; otherwise, the Ph.D. candidate will not be allowed to graduate. Journal paper submissions from work not a part of the dissertation, while strong encouraged, cannot be used to satisfy this requirement.

Academic Performance

In addition to the criteria defined in the current *Graduate Catalog*, unsatisfactory performance in the Ph.D. program in Engineering with concentration in Engineering Education is defined as any of the following;

- Failure to maintain a 3.50/4.00 or better GPA on all prerequisite undergraduate courses taken while in the ENE Ph.D. program.
- Failure to maintain a 3.30.4.00 or better GPA on all graduate courses attempted.

Industrial and Systems Engineering

Department Head: Dr. Kari Babski-Reeves

Graduate Coordinator: Dr. Mohammad Marufuzzaman 260 McCain Building Box 9542 Mississippi State, MS 39762 Telephone: 662-325-3865 E-mail: grad-coord@ise.msstate.edu

The Department of Industrial and Systems Engineering offers the Doctor of Philosophy in Industrial and Systems Engineering. In addition, the Department offers the Master of Science in Industrial and Systems Engineering with both thesis and non-thesis options. The M.S. (thesis option) is a research-oriented degree and serves to prepare students for positions in industry or government or for further graduate study in industrial and systems engineering or related areas. The M.S. (non-thesis option) is designed to prepare students for positions in business and industry that require a graduate education.

Concentrations offered at the master's level are:

Human Factors and Ergonomics Concentration (HFE)

This concentration is designed for students who wish to increase their understanding of Human Factors and Ergonomics (HFE). Students will be exposed to both a breadth and depth of HFE principles and practices including but not limited to physical ergonomics, cognitive ergonomics, and occupational safety and health.

Industrial Systems Concentration (SYS)

This concentration prepares students for general Industrial and Systems Engineering (ISE) work. It is designed to allow the student a high degree of flexibility in selecting a program that meets his/her needs. For example, the student might choose to specialize in one or more areas of ISE (e.g., quality engineering) or choose a very broad program covering several ISE fields.

Management Systems Engineering Concentration (MGTS)

This concentration is designed for students who wish to increase their understanding and capability in the areas of management systems engineering and general engineering management. The philosophy behind this option is that students can be provided with knowledge that will enable them to apply an engineering approach to problems involved in the design and operation of management systems.

Manufacturing Systems Concentration (MFGS)

This concentration is designed for students who wish to increase their understanding of the design, analysis and control of manufacturing systems and processes.

Operations Research Concentration (OPRS)

This concentration is designed for students who wish to increase their understanding of and use of Operations Research (OR) skills for systems analysis and design.

Accelerated Programs

Highly qualified undergraduates in the Bagley College of Engineering are encouraged to consider applying to one of two Accelerated Programs offered by the Department of Industrial and Systems Engineering.

Bachelor of Science in Industrial Engineering leading to Master of Science in Industrial Engineering

At the time a student applies to the program, the student must:

- 1. be enrolled at Mississippi State University in one of the eight Bagley College of Engineering programs;
- 2. have earned at least 60 hours toward their respective degree; and
- 3. have an overall cumulative grade point average (GPA) of at least 3.50.

An application package consists of the following items which must be submitted to the Graduate Coordinator of the Industrial and Systems Engineering Department.

- 1. Application form
- 2. One-page résumé

Bachelor of Science in Industrial Engineering leading to Master of Business Administration-Project Management

A second Accelerated Program encourages undergraduate students in Industrial Engineering to work toward a Master of Business Administration-Project Management degree and permits them to earn up to 9 hours of graduate-level coursework during their undergraduate industrial engineering program. These 9 hours are taken as graduate-level courses and earn both undergraduate credit (toward B.S.I.E. completion) and graduate credit (toward M.B.A.-P.M. completion) simultaneously. The Accelerated Program allows students to complete three foundational courses in the M.B.A.-P.M.program while still pursuing their B.S.I.E. The courses approved for the Accelerated Program are IE 6333 (Production Control 1), IE 6533 (Project Management), and IE 6653 (Industrial Quality Control 1). Junior and senior industrial engineering students with a cumulative GPA of 3.50 or higher are eligible to apply. Students interested in applying to the B.S.I.E./M.B.A.-P.M. program should see Accelerated Programs (p. 48) and contact Dr. Lesley Strawderman, ISE Undergraduate Coordinator. Ms. Angelia Knight is Director of the MBA programs in the College of Business.

Admission requirements include the following.

- A GPA of 3.50/4.00 for all undergraduate work
- A minimum of 60 hours towards the bachelor's degree
- · Completed application available from the Department of Industrial and Systems Engineering
- Résumé

Admission Criteria

Typically, an entering M.S. student should have a grade point average of 3.00 out of 4.00 for the junior and senior years. Likewise, an entering Ph.D. student with an M.S. degree should have a 3.50 out of 4.00 grade point average on the M.S. work, while a Ph.D. student entering with only a B.S. degree is expected to have a 3.50 out of 4.00 on the last two years of the undergraduate program. A student with a lower GPA may still be eligible for admission based on outstanding qualifications in other areas. All entering students must submit GRE general-test scores. International students must have a minimum TOEFL score of 550 PBT (79 iBT) or IELTS score of 6.5.

The department reviews completed applications four times a year: February 15, May 15, August 15, and November 15. Incomplete or not fully processed applications will be reviewed during the next cycle.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's Program of Study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Performance

In addition to the criteria defined in the current Bulletin of the Graduate School, unsatisfactory performance in the graduate program in Industrial and Systems Engineering is defined as any of the following.

- Failure to maintain a 3.00 average in the M.S. program or 3.30 in the Ph.D. program,
- · Failure of the qualifying exam (Ph.D. students only),

- Failure of the preliminary exam (Ph.D. students only);
- Failure of the comprehensive final exam (M.S. non-thesis option only),
- · Unsatisfactory evaluation of thesis or dissertation, or
- A failure of the required component of the program of study.

Any one of these will constitute the basis for review for possible dismissal. If the students drops six or more quality points below the required average (3.00 for M.S. or 3.30 for Ph.D.), the graduate coordinator will review the record along with the student's graduate committee and will recommend a final course of action, which will be immediate dismissal or the establishment of a probationary period in which corrective action must take place.

While on probation, the student is not eligible to receive an assistantship and is required to raise his/her cumulative GPA to 3.00 for M.S. or 3.30 for Ph.D. by the end of the following semester of enrollment. During that semester, the student must enroll in 9 credit hours of coursework; Directed Individual Study courses are excluded.

In case of a dismissal from the graduate program, a student may appeal his/her academic dismissal according to the following procedure.

- Within four weeks of being notified of the official dismissal, the student must present the request and related explanation in writing to the graduate coordinator. The graduate coordinator will review the appeal with the appropriate departmental committee and render a recommendation.
- If the appeal at the departmental level is unsuccessful, a student may then appeal to the Associate Dean for Research and Graduate Studies in the college.
- If the appeal at the college level is unsuccessful, the student may then appeal to the Office of the Provost.

Doctor of Philosophy in Industrial & Systems Engineering

Industrial Engineering courses		30
Courses in discipline other than Industrial Engineering		6
IE 6623	Engineering Statistics II (or equivalent)	3
IE 6773	Systems Simulation I (or equivalent)	3
Additional Graduate-level course	ework	6
Research		20
Total Hours		68

A preliminary examination, a dissertation, and an oral examination in defense of the dissertation are required.

Additional requirements are:

- 1. No ISE graduate student may list ST 8114 or IE 6613 on his/her graduate program
- 2. No program can contain more than 15 hours of courses that are required in the bachelor's degree curriculum
- 3. No program can contain more than 6 hours of Directed Individual Study (IE 7000).

Doctoral students must complete at least 48 hours of coursework beyond the B.S. level.

Master of Science in Industrial and Systems Engineering with Human Factors and Ergonomics Concentration (HFE) - Thesis

- MA 1713
- MA 1723
- MA 2733
- MA 2743
- IE 3123
- IE 4613/6613

IE 6773	Systems Simulation I	3
IE 6623	Engineering Statistics II	3
At least 3 HFE ISE courses		9
IE 8000	Thesis Research/ Thesis in Industrial Engineering	6
At least one non-HFE ISE course		3
At least one course from Mathematics (MA),	Statistics (ST), or Computer Science and Engineering (CSE)	3

At least one course from a supporting area (Biological Engineering [ABE], Psychology [PSY], Kinesiology [KI], Mechanical Engineering [ME], Mathematics [MA], Statistics [ST], etc.)

Total Hours

A thesis and an oral comprehensive examination in defense of the thesis are required.

Additional requirements are:

- 1. A minimum of 12 hours coursework must be at the 8000-level or higher.
- 2. No ISE graduate student may list ST 8114 or IE 6613 on his/her graduate program
- 3. No program can contain more than 15 hours of courses that are required in the bachelor's degree curriculum
- 4. No program can contain more than 6 hours of Directed Individual Study (IE 7000).

The thesis-option Master of Science in Industrial Engineering requires at least 24 credit hours of coursework above the baccalaureate degree. IE 9000 does not apply to M.S. students.

Master of Science in Industrial and Systems Engineering with Human Factors and Ergonomics Concentration (HFE) - Non-Thesis

Prerequisites (foundational courses) are:

٠	MA	171	3
---	----	-----	---

- MA 1723
- MA 2733
- MA 2743
- IE 3123
- IE 4613/6613

IE 6773	Systems Simulation I	3
IE 6623	Engineering Statistics II	3
At least three HFE ISE courses		9
At least two non-HFE ISE course	S	6
At least two courses from Mather	natics (MA), Statistics (ST), or Computer Science and Engineering (CSE)	6
At least one course from a suppo [ME], Mathematics [MA], Statistic	rting area (Biological Engineering [ABE], Psychology [PSY], Kinesiology [KI], Mechanical Engineering s [ST], etc.)	3
Total Hours		30

A written and oral comprehensive final exam on the coursework. At least 15 hours for the M.S. non-thesis degree must be from 8000-level courses or above. The specific courses required depend upon the student's area of concentration. IE 8000 Research/Thesis does not apply to non-thesis students.

Additional requirements are:

- 1. No ISE graduate student may list ST 8114 or IE 6613 on his/her graduate program.
- 2. No program can contain more than 15 hours of courses that are required in the bachelor's degree curriculum.
- 3. No program can contain more than 6 hours of Directed Individual Study (IE 7000).

The non-thesis Master of Science requires at least 30 credit hours of coursework above the baccalaureate degree. IE 9000 does not apply to M.S. students.

Master of Science in Industrial and Systems Engineering with Industrial Systems Concentration (SYS) - Thesis

Prerequisites (foundational courses) are:

- MA 1713
- MA 1723
- MA 2733
- MA 2743
- Computer programming proficiency
- IE 3123

3

30

- IE 3913
- IE 4333
- IE 4613/6613

Total Hours		30
All other courses to be selec	ted by the student along with the academic advisor and graduate program committee	21
IE 8000	Thesis Research/ Thesis in Industrial Engineering	6
IE 6773	Systems Simulation I	3

Additional requirements are:

- 1. A minimum of 12 hours coursework must be at the 8000-level or higher.
- 2. No ISE graduate student may list ST 8114 or IE 6613 on his/her graduate program
- 3. No program can contain more than 15 hours of courses that are required in the bachelor's degree curriculum
- 4. No program can contain more than 6 hours of Directed Individual Study (IE 7000).

The thesis-option Master of Science in Industrial Engineering requires at least 24 credit hours of coursework above the baccalaureate degree. IE 9000 does not apply to M.S. students.

Master of Science in Industrial and Systems Engineering with Industrial Systems Concentration (SYS) - Non-Thesis

Prerequisites (foundational courses) are:

- MA 1713
- MA 1723
- MA 2733
- MA 2743
- · Computer programming proficiency
- IE 3123
- IE 3913
- IE 4333
- IE 4613/6613

Total Hours	30
Other courses to be selected by the student along with the academic advisor and grade program committee.	15
At least 15 hours of 8000-level courses selected by the student along with the academic advisor and grade program committee.	15

A written and oral comprehensive final exam on the coursework. At least 15 hours for the M.S. non-thesis degree must be from 8000-level courses or above. The specific courses required depend upon the student's area of concentration. IE 8000 Research/Thesis does not apply to non-thesis students.

Additional requirements are:

- 1. No ISE graduate student may list ST 8114 or IE 6613 on his/her graduate program.
- 2. No program can contain more than 15 hours of courses that are required in the bachelor's degree curriculum
- 3. No program can contain more than 6 hours of Directed Individual Study (IE 7000).

The non-thesis Master of Science requires at least 30 credit hours of coursework above the baccalaureate degree. IE 9000 does not apply to M.S. students.

Master of Science in Industrial and Systems Engineering with Management Systems Engineering Concentration (MGTS) - Thesis

- B.S. in engineering from an ABET-accredited program or permission from the MSE Technical Committee
- IE 3913
- IE 4613/6613

IE 6513	Engineering Administration	3
IE 6533	Project Management	3
IE 6573	Process Improvement Engineering	3
IE 8583	Enterprise Systems Engineering	3
IE 8913	Engineering Economy II	3
IE 8000	Thesis Research/ Thesis in Industrial Engineering	6
At least two non-MSE ISE courses		6
Course to be selected by the student alc	ong with academic advisor and graduate program committee	3
Total Hours		30

Additional requirements are:

- 1. A minimum of 12 hours at the 8000-level is required.
- 2. No ISE graduate student may list ST 8114 or IE 6613 on his/her graduate program
- 3. No program can contain more than 15 hours of courses that are required in the bachelor's degree curriculum
- 4. No program can contain more than 6 hours of Directed Individual Study (IE 7000).

The thesis-option Master of Science in Industrial Engineering requires at least 24 credit hours of coursework above the baccalaureate degree. IE 9000 does not apply to M.S. students.

Master of Science in Industrial and Systems Engineering with Management Systems Engineering Concentration (MGTS) - Non-Thesis

Prerequisites (foundational courses) are:

- B.S. in engineering from an ABET-accedited program or permission from the MSE Technical Committee
- IE 3913
- IE 4613/6613

Total Hours		30
Other courses to be selected by the student along with the academic advisor and graduate program committee		9
At least two non-MSE ISE course	6	
IE 8913	Engineering Economy II	3
IE 8583	Enterprise Systems Engineering	3
IE 6573	Process Improvement Engineering	3
IE 6533	Project Management	3
IE 6513	Engineering Administration	3

A written and oral comprehensive final exam on the coursework. At least 15 hours for the M.S. non-thesis degree must be from 8000-level courses or above. The specific courses required depend upon the student's area of concentration. IE 8000 Research/Thesis does not apply to non-thesis students.

Additional requirements are:

- 1. No ISE graduate student may list ST 8114 or IE 6613 on his/her graduate program
- 2. No program can contain more than 15 hours of courses that are required in the bachelor's degree curriculum
- 3. No program can contain more than 6 hours of Directed Individual Study (IE 7000).

The non-thesis Master of Science requires at least 30 credit hours of coursework above the baccalaureate degree. IE 9000 does not apply to M.S. students.

Master of Science in Industrial and Systems Engineering with Manufacturing Systems Concentration (MFGS) - Thesis

- B.S. in engineering from an ABET-accredited program or permission from the Manufacturing Systems Technical Committee
- Computer programming proficiency

- IE 4333/6333
- IE 4613/6613

0,	ent along with the academic advisor and graduate program committee	3
	Course to be selected by the student along with the academic advisor and graduate program committee	
At least two non-Manufacturing Systems ISE courses		6
At least two Manufacturing Systems ISE courses		6
IE 8000	Thesis Research/ Thesis in Industrial Engineering	6
IE 8333	Production Control Systems II	3
IE 6773	Systems Simulation I	3
IE 6653	Industrial Quality Control	3

Additional requirements are:

- 1. A minimum of 12 hours coursework must be at the 8000-level or higher.
- 2. No ISE graduate student may list ST 8114 or IE 6613 on his/her graduate program
- 3. No program can contain more than 15 hours of courses that are required in the bachelor's degree curriculum
- 4. No program can contain more than 6 hours of Directed Individual Study (IE 7000).

The thesis-option Master of Science in Industrial Engineering requires at least 24 credit hours of coursework above the baccalaureate degree. IE 9000 does not apply to M.S. students.

Master of Science in Industrial and Systems Engineering with Manufacturing Systems **Concentration (MFGS) - Non-Thesis**

Prerequisites (foundational courses) are:

- B.S. in engineering from an ABET-accredited program or permission from the Manufacturing Systems Technical Committee
- · Computer programming proficiency
- IE 4333/6333
- IE 4613/6613

Total Hours		30
Other courses to be selected by the student along with the academic advisor and graduate program committee		9
At least two non-Manufacturing Systems ISE courses		6
At least two Manufacturing Systems ISE courses		6
IE 8333	Production Control Systems II	3
IE 6773	Systems Simulation I	3
IE 6653	Industrial Quality Control	3

Total Hours

A written and oral comprehensive final exam on the coursework. At least 15 hours for the M.S. non-thesis degree must be from 8000-level courses or above. The specific courses required depend upon the student's area of concentration. IE 8000 Research/Thesis does not apply to non-thesis students. IE 9000 does not apply to M.S. students.

Additional requirements are:

- 1. No ISE graduate student may list ST 8114 or IE 6613 on his/her graduate program
- 2. No program can contain more than 15 hours of courses that are required in the bachelor's degree curriculum
- 3. No program can contain more than 6 hours of Directed Individual Study (IE 7000).

The non-thesis Master of Science requires at least 30 credit hours of coursework above the baccalaureate degree. IE 9000 does not apply to M.S. students.

Master of Science in Industrial and Systems Engineering with Operations Research **Concentration (OPRS) - Thesis**

- MA 1713
- MA 1723
- MA 2733
- MA 2743
- Computer programming proficiency
- IE 4613/6613

Course to be selected by the student along with the academic advisor and graduate program committee		3
At least one course from Computer Science (CSE), Mathematics (MA), or Statistics (ST)		3
At least two non-OR ISE cours	Ses	6
At least two OR ISE ccourses		6
IE 8000	Thesis Research/ Thesis in Industrial Engineering	6
IE 6773	Systems Simulation I	3
IE 6733	Linear Programming	3

Additional requirements are:

- 1. A minimum of 12 hours coursework must be at the 8000-level or higher.
- 2. No ISE graduate student may list ST 8114 or IE 6613 on his/her graduate program
- 3. No program can contain more than 15 hours of courses that are required in the bachelor's degree curriculum
- 4. No program can contain more than 6 hours of Directed Individual Study (IE 7000).

The thesis-option Master of Science in Industrial Engineering requires at least 24 credit hours of coursework above the baccalaureate degree. IE 9000 does not apply to M.S. students.

Master of Science in Industrial and Systems Engineering with Operations Research Concentration (OPRS) - Non-Thesis

Prerequisites (foundational courses) are:

- MA 1713
- MA 1723
- MA 2733
- MA 2743
- Computer programming proficiency
- IE 4613/6613

Total Hours		30
Courses to be selected by the student along with the academic advisor and graduate program committee		9
At least one course com Computer Science (CSE), Mathematics (MA), or Statistics (ST)		3
At least two non-Operations Research ISE courses		6
At least two Operations Rea	search ISE courses	6
IE 6773	Systems Simulation I	3
IE 6733	Linear Programming	3

A written and oral comprehensive final exam on the coursework. At least 15 hours for the M.S. non-thesis degree must be from 8000-level courses or above. The specific courses required depend upon the student's area of concentration. IE 8000 Research/Thesis does not apply to non-thesis students. IE 9000 does not apply to M.S. students.

Additional requirements are:

- 1. No ISE graduate student may list ST 8114 or IE 6613 on his/her graduate program
- 2. No program can contain more than 15 hours of courses that are required in the bachelor's degree curriculum
- 3. No program can contain more than 6 hours of Directed Individual Study (IE 7000).

The non-thesis Master of Science requires at least 30 credit hours of coursework above the baccalaureate degree. IE 9000 does not apply to M.S. students.

Master of Engineering

Associate Dean for Research & Graduate Studies and Graduate Coordinator: Dr. Kari Babski-Reeves

160 McCain Box 9544 Mississippi State, MS 39762 Telephone: 662-325-2270 Fax: 662-325-8573 E-mail: kari@bagley.msstate.edu ortswann@bagley.msstate.edu Website: http://www.bcoelearning.msstate (http://www.bcoelearning.msstate.edu/academic-programs/master-of-engineering/)

An Interdisciplinary Program

Graduate study is offered through the Office of the Dean, James Worth Bagley College of Engineering, leading to the degree of Master of Engineering (M Eng) with a concentration in General Engineering or Military Engineering. The M Eng is an interdisciplinary program which combines graduate-level courses from different engineering programs into an advanced-level educational experience that is thematic in nature to allow students to specialize in areas critical to their career advancement. This has both a thesis and non-thesis option.

All students admitted to the M Eng should become familiar with academic requirements and processes associated with graduate studies in the Bagley College of Engineering and Mississippi State University as noted in the MSU *Graduate Catalog* in the General Requirements of the Graduate School and General Master's Degree Requirements sections. The *Graduate Catalog* is available at http://catalog.msstate.edu/graduate/. For specific information about the program, email graduate@bagley.msstate.edu.

Admission Criteria

In addition to meeting the requirements set forth by the Graduate School as noted in the admission section of this publication, the basic requirements for admission to the M Eng include a minimum 3.00/4.00 GPA on a B.S. degree in an engineering discipline or closely related area or remedial engineering coursework. Students should refer to the General Requirements for Admission section in the *Graduate Catalog* regarding University admission policy. A satisfactory performance is required on the GRE for students with a degree from a program that is not EAC/ABET-accredited. Consideration may be given to students who hold non-engineering undergraduate degrees on a case-by-case basis. Admission decisions are made by the Associate Dean for

given to students who hold non-engineering undergraduate degrees on a case-by-case basis. Admission decisions are made by the Associate Dear Research and Graduate Studies.

As part of the standard engineering undergraduate program, a student will have had the following coursework.

- Calculus I-IV and Differential Equations
- One year of calculus-based physics
- One semester of general chemistry class
- Two or three engineering science courses (e.g. electronic circuits, engineering mechanics, thermodynamics, production control systems)

The commonality in fundamental coursework in ABET-accredited engineering programs generally allows for the offering of graduate-level engineering courses with a prerequisite of "graduate standing." A student with a significant practical work experience in an area will have "consent of Instructor" as a standard prerequisite. If specific, significant prerequisites are required for any course, these will be clearly identified when the course is posted.

Provisional Admission

An applicant who does not meet a programmatic or university admission requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student may be dismissed from the graduate program. While in the provisional status, a student is not eligible to hold a graduate assistantship.

Unclassified Admission

In certain circumstances, a student may be granted admission in unclassified status. Only 9 hours of graduate coursework received as an unclassified student **may** be transferred to the M Eng with the approval of the Associate Dean for Research and Graduate Studies. Hours completed in unclassified status may not be used to satisfy provisional admission requirements.

Academic Performance

To be in good academic standing, a student is required to maintain a cumulative graduate GPA of 3.00 after admission to the program. If a graduate student's cumulative GPA falls below 3.00, the student will be placed on academic probation. The student must raise the cumulative GPA to at least a

3.00 on the next 9 hours of approved coursework in order to return to satisfactory academic performance. DIS credits, transfer credits and courses with S grades cannot be used to satisfy this requirement.

A student may be dismissed from the M Eng if:

- In any subsequent semester the student's cumulative GPA again falls below 3.00
- A student makes a grade of D, F, or more than two Cs.

In the case of academic dismissal, the student may appeal his/her academic dismissal according to Appeal of Academic Dismissal as outlined in the MSU Graduate Catalog.

Accelerated Program

Highly qualified undergraduates in the departments of Aerospace Engineering; Agricultural and Biological Engineering; Chemical Engineering; Civil and Environmental Engineering; Computer Science and Engineering; Electrical and Computer Engineering; Industrial and Systems Engineering; and Mechanical Engineering are encouraged to consider applying to the Accelerated Program. This program permits students to earn up to 9 hours of graduate-level coursework during their final year of undergraduate studies. Students in the Accelerated Program take graduate-level courses and earn both undergraduate credit and graduate credit simultaneously. Students need to consult with the Master of Engineering Graduate Coordinator to ensure graduate credit could be applied to a program of study for the graduate degree. Application to this program may be made after completion of 90 or more hours of graded undergraduate courses. Students interested in applying should see Accelerated Programs (p. 48) for information and contact the Master of Engineering Graduate Coordinator for more details.

At the time a student applies to the Accelerated Program, she or he must complete the following requirements:

- Be enrolled at Mississippi State University in one of the 11 undergraduate degree programs in the Bagley College of Engineering
- · Have completed a minimum of 60 credit hours toward a Bachelor's degree
- Have an overall GPA of 3.5 or higher for all undergraduate work

An application packet to be submitted to the Graduate Coordinator of the Master of Engineer Program must include the following:

- · Application form
- One-page résumé
- · Three letters of recommendation from references who are knowledgeable about the applicant's academic work
- Admission into the Accelerated Program requires a GPA of 3.50 or higher on a 4.00 system for all undergraduate work

Master of Engineering - Non-Thesis Option

Total Hours		30
Any Bagley College of Engine	ering class in combination with up to 12 hours outside of engineering ¹	21
GE 8003	Master of Engineering Capstone Course	3
or equivalent		
or CE 6703	Construction Engineering and Management	
IE 6533	Project Management	3
or equivalent		
or ST 8114	Statistical Methods	
IE 6613	Engineering Statistics I	3
Major Required Courses		

Total Hours

A minimum of 15 hours at the 8000-level is required.

Master of Engineering - Thesis Option

Major Required Courses		
IE 6613	Engineering Statistics I	3
or ST 8114	Statistical Methods	
or equivalent		
IE 6533	Project Management	3
or CE 6703	Construction Engineering and Management	
or equivalent		
Any Bagley College of Enginee	aring class in combination with up to 12 hours outside of engineering 1	18

Any Bagley College of Engineering class in combination with up to 12 hours outside of engineering

Thesis-option	6
XX 8000 Research/Thesis taken in a College of Engineering department	
Total Hours	30

1 A minimum of 12 hours at the 8000-level is required.

Master of Engineering - Military Engineering Concentration - Non-Thesis Option

Total Hours		30
Military Engineering Approved Elective courses (requires approval of graduate coordinator) ¹		21
GE 8003	Master of Engineering Capstone Course	3
or equivalent		
or CE 6703	Construction Engineering and Management	
IE 6533	Project Management	3
or equivalent		
or ST 8114	Statistical Methods	
IE 6613	Engineering Statistics I	3
Major Required Courses		

1

A minimum of 15 hours at the 8000-level is required.

Master of Engineering - Military Engineering Concentration - Thesis Option

Total Hours		30
XX 8000 Research/Thesis	s taken in a College of Engineering department	
Thesis-option		6
Military Engineering Approve	d Elective Courses (requires approval of graduate coordinator) ¹	18
or equivalent		
or CE 6703	Construction Engineering and Management	
IE 6533	Project Management	3
or equivalent		
or ST 8114	Statistical Methods	
IE 6613	Engineering Statistics I	3
Major Required Courses		

1 A minimum of 12 hours at the 8000-level is required.

The curriculum for the M Eng (both concentrations) is flexible with a minimum requirement of 30 credit hours for both the thesis and non-thesis tracks. Engineering Statistics I and Project Management (or their equivalent) must have been completed as part of another degree program or will be required on the M Eng program of study. For the thesis option, 24 hours of graduate-level coursework are required, with a minimum of 12 hours at the 8000 level, and 6 hours of research/thesis. For the non-thesis option, 30 hours of graduate-level coursework are required, with a minimum of 15 hours at the 8000 level. Coursework is selected from courses offered across the Bagley College of Engineering. Up to 12 hours may be taken from outside the engineering field (normally business, science, mathematics, or statistics; upon petition to the Associate Dean for Research and Graduate Studies, other areas may be considered). For the Military Engineering concentration, courses are selected from a set of identified courses that are applicable to this focus. Additionally, non-thesis students in either concentration must complete GE 8003 as the final capstone course for this program.

Mechanical Engineering

Department Head: Dr. Haitham El Kadiri Graduate Coordinator: Dr. Tonya Stone 212 Carpenter Engineering Building Box 9552 Mississippi State, MS 39762 Telephone: 662-325-4133 Fax: 662-325-7223 E-mail: gradcoord@me.msstate.edu (graduate@me.msstate.edu) Website: http://www.me.msstate.edu (http://www.me.msstate.edu/) The Mechanical Engineering program offers graduate study leading to the degrees of Master of Science in Mechanical Engineering and Doctor of Philosophy in Engineering with a Mechanical Engineering concentration. Both M.S. and Ph.D. degrees are available via BCoE Learning (online). The major areas of study include but are not limited to: fluid mechanics, solid mechanics, energy systems, thermal sciences, materials and manufacturing, mechanical design, and system dynamics. Specific programs of graduate study are established by consultation between students and their advisors. For further information contact the Graduate Coordinator, Mechanical Engineering Department, BOX 9552, Mississippi State, MS 39762 or gradcoord@me.msstate.edu.

Admission Criteria

A minimum GPA of 2.75 is required for admission. An entering graduate student with a bachelor's degree from a program that is not accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET) must submit GRE general-test scores. An international student must have a minimum TOEFL score of 550 PBT (79 iBT) or IELTS score of 6.5.

Provisional Admission

A provisional student must receive a 3.00 GPA on the first 9 hours of graduate level courses on his or her program of study taken at Mississippi State University (courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement) in order to be released from provisional status and achieve regular status. If a 3.00 GPA is not attained, the provisional student may be dismissed from graduate study. While in provisional status, a student is not eligible to hold a graduate assistantship.

Academic Performance

For students enrolled in either the M.S. or Ph.D. program, all issues related to academic probation, dismissal and appeal will be governed by University policy, as approved by Graduate Council and the Provost and outlined by the Graduate School in the Graduate Catalog (http://catalog.msstate.edu/ graduate/academic-policies/academic-requirements/).

Accelerated Program

Highly qualified undergraduates in the Mechanical Engineering Department are encouraged to consider applying to the Accelerated Program. This program permits students to earn up to 9 hours of graduate-level coursework during their final year of undergraduate studies. Students in the Accelerated Program take graduate-level courses and earn both undergraduate credit and graduate credit simultaneously. Students need to consult with the potential graduate advisor to ensure graduate credit could be applied to a program of study for the graduate degree. Application to this program may be made as early as the junior year (i.e. after completion of 60 or more hours of graded undergraduate courses). Students interested should see Accelerated Programs (p. 48) and contact the department's Graduate Coordinator, Dr. Tonya Stone, for more details.

Master of Science in Mechanical Engineering - Thesis

Total Hours		31
ME 8000	Thesis Research/ Thesis in Mechanical Engineering	6
Additional graduate-level coursework		12
XX 8XXX	Graduate-level coursework (can include up to 6 hours of DIS- ME 7000)	12
ME 8011	Graduate Seminar	1

A thesis and a final oral exam are required.

Master of Science in Mechanical Engineering - Non-Thesis

Total Hours		31
Additional graduate-level coursework		15
XX 8XXX	Graduate-level coursework (can includes up to 6 hours of DIS- ME 7000)	15
ME 8011	Graduate Seminar	1

An oral presentation and final are required.

Doctor of Philosophy in Engineering with Mechanical Engineering Concentration

Total Hours		63
ME 9000	Dissertation Research /Dissertation in Mechanical Engineering	20
Other graduate coursewor	K	21
XX 8XXX graduate-level co	pursework (may include up to 6 credit hours of DIS- ME 7000 taken since bachelor's)	18
ME 8213 OR MA 6313 OR	MA 6323 OR MA 8203 OR MA 8463	3
ME 8011	Graduate Seminar	1

Students who have entered the ME Ph.D. program are required to take the Ph.D. qualifying exams after they have completed 18 graduate course credit hours or within their first 3 years, whichever comes first. An oral preliminary comprehensive examination is required at least six months prior to graduation and after determination of dissertation topic. A final oral dissertation defense is required. The student's program of study, including all coursework, must be approved by the committee and the graduate coordinator.

College of Forest Resources

Interim Dean: Dr. Wes Burger Associate Dean: Dr. Ian A. Munn 107 Thompson Hall Telephone: 662-325-2953 Fax: 662-325-8762 Mailing Address: Box 9680, Mississippi State, MS 39762-9680 Website: http://www.cfr.msstate.edu (http://www.cfr.msstate.edu/) E-mail: iam1@msstate.edu

Degree Programs

Department	Degree and Major	Concentration	Thesis	Non-Thesis	Starkville	Meridian	Distance
Forestry	Master of Science - Forestry		Х	Х	Х		Х
Forestry	Doctor of Philosophy - Forest Resources	Forestry			Х		
Sustainable Bioproducts	Master of Science - Sustainable Bioproducts		Х	Х	Х		Х
Sustainable Bioproducts	Doctor of Philosophy - Forest Resources	Sustainable Bioproducts			Х		
Wildlife, Fisheries & Aquaculture	Master of Science - Wildlife, Fisheries and Aquaculture		Х		х		
Wildlife, Fisheries & Aquaculture	Master of Science - Conservation Education			Х	Х		Х
Wildlife, Fisheries & Aquaculture	Doctor of Philosophy - Forest Resources	Wildlife, Fisheries and Aquaculture			Х		

The College of Forest Resources (CFR) is the only college of its kind in the state providing learning and research opportunities in forestry, sustainable bioproducts, wildlife, fisheries, aquaculture, and water resources. The college has over 4,000 alumni who make an impact daily on conserving the planet and providing for a sustainable environment. The college has earned a national and international reputation as a center for science and education programs in forestry; wildlife, fisheries and aquaculture; and sustainable bioproducts. A Master of Science degree in forestry offered through distance learning allows students from across the globe an opportunity to advance their knowledge.

Forestry

Department Head and Graduate Coordinator: Dr. Donald Grebner

105A Thompson Hall Box 9681 Mississippi State, MS 39762-9681 Telephone: 662-325-2949 E-mail: dgrebner@cfr.msstate.edu

Graduate study is offered in the Department of Forestry leading to the degrees of:

- Master of Science (M.S.) in Forestry (Main Campus and Distance Campus) and
- · Doctor of Philosophy (Ph.D.) in Forest Resources with a concentration in Forestry

Specialized areas of study include the following:

- Ecohydrology
- · Forest biometrics
- · Forest business and finance
- · Forest ecology
- · Forest ecophysiology
- Forest genetics
- · Forest harvesting and operations
- · Forest hydrology and soils
- Forest management and economics
- Forest recreation
- Forest restoration
- Silviculture
- · Spatial technologies in natural resource management
- Urban and community forestry
- · Wildlife and other natural resource economics

Graduate teaching and research assistantships are available to qualified students.

Admission

M.S. in the Department of Forestry

Admission to the M.S. program in the Department of Forestry requires:

- 1. a Bachelor's degree from an accredited university;
- a grade point average (GPA) of 3.00 or higher for the last 60 hours of undergraduate study (for regular admission) or a GPA between 2.5 and 2.99 (for provisional admission);
- 3. a TOEFL score of 550 PBT (79 iBT) or IELTS score of 6.5 or higher for regular admission of international students or a TOEFL score between 477 and 549 (or IELTS equivalent) for conditional admission; and
- 4. acceptance by a faculty member who will serve as the student's major professor.

In addition, Graduate Record Examination (GRE) scores may be requested of applicants who do not meet regular admission requirements or international students applying from non-accredited universities or colleges.

Ph.D. in the Department of Forestry

Admission to the Ph.D. program in the Department of Forestry requires:

- 1. Bachelor's degree from an accredited university and an M.S. degree in a related field (or approval for exceptions to the Master's requirement);
- 2. GPA of 3.10 or higher on prior graduate courses or 3.25 or higher for the last 60 hours of undergraduate study (for exceptions to the Master's requirement);
- 3. TOEFL score of 550 PBT (79 iBT) or IELTS score of 6.5 or higher for regular admission of international students **or** a TOEFL score between 477 and 549 (or IELTS equivalent) for conditional admission; and
- 4. Acceptance by a faculty member who will serve as the student's major professor.

In addition, GRE scores may be requested of international students applying from non-accredited universities or colleges. There is no provisional admission to the doctoral program.

Provisional Admission

Provisional admission does not apply to doctoral applicants. Only Master's degree applicants who have a GPA between 2.50 and 2.99 for the last 60 semester hours of their undergraduate program may be admitted under provisional status, if accepted by a faculty member in the department.

The provisionally admitted student is eligible for regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional

student **shall** be dismissed from the graduate program. A student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Performance

A graduate student must maintain a 3.00 GPA to remain on a graduate assistantship and must have a 3.00 GPA or greater to receive his/her degree. A main campus student who begins the program in regular status and falls below a 3.00 cumulative GPA at any time following the start of the program will be placed on probationary status in the following semester and must regain a cumulative GPA of 3.00 within the next two subsequent semesters or within 9 credit hours of graduate coursework, whichever comes first (providing that the student attains a minimum GPA of 3.00 in all semesters during the probationary period). A distance education student who begins the M.S. program in regular status and falls below a 3.00 cumulative GPA at any time following the start of the program will be place on probationary status in the following semester and will be allowed 9 credit hours of graduate coursework to bring his/her cumulative GPA back to 3.00 regardless of the number of semesters (providing that the student attains a minimum GPA of 3.00 in all semesters during the probationary period). If this is not accomplished, the student will be dismissed from the graduate program. A student admitted on provisional status will not be allowed a probationary semester but will be dismissed if the GPA falls below 3.00.

A student receiving any grade of D or F in any course taken after admission to the graduate program will be placed on academic probation and will be required to maintain satisfactory academic performance in all subsequent semesters of his/her graduate program or will be dismissed from the graduate program and lose eligibility for readmission. A student receiving a grade of U will have one semester to bring his/her performance back up to satisfactory or will be dismissed from the graduate program and lose eligibility for readmission.

Prerequisite and Core Courses

There are no prerequisite or core graduate-level courses required of all graduate students in the Department of Forestry. Each area of emphasis, and each student's research or professional paper assignment, will influence what courses are required.

Accelerated Program

Highly qualified undergraduates in the Department of Forestry are encouraged to consider applying to the Accelerated Program. This program permits students to earn up to 15 hours of graduate level coursework during their final year of undergraduate studies. Students take graduate level courses and earn both undergraduate credit and graduate credit simultaneously. Students need to consult with a potential graduate advisor to ensure graduate credit could be applied to a Program of Study for the graduate degree. Application to this program may be made as early as the end of the sophomore year (i.e., after completion of 60 or more hours of graded undergraduate courses). Student interested in applying to the Accelerated Program should contact the Department's Graduate Coordinator, Dr. Don Grebner for more details.

Master of Science in Forestry - Thesis

Total Hours		30
FO 8000	Thesis Research/ Thesis in Forestry	6
Graded 8000-level coursework		12
Graded graduate-level Forestry course	es	12

In addition to passing all courses on the approved program of study with a GPA of 3.00 or higher, requirements include passing a comprehensive oral examination on coursework taken, completion of a thesis, passing a final comprehensive defense of the thesis, and securing final approval of the thesis.

If a minor is chosen in another field, at least 9 hours in the minor area must be taken, and a committee member from the minor area is required (refer to individual departmental requirements for minors). In conjunction with the student, the student's graduate committee will determine what courses are best suited for the program of study.

Master of Science in Forestry - Non-Thesis

Total Hours	30
Graded 8000-level coursework including FO 8293 Professional Paper	18
Graded graduate-level Forestry courses	12

In addition to passing all courses on the approved program of study with a GPA of 3.00 or higher, requirements include passing a comprehensive oral examination on coursework taken, completion of a professional paper, passing a final comprehensive defense of the professional paper, and securing final approval of the professional paper.

If a minor is chosen in another field, at least 9 hours in the minor area must be taken, and a committee member from the minor area is required (refer to individual departmental requirements for minors). In conjunction with the student, the student's graduate committee will determine what courses are best suited for the program of study.

Doctor of Philosophy in Forestry

Total Hours		54
Additional graduate-level cour	ses and/or dissertation/research credit hours	10
FO 9000	Dissertation Research/Dissertation in Forestry	20
Forestry)		
Graduate-level coursework (b	eyond the Bachelor's degree) including 12 credit hours of coursework in the area of emphasis (preferably	24

A doctoral student's graduate committee will determine the number of course hours required for the Ph.D. degree based on the student's academic background and courses currently available at MSU. This must include a minimum of 24 graded coursework hours beyond the Bachelor's degree, the MSU requirement of at least 20 hours of FO 9000 Research/Dissertation credit, and any requirement of full-time enrollment for an assistantship.

If a minor is chosen, at least 12 hours in the minor area must be taken, and a committee member from the minor area is required.

Completion of the Ph.D. program requires passing all courses on the approved doctoral program of study with a GPA of 3.00 or higher after admission to the program, passing a preliminary/comprehensive examination for admission to candidacy when within 6 hours of completing coursework, writing a dissertation, passing a final comprehensive defense of the dissertation, completing all required changes, securing final approval of the dissertation, and securing final approval of the dissertation.

Sustainable Bioproducts

Department Head and Graduate Coordinator: Dr. Rubin Shmulsky

201 Locksley Way Box 9820 Mississippi State, MS 39762-9820 Telephone: 662-325-2116 E-mail: rs26@msstate.edu

The Sustainable Bioproducts field is concerned with extending our knowledge of wood as a material and applying this knowledge to the manufacture of useful products. It requires knowledge of the chemical, physical, botanical, and engineering characteristics of wood and other biomaterials, and the application of these characteristics to production of solid and engineered wood products in related industries. The M.S. thesis-option program requires 24 hours of academic coursework, 6 hours of research/thesis credit, and a defense of the student's written thesis before his or her graduate committee. The M.S. non-thesis (Campus 1 and Campus 5) program requires 30 hours of academic coursework and a comprehensive examination. The M.S. non-thesis Campus 5 program also requires 30 hours of academic coursework (24 hours of academic coursework, 3 hours of professional practices, 3 hours of capstone/final project) and comprehensive examination.

Graduate study in the Department of Sustainable Bioproducts leads to the following degrees:

- Master of Science in Sustainable Bioproducts, thesis option
- Master of Science in Sustainable Bioproducts, non-thesis option
- Doctor of Philosophy in Forest Resources with a concentration in Sustainable Bioproducts

Major areas of study include composites, environmental biotechnology, materials science, bioenergy, bio-based material protection, cross laminated timber, business and production systems, and wood chemistry. Research assistantships are available for Ph.D. students and for M.S. students in the thesis option. For additional information, see the Sustainable Bioproducts Graduate Handbook (http://www.cfr.msstate.edu/bioproducts/docs/ grad_handbook.pdf) or contact the Departmental Graduate Coordinator.

Admission

An applicant to the program is not required to have the GRE or GMAT test scores unless his/her grade point average is below 3.00. An international applicant is required to have a TOEFL score of 550 PBT (79 iBT) or IELTS score of 6.5 or better in order to be considered. Interviews, certifications, etc. are not applicable.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Performance

The Department of Sustainable Bioproducts will accept a C grade; however, the student's overall GPA must be 3.00 or above.

Accelerated Program

The Department of Sustainable Bioproducts offers an Accelerated BS/MS program to highly qualified MSU undergraduates. Programs of this type, offered in several departments across the university, give students the opportunity to earn graduate credit while completing a Bachelor's program. Currently enrolled undergraduates who have completed 60 credit hours toward a Bachelor's degree, and who have a GPA of 3.5 or higher for all undergraduate work may apply for the program by contacting the Department of Sustainable Bioproducts for further information. Undergraduates may enroll in graduate level courses and receive credit for both the graduate and equivalent undergraduate course upon completion. These courses will be taken during their final year of undergraduate studies, and the student is expected to apply to the graduate program in Sustainable Bioproducts in their final semester, completing both programs in as few as five years in total.

The M.S. thesis-option program requires 24 hours of academic coursework, 6 hours of research/thesis credit, and a defense of the student's written thesis before his or her graduate committee. The M.S. non-thesis Campus 1 program requires 30 hours of academic coursework and a comprehensive examination. The M.S. non-thesis Campus 5 program also requires 30 hours of academic coursework (24 hours of academic coursework, 3 hours of professional practices, 3 hours of capstone/final project) and comprehensive examination. The Ph.D. program may entail approximately 60 hours of course and research work, a written preliminary examination, an oral examination, and a dissertation.

Master of Science in Sustainable Bioproducts - Thesis

Total Hours		30
SBP 7000 Direct Individual St	udy (no more than 6 hours total) may be used to satisfy 8000-level course requirements	
Graduate-level courses from o	other MSU departments as approved by the graduate committee	
Graduate-level electives		10
SBP 8000	Thesis Research/ Thesis in Sustainable Bioproducts	6
SBP 8121	Research Seminar II	1
SBP 8111	Research Seminar I	1
Graduate-level coursework		12

A comprehensive examination is required. The M.S. student is encouraged to present one professional paper to a referred journal.

Master of Science in Sustainable Bioproducts - Non-Thesis

Total Hours		30-34
Graduate-level electives		12-16
SBP 8203	Graduate Capstone (Graduate Capstone Seminar)	3
SBP 8023	Professional Practices in Wood Products Industry (Professional Practices in Wood Products Industry)	3
Major Required Courses: Camp	pus 5 non-thesis option	
OR		
SBP 8121	Research Seminar II	
SBP 8111	Research Seminar I	
Major Required Courses: Camp	pus 1 thesis option and non-thesis option	
Graduate-level coursework		12

A comprehensive examination is required.

Doctor of Philosophy in Forest Resources with a Concentration in Sustainable Bioproducts

The Ph.D. program generally requires three academic years beyond the bachelor's degree as a full-time student. The total number of course credit hours may vary based on the specific doctoral program, the student's needs, and the student's academic history.

Total Hours		54
Additional hours		10
SBP 9000	Dissertation Research /Dissertation in Sustainable Bioproducts	20
Academic hours with half at the 8000 level or higher		24

A written preliminary examination, an oral examination, and a dissertation are required. In lieu of the foreign language requirement, the Ph.D. candidate is required to take 6 hours of research skill courses from the departmental list. The Ph.D. student is encouraged to submit two professional papers to referred journals. The student must meet all the necessary guidelines to complete thesis/dissertation requirements set by the department, college, and the University in order to graduate. Types of qualifying and exit examinations are required by the department (doctoral preliminary).

Wildlife, Fisheries, and Aquaculture

Department Head: Dr. Andrew J. Kouba Graduate Coordinator: Dr. Kevin M. Hunt Forest Products Bldg. Room 1203 Box 9690 Mississippi State, MS 39762-9690 Telephone: (662) 325-0870 E-mail: kevin.hunt@msstate.edu

The Wildlife, Fisheries and Aquaculture Department offers graduate education leading to the Master of Science in Wildlife, Fisheries and Aquaculture with emphases in wildlife ecology and management, fisheries ecology and management, and aquaculture.

A Ph.D. degree is offered in Forest Resources with a concentration in Wildlife, Fisheries and Aquaculture. A limited number of graduate research assistantships and fellowships are available. For additional information please contact the Graduate Coordinator.

Admission Criteria

The applicant for a master's degree must hold a bachelor's degree and must be sponsored by an extramurally funded research project. The applicant for the Ph.D. degree must hold a master's degree and also is usually sponsored by an extramurally funded research project. It is strongly encouraged for the applicant to personally contact a professor within the department to discuss potential research opportunities. An applicant cannot be admitted to the department until a faculty member agrees to serve as a major professor. The applicant for the master's program must have taken the general Graduate Record Examination (GRE), and a) have a minimum GPA of 3.00 out of 4.00 for the last 60 semester hours of undergraduate academic work, or b) have an overall undergraduate GPA above 3.00 and achieved a GPA greater than 2.75 out of 4.00 for the last 60 semesters hours of undergraduate academic work. An applicant for the Ph.D. program must have an M.S. degree, a minimum GPA of 3.20 out of 4.00 on all prior graduate studies (excluding research or thesis credits), and must have taken the general GRE. Official transcripts of undergraduate and graduate work, GRE, and TOEFL or IELTS scores (if appropriate) should be sent to the Graduate School.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. A student entering on a provisional basis (available only for master's students) is required to take three graduate courses (minimum of 9 hours) in the first regular fall or spring semester and make a grade of B or higher in each of these courses. These courses will be selected by the departmental Graduate Program Advisory Committee (GPAC) and will include ST 8114 or equivalent, but may not include special problem courses, directed individual study courses, or thesis research hours. No provisional probation courses can be scheduled with the student's major professor. Failure to meet the grade requirement will result in dismissal and loss of eligibility for readmission to this department's graduate program. Students on provisional probation are not eligible for an assistantship and must cover their own tuition but may be paid wages equivalent to a base stipend.

Academic Performance

Students must maintain a cumulative 3.00 GPA on all courses after admission to the graduate program. If a master's student falls below a 3.00 cumulative GPA, he/she will be placed on probation for the next fall or spring semester. Probation courses will be selected by the GPAC and will include two 8000-level courses and one 6000 course if available. No special topics courses, directed individual study courses, or thesis research hours can be used toward probation. No probation courses can be scheduled with the student's major professor. A master's student admitted under normal circumstances (not provisional) will be allowed only one probationary semester. If a student is admitted on a provisional basis, he/she will be allowed one probationary semester beyond that point. If grades do not meet the required B or better in each course taken, the student will be dismissed from the program. The department has an appeal process in the event the student wishes to file an appeal. A doctoral student falling below a 3.00 cumulative average after admission to the program will be immediately dismissed from the program unless the student's committee justifies an exception which is reviewed by the departmental GPAC and then approved by the department head.

Unsatisfactory Performance

All graduate students are expected to know and comply with University, departmental, and subject-area requirements. Failure to comply satisfactorily with all requirements may seriously affect the student and, in some cases, may lead to termination of assistantships or dismissal from the graduate program in this department.

Program of Study/Completion Requirements

Prior to submitting the formal program of study to the graduate coordinator, the student's graduate committee and major professor will be selected and officially appointed in consultation with the student. A Committee Request Form must be completed by the student with committee members' signatures

and submitted to the graduate coordinator within the first 12 months of enrollment. If, during the course of a student's tenure, his/her research direction changes, it may be necessary to change the members of the graduate committee or the student's advisor. Such changes must be submitted on a change of committee request form.

Master of Science graduate committees must include at least three members of the graduate faculty, including the major professor and a minor professor if required.

A Ph.D. student's committee will include the major professor as chairperson, who must be from the department and hold a graduate faculty appointment, at least three committee members from the student's major field of interest, and a minor committee member if required.

The graduate committee and the master's student will meet during the student's first 12 months of work to prepare the program of study. This is followed by a mandatory seminar regarding the proposed research plan. The graduate committee and the Ph.D. student will meet during the student's first 12 months to prepare the program of study. Students must complete this form with the help of his/her major professor and concurrence of his/her graduate committee. A doctoral student's program of study is required in the Graduate School when the preliminary/comprehensive examination is scheduled. The program of study will be kept in the department head's office and forwarded to the Graduate School during the student's last semester of coursework. The Committee Request Form, Program of Study, and Proposal for both master's and Ph.D. students must be signed and submitted to the graduate coordinator within the first 12 months of work, or a departmental hold will be placed on the student's account.

The Department of Wildlife, Fisheries, and Aquaculture allows graduate students outside of the graduate program in Wildlife, Fisheries and Aquaculture to obtain a minor at either the master's or doctoral level. The minor may be in one of three subject areas: aquaculture, fisheries, or wildlife. If a minor is chosen, the student's graduate committee must include a representative from the Department of Wildlife, Fisheries and Aquaculture to serve as the minor professor, approve all coursework (B or better in 9 hours graduate-level coursework the M.S.; B or better in 12 hours graduate-level hours for the Ph.D.) that is applied towards the minor, and administer the minor examination. Once minor coursework is approved by the graduate committee it must be reviewed and approved by the WFA graduate coordinator. The minor exam (written, oral, or both) will be administered by the WFA minor committee member in combination with and using the same procedure as the major exam. The minor committee member will work with the student's instructors to determine appropriate subject areas for the exam. The minor professor is responsible for ensuring that the student demonstrates knowledge and understanding commensurate with a M.S. or Ph.D. minor in addition to fulfilling the usual duties of a committee member. For more information on obtaining a graduate minor in WFA, please contact the WFA graduate coordinator.

Master of Science in Wildlife, Fisheries and Aquaculture

8000-level coursework		12
Graduate-level coursework		9
Graduate-level statistics course		3-4
WFA 8000	Thesis Research/ Thesis in Wildlife, Fisheries and Aquaculture	6
Total Hours		30-31

A research proposal seminar, thesis defense and comprehensive oral examination are required.

Master of Science in Conservation Education

WFA 8763 Capstone Project for Conservation Education Additional Electives as approved by WFA Graduate Degree Program Coordinator and MS Conservation Education Degree Coordinator	3
	3
	3
Capstone Project	3
WFA 8753 Terrestrial Biodiversity Conservation	2
WFA 8743 Aquatic Biodiversity Conservation	3
WFA 6623 Conservation Biology	3
Science	
WFA 8733 Conservation Leadership, Management, and Communication	3
WFA 8723 Conservation Education Outreach Techniques	3
WFA 8713 Program Development and Evaluation for Conservation Educators	3
Education and Leadership	
Major Required Courses	

Total Hours

In addition to coursework, all students will be required to take a final comprehensive exam.

Prerequisites: BIO 1134 (or equivalent); BIO 1144 (or equivalent). The prerequisite courses, or their equivalent, must be completed before admission. A grade of C or better is required on all undergraduate prerequisite courses and must be completed at an accredited institution. A passing score on the Praxis II Biology exam would be accepted in lieu of the prerequisite courses for admission requirements.

Doctor of Philosophy in Wildlife, Fisheries and Aquaculture

l Hours		54
oral committee approved coursework ¹		34
9000	Dissertation Research /Dissertation in Wildlife, Fisheries and Aquaculture	20

Total Hours

WFA 9

¹The Ph.D. student is required to complete 54 hours past the bachelor's degree. Of the 54 hours, 20 hours must be WFA 9000 Dissertation Research hours. Of the remaining 34 hours, 24 hours must be graded coursework which is determined by the student's committee. 12 of these hours must be taken at MSU; the remaining 12 hours can be taken at MSU or can be transferred in from the students master's institution. Additionally, 12 of these hours must be doctoral level courses (8000 level or equivalent). The remaining 10 hours can be any combination of graded coursework credits, dissertation research credits, or transfer credits.

The Ph.D. also requires a proposal defense, oral and written comprehensive preliminary examinations, a written dissertation and oral defense of the dissertation.

College of Veterinary Medicine

Dean: Dr. Kent Hoblet Associate Dean for Research and Graduate Studies and Graduate Coordinator: Dr. David Smith, Interim Associate Dean: Dr. Ron McLaughlin Associate Dean: Dr. Jack Smith Wise Center Box 6100 Mississippi State, MS 39762-6100 Telephone: 662-325-1417 Fax: 662-325-1193 E-mail: tia.perkins@msstate.edu Website: http://www.cvm.msstate.edu/)

The College of Veterinary Medicine (CVM) at Mississippi State University provides the following graduate programs:

Master of Science in Veterinary and Biomedical Sciences (VMS) with the following concentrations:

- Population Medicine Non-Thesis (PMNT)
- Veterinary Medical Research (VMRC)
- Computational Biology (VCBC)
- Infectious Diseases (VIDC)
- Toxicology (TOXI)
- Population Medicine (POPM)

Doctor of Philosophy in Veterinary and Biomedical Sciences (VMS) with the following concentrations:

- Veterinary Medical Research (VMRC)
- Computational Biology (VCBC)
- Infectious Diseases IVIDC)
- Population Medicine (POPM)

Doctor of Philosophy in Environmental Toxicology (ENVT)

These graduate programs provide advanced educational opportunities for students in a broad range of biomedical and veterinary sciences. A non-thesis master's option in VMS is also offered with emphasis in food animal production medicine (i.e. dairy, beef, swine, poultry, and aquaculture). The goal of the VMS and ENVT programs is to provide training for the next generation of scientists and educators who will be leaders in biomedical and veterinary research and education. Faculty in CVM's **Department of Basic Sciences**, **Department of Clinical Sciences**, and **Department of Pathobiology & Population Medicine** lead each student's graduate education. Involvement in ongoing research projects conducted by the faculty is an important part of each degree program. Students in the VMS program specialize in disciplines such as applied clinical research, biocomputing, epidemiology, health disparities, infectious diseases, toxicology, and food safety.

Degree Programs

Department	Degree and Major	Concentration	Thesis	Non-Thesis	Starkville	Meridian	Distance
College of Veterinary Medicine	Master of Science - Veterinary Medical Science	Computational Biology	Х		Х		
College of Veterinary Medicine	Master of Science - Veterinary Medical Science	Infectious Diseases	Х		Х		
College of Veterinary Medicine	Master of Science - Veterinary Medical Science	Population Medicine Non- Thesis		Х	Х		
College of Veterinary Medicine	Master of Science - Veterinary Medical Science	Population Medicine	Х		Х		
College of Veterinary Medicine	Master of Science - Veterinary Medical Science	Toxicology	Х		Х		
College of Veterinary Medicine	Master of Science - Veterinary Medical Science	Veterinary Medical Research	Х		Х		
College of Veterinary Medicine	Doctor of Philosophy - Environmental Toxicology				x		
College of Veterinary Medicine	Doctor of Philosophy - Veterinary Medical Science	Computational Biology			x		
College of Veterinary Medicine	Doctor of Philosophy - Veterinary Medical Science	Infectious Diseases			x		
College of Vetinary Medicine	Doctor of Philosophy - Veterinary Medical Science	Population Medicine			Х		
College of Veterinary Medicine	Doctor of Philosophy - Veterinary Medical Science	Veterinary Medical Research			Х		

In addition to the traditional M.S. and Ph.D. programs in the college, students may pursue a D.V.M.-Ph.D. or D.V.M.-M.S. through the dual-degree program. Information concerning the D.V.M. dual-degree programs can be found at the **Combined D.V.M.-Graduate Degree Programs** site. The following admission guidelines/restrictions must be followed for admission to the dual degree program.

- Student with a B.S. degree are eligible for admission to the M.S. and Ph.D. programs in CVM.
- Current D.V.M. students without a B.S. degree must complete the first two years of the D.V.M. program before admission to a CVM M.S. or Ph.D. program.
- A signed Dual Degree Form must be submitted to CVM Office of Research and Graduate Studies by the student and then to the Office of the Graduate School at the time of admission to the graduate program.

Environmental Toxicology

Graduate Coordinator: Dr. Russell Carr R2008 Wise Center Box 6100 Mississippi State, MS 39762-6100 Telephone: 662-325-1417 E-mail: tia.perkins@msstate.edu

Admission Criteria

To be admitted to the Ph.D. graduate program in Environmental Toxicology, the applicant must have at least a bachelor's degree from a fully recognized four-year institution of higher learning and preferably an M.S. in a related field of study. The scholastic record for all undergraduate, graduate, and professional school coursework will be reviewed and should exceed a minimum GPA of 3.00 for undergraduate work; GPA of 3.00 for any graduate work; GPA of 2.75 for the four years of the veterinary curriculum, if applicable. Also required are three reference letters, a minimum TOEFL score of 550 PBT (79 iBT) or IELTS score of 6.5 for international students where English is not the primary language, and if a Graduate Record Examination score is available, those scores will be considered.

Provisional Admission

In special circumstances a student who does not meet admission criteria may be admitted provisionally if approved by the Graduate Program Advisory Committee. See Provisional Admission under Admission In this publication for provisional requirements.

Academic Performance

If a student does not show satisfactory progress toward meeting academic, research, and/or dissertation requirements, his/her performance will be reviewed in a meeting with the student's graduate committee. This committee may recommend a change in the student's program or recommend that the student be dismissed from the graduate degree program in the College of Veterinary Medicine. Preliminary exams and the proposal are to be completed and approved/submitted by the end of year three in the program; either one can be completed first. Both must be completed for admission to candidacy. Students must follow all guidelines outlined in the *Graduate Catalog*.

Doctor of Philosophy in Environmental Toxicology (for students with a master's degree)

CVM 9000	Dissertation Research/ Dissertation in Veterinary Medicine	20
Three seminar courses (CVM 8011 or equivalent) ¹		3
Two statistics courses ^{1,2}		6
Graduate-level courses (at least 12 hours of all coursework must be at 8000-level) or additional CVM 9000 credits 3		31
Total Hours		60

- ¹ Equivalency of seminars and coursework is determined by the student's graduate committee.
- Previous graduate level statistics courses can satisfy this requirement with approval of the student's graduate committee. Transfer of credit for any previously taken courses is subject to the MSU *Graduate Catalog* policy. Graduate-level statistics courses that have counted towards a previous degree can satisfy this policy but will not be calculated towards the Ph.D. coursework hours.
- ³ Coursework taken at the M.S. level will be counted toward the 24 hours required if approved by the Ph.D. graduate committee.

The student must pass a preliminary examination which covers the major and supportive fields and a final examination which is a defense of the dissertation. In addition, the student must present an open seminar of the dissertation research prior to the oral final examination. The student must adhere to the University and College regulations regarding his/her graduate program.

Doctor of Philosophy in Environmental Toxicology (for students with a bachelor's but no master's degree)

CVM 9000	Dissertation Research/ Dissertation in Veterinary Medicine	20
Three seminar courses (CVM 8011 or equiv	alent) ¹	3
Two statistics courses ²		6
Graduate-level coursework		15
Additional graduate-level coursework and/or CVM 9000 credits ³		46
Total Hours		90

¹ Equivalency of seminars and coursework is determined by the student's graduate committee.

- Previous graduate level statistics courses can satisfy this requirement with approval of the student's graduate committee. Transfer of credit for any previously taken courses is subject to the MSU *Graduate Catalog* policy. Graduate-level statistics courses that have counted towards a previous degree can satisfy this policy but will not be calculated towards the Ph.D. coursework hours.
- ³ Students must have 24 hours of graduate coursework to graduate with a Ph.D. in Environmental Toxicology.

The student must pass a preliminary examination which covers the major and supportive fields and a final examination which is a defense of the dissertation. In addition, the student must present an open seminar of the dissertation research prior to the oral final examination. The student must adhere to the University and College regulations regarding his/her graduate program.

Veterinary Medical Science

Graduate Coordinator: Dr. Larry Hanson R2008 Wise Center Box 6100 Mississippi State, MS 39762-6100 Telephone: 662-325-1417 E-mail: tia.perkins@msstate.edu

Admission Criteria

To be admitted to the Veterinary Medical Sciences Graduate Program the applicant must either hold a D.V.M. degree from a recognized college of veterinary medicine or have at least a bachelor's degree from a fully recognized four-year institution of higher learning. The scholastic record for all undergraduate, graduate, and professional school coursework will be reviewed and should exceed a minimum GPA of 3.00 for undergraduate work; GPA of 3.00 for graduate work; GPA of 2.75 for the four years of the veterinary curriculum or 2.75 for the last two years of the veterinary curriculum. Also required are three reference letters, a minimum TOEFL score of 550 PBT (79 iBT) or IELTS score of 6.5 for international students from countries whose primarily language is not English, and if a Graduate Record Examination (GRE) score is available, those scores will be considered.

Provisional Admission

In special circumstances a student who does not meet admission criteria may be admitted provisionally if approved by the Graduate Program Advisory Committee. See Provisional Admission under Admission In this publication for provisional requirements.

Academic Performance

If a student does not show satisfactory progress toward meeting academic, research, and/or thesis requirements, his/her performance will be reviewed in a meeting with the student's graduate committee. This committee may recommend a change in the student's program or recommend that the student be dismissed from the degree program in the College of Veterinary Medical Science program. Students must follow all guidelines outlined in the Graduate Catalog.

Master of Science in Veterinary and Biomedical Medical Sciences (VMS) - Population Medicine Non-Thesis Concentration (PMNT)

Total Hours		35
or CVM 8091	Current Topics in Production Animal Medicine	
CVM 8011	Seminar ¹	1
Statistics course ^{1,2}		3
Graduate-level coursework cr	edits (at least 15 hours of all coursework credits must be 8000-level or above) 1	31

Total Hours

1 Equivalency of seminars and coursework is determined by the student's graduate committee.

2 Previous graduate-level statistics courses can satisfy this requirement with approval of the student's graduate committee. Transfer of credit for any previously taken courses is subject to the policy found in the Graduate Catalog.

A final examination (oral and/or written) which covers both the major and supportive fields and includes defense of the thesis is required. Students must present an open seminar of the thesis research just prior to oral final examinations. The student must adhere to the University and College regulations regarding his/her graduate program.

Master of Science in Veterinary and Biomedical Sciences (VMS) - Veterinary Medical **Research Concentration (VMRC)**

Graduate-level coursework (at least 12 hou	rs of all coursework credits must be 8000-level or above) ¹	20
One statistics course ^{1, 2}		3
One seminar course (CVM 8011 or equivale	ent) ¹	1
CVM 8000	Thesis Research/ Thesis in Veterinary Medicine	6
Total Hours		30

- 1 Equivalency of seminars and coursework is determined by the student's graduate committee.
- 2 Previous graduate-level statistics courses can satisfy this requirement with approval of the student's graduate committee.

A final examination (oral and/or written) which covers both the major and supportive fields and includes defense of the thesis is required. Students must present an open seminar of the thesis research just prior to oral final examinations. The student must adhere to the University and College regulations regarding his/her graduate program.

Master of Science in Veterinary and Biomedical Sciences (VMS) - Computational **Biology Concentration (VCBC)**

Graduate-level courses (at least 12 hours of all coursework credits must be 8000-level or higher)¹

Total Hours		30
CVM 8000	Thesis Research/ Thesis in Veterinary Medicine	6
One seminar course (CVM 801	1 or equivalent) ¹	1
One statistics course 1, 2		3
CSE 6623	Computational Biology	3
CSE 6613	Bio-computing	3
or PSS 8653	Genomes and Genomics	
BCH 8653	Genomes and Genomics	3
		11

11

1 Equivalency of seminars and coursework is determined by the student's graduate committee.

2 Previous graduate-level statistics courses can satisfy this requirement with approval of the student's graduate committee.

A final examination (oral and/or written) which covers both the major and supportive fields and includes defense of the thesis is required. Students must present an open seminar of the thesis research just prior to oral final examinations. The student must adhere to the University and College regulations regarding his/her graduate program.

Master of Science in Veterinary and Biomedical Sciences (VMS) - Infectious Diseases **Concentration (VIDC)**

CVM 8303	Advanced Immunology	3
BCH 6013	Principles of Biochemistry	3
or BCH 6713	Molecular Biology	
One statistics course 1, 2		3
One seminar course (CVM 8011 or equivalent) ¹		1
Graduate-level courses (at lea	ast 12 hours of all coursework must be at 8000 level or higher) $^{ m 1}$	14
CVM 8000	Thesis Research/ Thesis in Veterinary Medicine	6
Total Hours		30

1 Equivalency of seminars and coursework is determined by the student's graduate committee.

2 Previous graduate-level statistics courses can satisfy this requirement with approval of the student's graduate committee.

A final examination (oral and/or written) which covers both the major and supportive fields and includes defense of the thesis is required. Students must present an open seminar of the thesis research just prior to oral final examinations. The student must adhere to the University and College regulations regarding his/her graduate program.

Master of Science in Veterinary and Biomedical Sciences (VMS) - Toxicology **Concentration (TOXI)**

CVM 8543	Mechanisms of Toxic Action	3
or CVM 8523	Organ Systems Toxicology I	
or CVM 8533	Organ Systems Toxicology II	
CVM 6513	Environmental Toxicology	3
One statistics course 1, 2		3
On seminar course (CVM 8011, 80	091, or equivalent) ¹	1
Graduate-level courses (at least 1	2 credits of all coursework must be 8000-level or higher)	14

;;)

al Hours	30
M 8000 Thesis Research/ Thesis in Veterinary Medicine	6

- ¹ Equivalency of seminars and coursework is determined by the student's graduate committee.
- ² Previous graduate-level statistics courses can satisfy this requirement with approval of the student's graduate committee.

A final examination (oral and/or written) which covers both the major and supportive fields and includes defense of the thesis is required. Students must present an open seminar of the thesis research just prior to oral final examinations. The student must adhere to the University and College regulations regarding his/her graduate program.

Master of Science in Veterinary and Biomedical Sciences (VMS) - Population Medicine Thesis concentration (POPM)

CVM 8333	Food Safety and Security in Public Health	3
CVM 8513	Applied Veterinary Epidemiology	3
CVM 8503	Epidemiology/Biostatistics	3
ST 8114	Statistical Methods ^{1,2}	4
One seminar course (CVM 801	1, CVM 8091 or equivalent) ¹	1
Additional graduate-level course	es (at least 12 hours of all coursework credits must be 8000-level or higher) $^{ m 1}$	10
CVM 8000	Thesis Research/ Thesis in Veterinary Medicine	6
Total Hours		30
Total Flours		30

¹Equivalency of seminars and coursework is determined by the student's graduate committee.

²Previous graduate-level statistics courses can satisfy this requirement with approval of the student's graduate committee.

A final examination (oral and/or written) which covers both the major and supportive fields and includes defense of the thesis is required. Students must present an open seminar of the thesis research just prior to oral final examinations. The student must adhere to the University and College regulations regarding his/her graduate program.

Doctor of Philosophy in Veterinary and Biomedical Sciences (VMS) - Veterinary Medical Research Concentration (VMRC) (for students with a master's degree)

Two statistics courses ^{1,2}		6
Three seminar courses (CVM 80	11 or equivalent)	3
Graduate-level courses (at least	12 hours of all coursework at 8000-level or higher) or additional CVM 9000 credits ¹	31
CVM 9000	Dissertation Research/ Dissertation in Veterinary Medicine	20
Total Hours		60

¹ Equivalency of seminars and coursework is determined by the student's graduate committee.

² Previous graduate-level statistics courses can satisfy this requirement with approval of the student's graduate committee. Transfer of credit for any previously taken courses is subject to the policy found in the *Graduate Catalog*.

Doctor of Philosophy in Veterinary and Biomedical Sciences (VMS) - Veterinary Medical Research Concentration (VMRC) (for students with a bachelor's but no master's degree)

Two statistics courses ^{1, 2}		6
Three seminar courses (CVM 801	1 or equivalent) ¹	3
Graduate-level courses (at least 1	2 hours of all coursework at 8000 level or higher)	15
CVM 9000	Dissertation Research/ Dissertation in Veterinary Medicine	20
Additional graduate-level coursew	vork and/or CVM 9000 credits ³	46
Total Hours		90

¹ Equivalency of seminars and coursework is determined by the student's graduate committee.

² Previous graduate-level statistics courses can satisfy this requirement with approval of the student's graduate committee.

³ Students must have 24 hours of graduate coursework to graduate with a Ph.D. in VMS.

Doctor of Philosophy in Veterinary and Biomedical Sciences (VMS) - Computational Biology Concentration (VCBC) (for students with a master's degree)

Total Hours		60
CVM 9000		20
Graduate-level courses (at lea	ast 12 hours of all coursework at 8000-level) or additional CVM 9000 credits	22
Two graduate-level statistics	courses	6
Three seminar courses (CVM	l 8011 or equivalent) ¹	3
CSE 6623	Computational Biology	3
CSE 6613	Bio-computing	3
or PSS 8653	Genomes and Genomics	
BCH 8653	Genomes and Genomics	3

1

¹ Equivalency of seminars and coursework is determined by the student's graduate committee.

² Previous graduate-level statistics courses can satisfy this requirement with approval of the student's graduate committee.

Doctor of Philosophy in Veterinary and Biomedical Sciences (VMS) - Computational Biology Concentration (VCBC) (for students with a bachelor's but no master's degree)

BCH 8653	Genomes and Genomics	3
or PSS 8653	Genomes and Genomics	
CSE 6613	Bio-computing	3
CSE 6623	Computational Biology	3
Three seminar courses (CVM 801	11 or equivalent) ¹	3
Two graduate-level statistics cour	ses	6
Graduate level courses (at least 1	2 hours of all coursework at 8000 level or higher)	6
CVM 9000	Dissertation Research/ Dissertation in Veterinary Medicine	20
Graduate-level coursework and/o	r additional CVM 9000 credits ³	46
Total Hours		90

¹ Equivalency of seminars and coursework is determined by the student's graduate committee.

² Previous graduate-level statistics courses can satisfy this requirement with approval of the student's graduate committee.

³ Students must have 24 hours of graduate coursework to graduate with a Ph.D. in VMS.

Doctor of Philosophy in Veterinary and Biomedical Sciences (VMS) - Infectious Diseases Concentration (VIDC) (for students with a master's degree)

Total Hours		60
CVM 9000	Dissertation Research/ Dissertation in Veterinary Medicine	20
Graduate-level courses (at lea	ast 12 hours of all coursework at 8000-level or higher) 3	25
Three seminar courses (CVM 8011 or equivalent)		3
Two statistics courses ^{1, 2}		6
or BCH 6713	Molecular Biology	
BCH 6013	Principles of Biochemistry	3
CVM 8303	Advanced Immunology	3

¹ Equivalency of seminars and coursework is determined by the student's graduate committee.

² Previous graduate-level statistics courses can satisfy this requirement with approval of the student's graduate committee.

³ Students must have 24 hours of graduate coursework to graduate with a Ph.D. in VMS.

Doctor of Philosophy in Veterinary and Biomedical Sciences (VMS) - Infectious Diseases Concentration (VIDC) (for students with a bachelor's but no master's degree)

CVM 8303	Advanced Immunology
BCH 6013	Principles of Biochemistry

or BCH 6713	Molecular Biology	
Two statistics courses 1, 2		6
Three seminar courses (CVM 8011 or equivalent) ¹		3
Graduate-level courses (at least 12 hours of all coursework must be at 8000 level or higher)		9
CVM 9000	Dissertation Research/ Dissertation in Veterinary Medicine	20
Additional graduate-level coursework and/or CVM 9000 credits		46
Total Hours		90

¹ Equivalency of seminars and coursework is determined by the student's graduate committee.

² Previous graduate-level statistics courses can satisfy this requirement with approval of the student's graduate committee.

Doctor of Philosophy in Veterinary and Biomedical Sciences (VMS) - Population Medicine concentration (POPM) (for students with a master's degree)

3			
3			
4			
Three seminar courses (CVM 8011, CVM 8091, or equivalent) ¹			
24			
20			
60			

¹ Equivalency of seminars and coursework is determined by the student's graduate committee.

² Previous graduate-level statistics courses can satisfy this requirement with approval of the student's graduate committee. Graduate-level statistics that have counted toward a previous degree can satisfy this policy, but will not be calculated toward the Ph.D. coursework hours.

An examination (oral and/or written) which covers both the major and supportive fields and includes defense of the dissertation is required. Students must present an open seminar of the dissertation research just prior to examinations. The student must adhere to the University and College regulations regarding his/her graduate program.

Doctor of Philosophy in Veterinary and Biomedical Sciences (VMS) - Population Medicine concentration (POPM) (for students with a bachelor's but no master's degree)

CVM 8333	Food Safety and Security in Public Health	3	
CVM 8513	Applied Veterinary Epidemiology	3	
CVM 8503	Epidemiology/Biostatistics	3	
ST 8114	Statistical Methods ^{1,2}	4	
Three seminar courses (CVM 8011, CVM 8091, or equivalent) ¹			
Additional graduate-level courses (at least 1	2 hours of all coursework must be at 8000-level or higher) or additional 9000-level credit 3	54	
CVM 9000	Dissertation Research/ Dissertation in Veterinary Medicine	20	
Toal Hours		90	

¹ Equivalency of seminars and coursework is determined by the student's graduate committee.

- ² Previous graduate-level statistics courses can satisfy this requirement with approval of the student's graduate committee. Graduate-level statistics that have counted toward a previous degree can satisfy this policy, but will not be calculated toward the Ph.D. coursework hours.
- ³ Students must have 24 hours of graduate-level coursework to graduate with a PhD in VMS.

An examination (oral and/or written) which covers both the major and supportive fields and includes defense of the dissertation is required. Students must present an open seminar of the dissertation research just prior to examinations. The student must adhere to the University and College regulations regarding his/her graduate program.

Online Education

Dr. Susan D. Seal, Executive Director 301 Memorial Hall PO Box 5247 Mississippi State, MS 39762 Telephone: 662-325-3473 http://online.msstate.edu (http://online.msstate.edu/)

Mississippi State University offers a variety of online graduate courses and academic programs for Online students. For a list of academic programs offered online, please refer to the section titled Degrees and Majors Offered (p. 23), where a table lists all graduate programs and indicates the campus (Starkville, Meridian, or Online) at which each is offered.

The University's Center for Distance Education (CDE) is a service unit that provides working and place-bound individuals with an alternative to traditional on-campus programs and courses and is dedicated to fostering the success of Online students. The website (http://distance.msstate.edu/) for the Center for Distance Education provides detailed information for prospective and current Online students as well as services that are unique to their needs, such as an Online orientation, technical assistance, Online tutoring, and information about Online exam proctoring.

CDE is also committed to working with faculty and staff to research, develop, and market Online education programs and to recruit students to those programs. CDE also specializes in quality student and departmental support for any Online needs. All Online courses and programs offered through Mississippi State University are fully accredited and possess the same rigor and standards as courses and programs offered at the main campus.

Students enrolled in graduate programs offered online and requiring a thesis or dissertation must meet established research requirements as stated in the Mississippi State University *Graduate Catalog*. Should the student request, or be required, to conduct research at an off-site research facility, appropriate certification must be completed prior to beginning the research process.

Distance Student Certification of Off-Campus/Non-MSU Research Facility

Students enrolled in graduate programs (Master's, Educational Specialist, or doctoral) offered online and requiring a thesis or dissertation must meet established research requirements as stated in the Mississippi State University *Graduate Catalog*. Distance education students engaged in research will be provided the same student support services as those of on-campus students, including access to Library resources, thesis and dissertation workshops, etc. MSU believes that special attention must be directed toward the mentoring of the students and the development of a creative and supportive environment for research hours offered online. Each academic unit which administers an online graduate degree program with a thesis or dissertation will determine and define the appropriate use of communication and technology. A student's thesis/dissertation committee must approve the procedures which the student must follow to ensure quality and integrity of the research process at all stages: proposal, preparation and presentation, data collection/analysis, and final defense stages. **Should the student request, or be required, to conduct research at an off-site research facility, appropriate certification must be completed prior to beginning the research process.**

Any department offering such an online program must include specific language that addresses delivery of research/thesis or research/dissertation hours in a published format (policy handbooks for approved online programs, website, etc.).

Meridian Campus

Mississippi State University-Meridian is a regional, upper-division, degree-granting campus of Mississippi State University (MSU). Located in east-central Mississippi, the campus is non-residential and provides site-based credit and non-credit coursework. Courses are taught by highly qualified faculty, who are experts in their fields. Junior, senior, and graduate-level courses offered at MSU-Meridian enable students to fulfill all or some requirements for bachelor's, master's, specialist's, and doctoral degrees. Students may also elect to enroll in specific classes for professional or personal growth.

A friendly atmosphere providing personal attention through small classes, a convenient location, and a diverse student population flavor the educational experience at MSU-Meridian. Through the flexibility of day and evening classes at the MSU-Meridian Campus, both non-traditional adult students and traditional college-age students are able to continue employment, maintain important roles in family life, contribute to their communities, and still obtain a quality Mississippi State University education.

MSU-Meridian serves as a proud representative of the University's heritage as "The People's University" and of its commitment of providing quality higher education through the mission of teaching, research, and service.

Location

Mississippi State University-Meridian is comprised of two campuses. The College Park Campus is located on 26 acres at 1000 Highway 19 North in Meridian, a short drive northwest of Exit 150 off Interstates 20/59. The Riley Campus is located in the heart of Meridian's downtown area, off 22nd Avenue and 5th Street, where the Division of Business is housed in the Deen building and the Kinesiology program is housed in the Rosenbaum building. The Riley Campus is also home to the Riley Center for Education and Performing Arts.

Teleclassrooms

Interactive "video conference classrooms" allow students on the Meridian and Starkville campuses to receive instruction and interact through two-way video and audio distance technologies. This greatly improves MSU-Meridian's ability to expand the scope of its service and still maintain courses of the

highest quality. The development of web-based (direct-to-desktop) delivery systems is also being utilized to facilitate the delivery of asynchronous and synchronous real time audio and video through computer-based technologies and the internet.

Library Facilities

The MSU University Libraries, with the Phil Hardin Foundation Library on the College Park Campus and the Riley Campus, support the teaching, research, and service needs of the MSU-Meridian Campus community. Meridian Campus faculty, students, and staff have full access to all the electronic collections offered by the University Libraries, including scholarly journals, government documents, books, newspapers, and reference materials. Physical items located on the Starkville Campus are accessible through Interlibrary Loan and the Library Express document delivery service at no charge to the MSU-Meridian community. An "Electronic Library Room" is available so that individuals at MSU-Meridian may access these online resources and services, including online workshops and podcasts.

Students

Approximately one-half of the MSU-Meridian students reside in Lauderdale County. The remainder commute from Alabama and from 32 surrounding Mississippi counties, including Clarke, Jasper, Jones, Kemper, Leake, Neshoba, Newton, Scott, and Wayne.

Degrees

For graduate degrees (all or in part) offered at MSU-Meridian, please refer to the section titled Degrees and Majors Offered (p. 23).

Graduate Calendar

Current Graduate Academic Calendars (https://www.grad.msstate.edu/calendar/)can be found on the Graduate School's website. To consult official University Academic Calendars, visit the Calendars tab on the MSU website.

Graduate Council

The Graduate Council is the executive committee of the Graduate Faculty and is responsible for the formulation of academic policy and programs related to graduate study at Mississippi State University. In addition, the Council may advise the Dean of the Graduate School on any matter they, or the Dean, feel is appropriate. The Chairperson of the Graduate Council is elected by and from the members of the Council.

The Council consists of one elected member from each of the eight academic colleges offering graduate study (programs), a graduate student association representative, and one fewer in number (seven) appointed by the Provost and Executive Vice President for Academic Affairs, of which at least one must represent interdisciplinary programs. Not more than two appointed faculty members may be from the same college or school. To be eligible for membership on the Council, members must hold Graduate Faculty status. The term of office is three academic years. A vacancy on the Council is filled in the same manner in which the member vacating the position was selected. In addition to the faculty, the Council has one graduate student representative who is usually the president of the Graduate Student Association. S/he is a voting member, and the term of office is one academic year.

Ex-officio members include:

- Dean of the Graduate School;
- Associate Dean of the Graduate School;
- Provost and Executive Vice President for Academic Affairs;
- Executive Vice Provost;
- Vice President for Research and Economic Development;
- Dean of University Libraries;
- Executive Director of Center for Distance Education;
- Director of International Institute;
- Chair of University Committee on Courses and Curricula;
- Associate University Registrar; and
- Director of Academic Quality, Institutional Effectiveness

Officers

Rebecca Robichaux-Davis, Ph.D., Chair

Professor, Curriculum, Instruction, and Special Education College of Education

Russell Carr, Ph.D., Vice-Chair Associate Professor, Basic Sciences College of Veterinary Medicine

Ex-Officio Members

Peter L. Ryan, Ph.D. Executive Vice Provost and Dean of the Graduate School

W. Brien Henry, Ph.D. Associate Dean of the Graduate School

David R. Shaw, Ph.D. Provost and Executive Vice President for Academic Affairs

Dan Reynolds, Ph.D. Interim Assistant Vice President/Executive Director, International Institute

Lis Pankl, Ph.D. Dean of University Libraries

Susan Seal, Ph.D. Executive Director, Center for Distance Education

Lauren Wright Director of the International Institute

Andy Perkins, Ph.D. Chair, University Committee on Courses and Curricula

Emily Shaw, M.S. Associate Registrar

Dana Franz, Ph.D. Director of Academic Quality, Office of Institutional Research and Effectiveness

Elected Members

Richard Harkess, Ph.D., 2023 Professor, Plant and Soil Sciences College of Agriculture and Life Sciences

Saeed Rokooie, Ph.D., 2023 Assistant Professor, Building Construction Science College of Architecture, Art, and Design

Kenneth Anthony, Ph.D., 2023 Associate Professor, Curriculum, Instruction, and Special Education College of Education

Kevin Armstrong, Ph.D., 2021 Associate Professor, Psychology College of Arts and Sciences

Donald Grebner, Ph.D., 2023 Professor, Forestry College of Forest Resources

Priscilla Hill, Ph.D., 2024 Associate Professor, Chemical Engineering Bagley College of Engineering

Russell Carr, Ph.D., 2022, Vice-Chair Associate Professor, Basic Sciences College of Veterinary Medicine

Joel Collier, Ph.D., 2022 Professor, Marketing, Quantitative Analysis, and Business Law College of Business

Appointed Members

Larry Hanson, Ph.D., 2023 Professor, Basic Sciences College of Veterinary Medicine

Ashik Amin, 2022 Graduate Student Association Representative

Linkan Bian, Ph.D., 2024 Associate Professor, Industrial and Systems Engineering Bagley College of Engineering

Sandra Orozco Aleman, Ph.D., 2023 Associate Professor, Finance and Economics College of Business

David Hoffman, Ph.D., 2022 Associate Professor, Anthropology and Middle Eastern Cultures College of Arts and Sciences

Kevin Hunt, Ph.D., 2022 Professor, Wildlife, Fisheries, & Aquaculture College of Forest Resources

Ashli Brown Johnson, Ph.D., 2022 Associate Professor, Biochemistry, Molecular Biology, Entomology, and Plant Pathology College of Agriculture and Life Sciences

Rebecca Robichaux-Davis, Ph.D., 2022

Professor, Curriculum, Instruction and Special Education College of Education

Graduate Faculty

With the approval of the Academic Dean, each department offering graduate programs will determine procedures for handling recommendations or appeals concerning Graduate Faculty appointments or changes to membership status. The criteria and procedures set by the department and/or the college must be consistent with the qualifications and responsibilities outlined in the "Appointment Policies" section of this document, but may be more restrictive.

Graduate Faculty members are listed in the Catalog of the Graduate School by college/department.

Graduate Faculty Criterion

MSU graduate faculty members are employees of Mississippi State University. Other criteria for holding an MSU graduate faculty appointment follow:

- earned a terminal degree (highest degree awarded in the discipline) in or related to the faculty member's area of graduate discipline;
- be a full-time employee of Mississippi State University, holding the rank of assistant professor, assistant research professor, assistant extension professor, assistant clinical professor or higher without any qualifying designations such as 'visiting,' 'emeritus,' or 'adjunct'; and
- have demonstrated and maintained noteworthy accomplishments in research and/or creative achievement, as defined in the Faculty Handbook (6.1.2)

Government affiliates embedded in the university may be considered MSU graduate faculty by agreement.

MSU graduate faculty may:

- teach graduate-level courses in each field of specialization if the individual meets all requirements outlined in AOP 13.09, Credentials for Teaching;
- serve as members of doctoral and master's/education specialist committees within or outside of the department/program of appointment; and
- serve as a chair of doctoral, master's, or educational specialist committees and may serve as the director of thesis and dissertation research within the faculty member's area of graduate responsibility.

Graduate faculty members are appointed through submission of the 'Application to Graduate Faculty' form, which is approved by the Department Head and Academic Dean. Reappointment to graduate faculty is not required provided the faculty member remains full-time faculty (as described in the

second bullet under graduate faculty qualifications) of Mississippi State University and remains affiliated with an academic program. Removal of a faculty member from graduate faculty is at the discretion of the Department Head, Academic Dean, and Graduate School Dean.

MSU graduate faculty members are listed by college/department in the Graduate Catalog.

Non-Graduate Faculty Committee Members

At minimum, greater than 50% of the committee members must be members of MSU graduate faculty. A non-graduate faculty member is anyone external to Mississippi State University or Mississippi State employees who are not graduate faculty. Non-graduate faculty committee members are expected to have a graduate degree or commensurate expertise in the field of study. The decision of whether or not non-graduate faculty members are qualified to serve on a thesis or dissertation committee is determined by the program/college.

If a non-graduate faculty committee member serves as the director of research, it is expected the individual will have education and research expertise commensurate with MSU graduate faculty.

Thesis/Dissertation Director

A thesis/dissertation director is the individual primarily responsible for providing oversight for a master's, educational specialist, or doctoral student's research. Any member of a student's graduate committee may be designated as the thesis/dissertation director on the committee request form. Typically, the major professor serves in this role. In the rare case when the thesis/dissertation director is not the major professor, coordination between the thesis/dissertation director and the major professor is required. The major professor will be primarily responsible for academic advising and ensuring the student meets all the programmatic requirements for the degree.

Committee Membership Changes

Committee membership changes are submitted to the Graduate School on the 'Request for Change of Committee Members' form. The new committee member(s), student, Major Professor, Graduate Coordinator and Department Head must sign the form. If a student's request to remove a member of the graduate committee is not approved, the student may appeal the decision using the Graduate Appeals Process. All decisions will be provided in writing to the student, committee member(s), Major Professor, Graduate Coordinator, and Department Head if applicable. Faculty may appeal removal from a student's committee using the Faculty Grievance Procedures (AOP 13.05).

Academic Affairs

Computational Biology

Dapper, Amy L., Ph.D., Indiana University, Assistant Professor

Hoffman, Federico G., Ph.D., Texas Tech University, Associate Professor

Gout, Jean-Francois, Ph.D., University of Lyon (France), Assistant Professor

King, Jonas G., Ph.D., Vanderbilt University, Assistant Professor

Lawton, Andrew, Ph.D., Yale University, Assistant Professor

Nanduri, Bindu, Ph.D., University of Arkansas, Associate Professor

Perkins, Andy D., Ph.D., University of Tennessee, Professor and Director

Popescu, George, Ph.D., Rutgers University, Assistant Research Professor

Thornton, Justin A., Ph.D., University of Mississippi Medical Center, Associate Professor

Master of Physician Assistant Studies

Milligan, Tara, MMS, PAC, University of North Texas, Assistant Clinical Professor

Munsell, Deborah, DMSc, Nova Southeastern University, Associate Professor and Director

Ruffin, Cedric J., DMSc, University of Lynchburg, Assistant Clinical Professor

Washburn, Shey MMS, PAC, Arcadia University, Assistant Clinical Professor

COLLEGE OF AGRICULTURE AND LIFE SCIENCES

Agricultural and Biological Engineering

Bora, Ganesh Chandra, Ph.D., Kansas State University, Associate Professor

Cathcart, Thomas P., Ph.D., University of Maryland, Professor Chesser, Gary Daniel Jr., Ph.D., Mississippi State University, Assistant Professor Elder, Steven H., Ph.D., University of Michigan, Professor Horton, Renita E., Ph.D., Harvard University, Assistant Research Professor Liao, Jun, Ph.D., Cleveland State University, Assistant Professor Linhoss, Anna C., Ph.D., University of Florida, Assistant Professor Lo, Tsz Him, Ph.D., University of Nebraska-Lincoln, Assistant Extension/Research Professor Linhoss, John E., Ph.D., Mississippi State University, Assistant Extension Professor Lowe, John Wesley, Ph.D., Mississippi State University, Assistant Professor Lu, Yuzhen, Ph.D., Michigan State University, Assistant Professor Miralami, Raheleh, Ph.D., University of Nebraska, Assistant Research Professor Parajuli, Prem B., Ph.D., Kansas State University, Associate Professor Paz, Joel O., Ph.D., Iowa State University, Assistant Professor Pote, Jonathan W., Ph.D., University of Arkansas, Professor and Department Head Prabhu, Rajkumar, Ph.D., Mississippi State University, Assistant Research Professor and Graduate Coordinator (Agriculture) Priddy, Lauren B., Ph.D., Georgia Institute of Technology, Assistant Professor Purswell, Joseph L., Ph.D., University of Kentucky, Agricultural Engineer, USDA-ARS Poultry Research Unit Lead Scientist Stevens, Andrew W., Ph.D., University of California, Assistant Professor Simpson, Chartrisa LaShan, Ph.D., Clemson University, Assistant Professor Srinivasan, Radhakrishnan, Ph.D., University of Illinois, Assistant Research Professor Taebi, Amirtaha, Ph.D., University of Central Florida, Assistant Professor Tagert, Mary Love M., Ph.D., Mississippi State University, Assistant Research Professor Wijewardane, Nuwan, Ph.D., Universirty of Nebraska, Assistant Professor Williams, Lakiesha N., Ph.D., Mississippi State University, Associate Professor Yao, Haibo, Ph.D., University of Illinois, Associate Research Professor Yu, Fei, Ph.D., University of Minnesota, Associate Professor and Graduate Coordinator (Engineering) Zhang, Xin, Ph.D., Washington State University, Assistant Professor Zhao, Yang, Ph.D., Wageningen University (The Netherlands), Assistant Professor **Agricultural Economics** Barefield, D. Alan, Ph.D., Texas A&M University, Extension Professor Barnes, James N., Ph.D., University of Missouri, Assistant Extension Professor Canales Medine, Dominga "Elizabeth," Ph.D., Kansas State University, Assistant Professor Coatney, Kalyn T., Ph.D., University of Wyoming, Assistant Professor Coble, Keith H., Ph.D., Texas A&M University, Giles Distinguished Professor and Vice President, DAFVM Collart, Alba J., Ph.D., Texas A&M University, Assistant Extension Professor

Falconer, Lawrence L., Ph.D., Texas A&M University, Extension Professor

Harri, Ardian, Ph.D., Oklahoma State University, Professor and Interim Department Head Herndon, Cary W., Jr., Ph.D., Oklahoma State University, Professor and Associate Vice President for Agriculture, Forestry & Veterinary Medicine Fan, Linlin, Ph.D., University of Illinois, Assistant Professor Interis, Matthew G., Ph.D., Ohio State University, Professor and Graduate Coordinator Johnson, Jeffrey W., Ph.D., Texas Tech University, Extension/Research Professor and Head of Delta Research and Extension Center, Stoneville Li, Xiaofei, Ph.D., Purdue University, Assistant Professor Lacy, Richard Curtis, Ph.D., Mississippi State University, Extension Professor Little, Randall D., Ph.D., Oklahoma State University, Professor Maples, Joshua G., Ph.D., Oklahoma State University, Assistant Professor Maples, William E., Ph.D., Oklahoma State University, Assistant Professor Martin, Steven W., Ph.D., Mississippi State University, Associate Director/ANR, Mississippi State University Extension Professor and Head Mills, Brian E., Ph.D., Oklahoma State University, Assistant Professor Park, Eunchun, Ph.D., Oklahoma State University, Assistant Professor Petrolia, Daniel R., Ph.D., University of Minnesota, Associate Professor Posadas, Benedict C., Ph.D., Mississippi State University, Associate Extension/Research Professor Quintana Ashwell, Nicolas E., Ph.D., Kansas State University, Assistant Professor Smith, Becky, Ph.D., Louisiana State University, Assistant Extension Professor Turner, Steven C., Ph.D., Virginia Polytechnic Institute and State University, Professor Yun, Seong, Ph.D., Purdue University, Assistant Professor Animal and Dairy Sciences Cavinder, Clay A., Ph.D., Texas A&M University, Professor Devost-Burnett, Derris, Ph.D., Auburn University, Associate Professor Dinh, Thu, Ph.D., Texas Tech University, Associate Professor Harvey, Kelsey, Ph.D., Texas A&M University, Assistant Professor Jousan, F. Dean, Ph.D., University of Florida, Associate Extension Professor Karisch, Brandi B., Ph.D., Texas A&M University, Associate Extension/Research Professor Kouba, Andrew J., Ph.D., University of Florida, Professor and Head, Wildlife, Fisheries, and Aquaculture Larson, Jamie, Ph.D., University of Minnesota, Professor and Graduate Coordinator Lemley, Caleb O., Ph.D., West Virginia University, Associate Professor Liao, Shengfa, Ph.D., University of Alberta (Canada), Associate Professor McGee, Marcus, Ph.D., University of Idaho, Assistant Clinical Professor Memili, Erdogan, Ph.D., University of Wisconsin-Madison, Professor Nguekam Feugang, Jean M. N., Ph.D., Catholic University of Louvain (Belgium), Associate Research Professor Nicodemus, Molly C., Ph.D., Michigan State University, Associate Professor

Parish, Jane A., Ph.D., The University of Georgia, Professor, Interim Department Head and Head, North MS Research and Extension Center

Rios de Alvarez, Leyla, Ph.D., University of Edinburgh, Assistant Extension/Research Professor

Rude, Brian J., Ph.D., Auburn University, Professor Ryan, Peter L., Ph.D., University of Guelph (Canada), Professor, Executive Vice Provost, and Dean of the Graduate School Smith, Trent, Ph.D., Louisiana State University, Associate Professor Stone, Amanda, Ph.D., University of Kentucky, Assistant Professor Vann, Rhonda, Ph.D., Mississippi State University, Research Professor Willard, Scott T., Ph.D., Texas A&M University, Professor and Interim Dean Animal Physiology Brown-Johnson, Ashli, Ph.D., University of South Florida, Associate Professor Chambers, Janice E., Ph.D., Mississippi State University, Professor and Director, Center for Environmental Health Sciences Chamblee, Timothy, Ph.D., Mississippi State University, Associate Professor and Director, Office of Institutional Research and Effectiveness Christiansen, David, D.V.M., Mississippi State University, Assistant Clinical Professor Galarneau, Karen, Ph.D., Mississippi State University, Assistant Research Professor Hoffman, Federico G., Ph.D., Texas Tech University, Assistant Professor Hopper, Richard M., D.V.M., Auburn University, Professor Jousan, Dean, Ph.D., University of Florida, Associate Extension Professor Kouba, Andrew, Ph.D., University of Florida, Professor and Department Head, Wildlife, Fisheries and Aquaculture Larson, Jamie, Ph.D., University of Minnesota, Professor Liao, Shengfa, Ph.D., University of Alberta (Canada), Associate Professor McDaniel, Christopher D., Ph.D., University of Georgia, Professor Memili, Erdogan, Ph.D., University of Wisconsin-Madison, Professor Nguekam Feugang, Jean M. N., Ph.D., Catholic University of Louvain-la-Neuve (Belgium), Associate Research Professor Nicodemus, Molly C., Ph.D., Michigan State University, Associate Professor Peebles, E. David, Ph.D., North Carolina State University, Professor Phillips, Tommy, Ph.D., Auburn University, Associate Professor Rude, Brian J., Ph.D., Auburn University, Professor Ryan, Peter L., Ph.D., University of Guelph (Canada), Professor; Executive Vice Provost; Dean of the Graduate School Smith, Trent, Ph.D., Louisiana State University, Associate Professor Sparks, Darrell L., Jr., Ph.D., Mississippi State University, Assistant Professor and Director of Chemical Regulatory Services, MS State Chemical Laboratory Thornton, Justin A., Ph.D., University of Mississippi Medical Center, Assistant Professor Vance, Carrie Kim, Ph.D., Johns Hopkins University, Assistant Research Professor Vann, Rhonda, Ph.D., Mississippi State University, Research Professor Willard, Scott T., Ph.D., Texas A&M University, Professor and Associate Dean; Interim Graduate Coordinator Willeford, Kenneth O., Ph.D., University of California-Riverside, Professor Wills, Robert W., D.V.M., University of Missouri; Ph.D., Iowa State University, Professor Zhai, Wei, Ph.D., Purdue University, Assistant Professor

Biochemistry, Molecular Biology, Entomology and Plant Pathology

Aboughanem, Nina, Ph.D., University of Bari (Italy), Assistant Research Professor Ahn, Seung-Joon, Ph.D., Friedrich Schiller University (Germany), Assistant Professor Allen, Thomas W., Jr., Ph.D., Auburn University, Extension/Research Professor Baird, Richard E., Ph.D., University of Tennessee, Professor Baker, Gerald T., Ph.D., Oregon State University, Professor (Entomology) Brown-Johnson, Ashli, Ph.D., University of South Florida, Associate Professor Brown, Richard L., Ph.D., Cornell University, Professor Caprio, Michael A., Ph.D., University of Hawaii, Professor and Graduate Coordinator (Entomology and Plant Pathology) Catchot, Angus L., Jr., Ph.D., Mississippi State University, Extension Professor Cook, Donald R., Ph.D., Louisiana State University, Assistant Research Professor Counterman, Brian, Ph.D., Duke University, Assistant Professor Crow, Whitney, Ph.D., Mississippi State University, Assistant Professor Dean, Jeffrey F. D., Ph. D., Purdue University, Department Head and Professor Edwards, Kristine T., Ph.D., Mississippi State University; D.V.M., Colorado State University, Assistant Research Professor Goddard, Jerome, Ph.D., Mississippi State University, Extension Professor Gore, Jeffrey, Ph.D., Louisiana State University, Associate Research/Extension Professor Guyton, John W., III, Ed.D., Mississippi State University, Associate Extension Professor Harris, Jeffrey W., Ph.D., Louisiana State University, Assistant Extension Research Professor Henn, R. Alan, Ph.D., University of Florida, Extension Professor Hill, JoVonn G., Ph.D., Mississippi State University, Assistant Research Professor Hoffmann, Federico G., Ph.D., Texas Tech University, Assistant Professor King, Jonas G., Ph.D., Vanderbilt University, Assistant Professor Krishnan, Natraj, Ph.D., Vidyasagar University (India), Associate Professor and Graduate Coordinator Lawrence, Gary W., Ph.D., Louisiana State University, Associate Professor Layton, M. Blake, Jr., Ph.D., Louisiana State University, Extension Professor Li, Jiaxu, Ph.D., Pennsylvania State University, Associate Professor Lu, Shien, Ph.D., Washington State University, Associate Professor Ma, Din-Pow, Ph.D., Kent State University, Professor Melanson, Rebecca A., Ph.D., Louisiana State University, Assistant Extension Professor Meyer, Florencia, Ph.D., University of Nebraska-Lincoln, Assistant Professor Musser, Fred R., Ph.D., Cornell University, Professor Peng, Zhaohua, Ph.D., Ohio State University, Professor Peterson, Daniel, Ph.D., Colorado State University, Professor Popescu, George V., Ph,.D., Rutgers University, Assistant Research Professor Popescu, Sorina C., Ph.D., Rutgers University, Assistant Professor

Rai, Aswathy, Ph.D., University of Minnesota, Assistant Clinical Professor Reichert, Nancy A., Ph.D., New Mexico State University, Professor of Biological Sciences Riggins, John J., Ph.D., University of Arkansas, Associate Professor Rodriguez, Jose M., Ph.D., University of Idaho, Assistant Research Professor Sabanadzovic, Sead, Ph.D., University of Bari (Italy), Professor Schneider, John C., Ph.D., Princeton University, Professor Shan, Xueyan, Ph.D., Montana State University, Associate Research Professor Sparks, Darrell L., Jr., Ph.D., Mississippi State University, Assistant Professor and Director of Chemical Regulatory Services, MS State Chemical Laboratory Tomaso-Peterson, Maria, Ph.D., Mississippi State University, Associate Research Professor Warburton, Marilyn Louise, Ph.D., University of California-Davis, Research Geneticist USDA-ARS Wilkerson, Teresa, Ph.D., Mississippi State University, Assistant Research Professor Williams, W. Paul, Ph.D., North Carolina State University, Supervisory Research Geneticist, USDA-ARS Feed Onione Deveticing and Line State University, Supervisory Research Geneticist, USDA-ARS

Food Science, Nutrition and Health Promotion

Bailey, R. Hartford, Ph.D., Texas A&M University, Professor (Pathobiology and Population Medicine - College of Veterinary Medicine) Buys, David R., Ph.D., University of Alabama-Birmingham, Associate Extension and Research Professor (Health Promotion - State Health Specialist) Byrd, Sylvia H., Ph.D., Mississippi State University, Professor (Nutrition) Chang, Sam K. C., Ph.D., University of Nebraska-Lincoln, Professor (Food Science and Technology) Cheng, Wen-Hsing, Ph.D., Cornell University, Associate Professor (Nutrition), and Graduate Coordinator Crist, Courtney A., Ph.D., Virginia Polytechnic Institute and State University, Assistant Extension Professor (Food Science and Technology) Fountain, Brent J., Ph.D., Mississippi State University, Associate Extension Professor (Nutrition) Gardner, Antonio J., Ph.D., University of Alabama, Assistant Professor (Health Promotion) Hunt, Barry P., Ed.D, University of Alabama, Professor (Health Promotion) Mathews, Rahel, Ph.D., Mississippi State University, Assistant Professor (Nutrition) Nannapaneni, Ramakrishna, Ph.D., University of Strathclyde, Glasgow (UK), Research Professor (Food Science and Technology) Pylate, Leah P., Ph.D., Mississippi State University, Assistant Professor (Health Promotion) Schilling, M. Wes, Ph.D., Virginia Polytechnic Institute and State University, Professor (Food Science and Technology) Silva, Juan L., Ph.D., Mississippi State University, Professor (Food Science and Technology) Tidwell, Diane K., Ph.D., Mississippi State University, Professor (Nutrition) Tolar-Peterson, Terezie T., Ed.D., University of Memphis, Associate Professor/Dietetic Internship Director (Nutrition) White, Shecoya, Ph.D., Iowa State University, Assistant Professor (Food Science and Technology)

Williams, J. Byron, Ph.D., Mississippi State University, Associate Extension/Research Professor (Food Science and Technology)

School of Human Sciences

Agricultural and Extension Education

Akers, C. Ryan, Ph.D., University of Georgia, Associate Extension Professor Barrett, Jason R., Ph.D., Mississippi State University, Assistant Extension Professor Denny, Marina D., Ed.D., Nova Southeastern University, Assistant Professor Downey, Laura Hall, DrPH, University of Kentucky, Associate Extension Professor Jackson, Gary B., Ph.D., Pennsylvania State University, Professor and Director of Extension Jagger, Carla B., Ph.D., Ohio State University, Assistant Professor Long, Cheryl Leanne, Ph.D., Mississippi State University, Assistant Research Professor Long, John L., Ph.D., Mississippi State University, Assistant Extension Professor McCubbins, Andrew O.P., Ph.D., Iowa State University, Assistant Professor Morgan, Mariah Smith, Ph.D., Mississippi State University, Assistant Extension Professor Morrison, Carley Calico, Ph.D., Mississippi State University, Assistant Professor Newman, Michael E., Ph.D., Mississippi State University, Professor of Human Sciences, Director Peterson, Donna J., Ph.D., University of Arizona, Associate Extension Professor Seal, Susan D., Ph.D., Mississippi State University, Assistant Professor and Executive Director, Center for Distance Education Swortzel, Kirk A., Ph.D., Ohio State University, Professor and Graduate Coordinator Threadgill, Paula I., Ph.D., Mississippi State University, Extension Professor

School of Human Sciences

Fashion Design and Merchandising

Black, Catherine, Ph.D., University of Minnesota, Professor

Freeman, Charles E., Ph.D., Louisiana State University, Assistant Professor and Graduate Coordinator

Kobia, Caroline M., Ph.D., Louisiana State University, Assistant Professor

Lee, Juyoung (Jill), Ph.D., Iowa State University, Assistant Professor

School of Human Sciences

Human Development and Family Science

Davis, Louise E., Ph.D., Mississippi State University, Extension Professor
Downey, Laura Hall, DrPH, University of Kentucky, Associate Extension Professor
Elmore-Staton, Lori D., Ph.D., Auburn University, Associate Professor
Hardman, Alisha M., Ph.D., University of Minnesota, Assistant Professor
Pansé, Chelsea, Ph.D., University of Connecticut, Assistant Professor
Parker, Julie C., Ph.D., Northcentral University, Associate Professor
Peterson, Donna J., Ph.D., University of Arizona, Associate Extension Professor
Phillips, Tommy M., Ph.D., Auburn University, Associate Professor and Graduate Coordinator
Seal, Susan, Ph.D., Mississippi State University, Executive Director, Online Education

Wheeler, Brandan, Ph.D., Auburn University, Assistant Professor

Wilmoth, Joe D., Ph.D., Oklahoma State University, Professor

Landscape Architecture

Artunc, Sadik, M.L.A., University of Michigan, Professor, and Department Head Brzuszek, Robert F., M.L.A., Louisiana State University, Professor Fulford, Charles Taze, III, M. Arch, University of Idaho, Associate Professor Gallo, Warren C., M.U.D., University of Michigan, Assistant Professor Li, Chuo, Ph.D., University of Illinois, Associate Professor and Graduate Coordinator Payne, Elizabeth, M.Phil., School of Landscape Architecture, University of Edinburgh (Scotland), Assistant Professor Schauwecker, Timothy J., Ph.D., Mississippi State University, Associate Professor Seymour, Michael, M.L.A., Louisiana State University, Professor Summerlin, Peter R., M.L.A., Louisiana State University, Assistant Professor Walker, Jason B., M.L.A., Virginia Polytechnic Institute and State University, Associate Professor Plant and Soil Sciences Babiker, Ebrahiem M., Ph.D., Washington State University, Research Geneticist/ Lead Scientist USDA-ARS Bachman, Gary R., Ph.D., Ohio State University, Associate Extension/Research Professor Baldwin, Brian S., Ph.D., New Mexico State University, Professor Bararpour, M. T., Ph.D., University of Arkansas, Assistant Extension/Research Professor Barickman, T. Casey, Ph.D., University of Tennessee, Associate Research Professor Bheemanahalli, Raju, Ph.D., University of Agricultural Sciences (India), Assistant Research Professor Bi, Guihong, Ph.D., Oregon State University, Associate Research Professor Blythe, Eugene K., Ph.D., Auburn University, Associate Research Professor Bond, Jason A., Ph.D., University of Arkansas, Associate Research/Extension Professor Broderick, Shaun R., Ph.D., Ohio State University, Assistant Research/Extension Professor Byrd, John D., Ph.D., North Carolina State University, Extension/Research Professor Chastain, Daryl R., Ph.D., University of Georgia, Assistant Research Professor Coker, Christine H., Ph.D., Auburn University, Associate Research Professor Cox, Michael S., Ph.D., Louisiana State University, Professor and Graduate Coordinator Czarnecki, Joby M., Ph.D., Mississippi State University, Assistant Research Professor DelPrince, James, Ph.D., Mississippi State University, Assistant Extension Professor Denny, Geoffrey C., Ph.D., Texas A&M University, Assistant Extension Professor Dodds, Darrin M., Ph.D., Mississippi State University, Associate Extension Professor and Department Head Dong, Hongxu, Ph.D., University of Illinois, Assistant Professor Ebelhar, M. Wayne, Ph.D., University of Illinois, Research Professor Etheredge, Coleman, Ph.D., Texas A&M University, Assistant Professor Ferguson, Jason Connor, Ph.D., University of Queensland (Australia), Assistant Professor

Fox, Amelia Ann Amy, Ph.D., Mississippi State University, Assistant Professor

Ganapathi-Shanmugam, Shankar, Ph.D., Assistant Research Professor, Mississippi State University Gholson, Drew M., Ph.D., Texas A&M University, Assistant Professor Golden, Bobby R., Ph.D., University of Arkansas, Assistant Extension/Research Professor Harkess, Richard L., Ph.D., Virginia Polytechnic Institute and State University, Professor Harvey, Lorin, Ph.D., Teaxas A&M University, Assistant Extension Professor Henry, W. Brien, Ph.D., Mississippi State University, Professor and Associate Dean of the Graduate School Hu, Jing, Ph.D., University of Florida, Assistant Research Professor Irby, Jon Trenton, Ph.D., Mississippi State University, Assistant Extension Professor Kaur, Gurpreet, Ph.D. University of Missouri, Assistant Research Professor Kingery, William L., Ph.D., Auburn University, Professor Knight, Patricia R., Ph.D., Virginia Polytechnic Institute and State University, Research Professor & Director, Coastal Horticulture Research Krutz, L. Jason, Ph.D., Texas A&M University, Associate Extension/Research Professor Lang, David J., Ph.D., University of New Hampshire, Associate Professor Larson, Erick J., Ph.D., University of Nebraska-Lincoln, Associate Extension/Research Professor Lawrence, Benjamin, Ph.D., Cropping Systems Agronomist, Mississippi State University Lemus, Rocky W., Ph.D., Virginia Polytechnic Institute and State University, Associate Extension/Research Professor Li, Tongyin, Ph.D., Mississippi State University, Assistant Professor Macoon, Bisoondat, Ph.D., University of Florida, Associate Research Professor McCoy, Justin, Ph.D., Mississippi State University, Assistant Professor McCurdy, James D., Ph.D., Auburn University, Assistant Extension Professor Morrison, Jesse I., Ph.D., Mississippi State University, Assistant Research Professor Mulvaney. Michael, Ph.D., Auburn University, Associate Professor and Endowed Chair Nandula, Vijay K., Ph.D., Virginia Polytechnic Institute and State University, Research Plant Physiologist, USDA-ARS Oldham, J. Larry, Ph.D., University of Minnesota, Extension Professor Peterson, Daniel G., Ph.D., Colorado State University, Professor Pieralisi, Brian Kimbrell, Ph.D., Mississippi State University, Assistant Professor Reddy, K. Raja, Ph.D., Sri Venkateswara University, Research Professor Redoña, Edilberto, Ph.D., University of California-Davis, Research Professor (DREC) Reynolds, Daniel B., Ph.D., Oklahoma State University, Professor & Endowed Chair Rushing, J. Brett, Ph.D., Mississippi State University, Assistant Research/Extension Professor Scheffler, Jodi A., Ph.D., University of Wisconsin-Madison, Research Plant Geneticist, USDA-ARS Shankle, Mark W., Ph.D., Mississippi State University, Research Professor Shaw, David R., Ph.D., Oklahoma State University, William L. Giles Distinguished Professor and Provost Singh, Gurbir, Ph.D., Southern Illinois University, Assistant Research Professor Singh Dhillon, Jagmandeep, Ph.D., Oklahoma State University, Assistant Professor

Spencer, Dave, Ph.D., Mississippi State University, Assistant Professor

Snyder, Richard G., Ph.D., Cornell University, Extension/Research Professor Stafne, Eric T., Ph.D., University of Arkansas, Associate Extension Professor Stetina, Salliana R., Ph.D., Louisiana State University, Research Plant Pathologist, USDA-ARS Stewart, Barry R., Ph.D., Virginia Polytechnic Institute and State University, Associate Professor Tseng, Te-Ming (Paul), Ph.D., University of Arkansas, Assistant Professor Turnage, Jr., Lee, Ph.D., Mississippi State University, Associate Extension/Research Professor Varco, Jac J., Ph.D., University of Kentucky, Professor and Endowed Chair Wallace, Teddy P., Ph.D., Texas A&M University, Associate Professor Warburton, Marilyn Louise, Ph.D., University of California-Davis, Research Geneticist USDA-ARS Williams, W. Paul, Ph.D., North Carolina State University, Supervisory Research Geneticist/Research Leader, USDA-ARS Wilson, Jeffrey C., Ph.D., Mississippi State University, Assistant Professor Zurweller, Brendan, Ph.D., University of Florida, Assistant Professor **Poultry Science** Beck, Mary M., Ph. D., University of Maryland, Professor and Department Head Kiess, Aaron S., Ph.D., West Virginia University, Associate Professor Peebles, E. David, Ph.D., North Carolina State University, Professor Ramachandran, Reshma, Ph.D., Mississippi State University, Assistant Research Professor

Sukumaran, Anuraj, Ph.D., Mississippi State University, Assistant Research Professor

Tabler, Thomas, Ph.D., University of Arkansas, Extension Professor

Wamsley, Kelley G. S., Ph.D., West Virginia University, Associate Professor and Graduate Coordinator

Wells, Jessica B., Ph.D., Mississippi State University, Assistant Clinical/Extension Professor

Zhai, Wei, Ph.D., Purdue University, Assistant Professor

Zhang, Li, Ph.D., Mississippi State University, Assistant Research Professor

COLLEGE OF ARCHITECTURE, ART, AND DESIGN

School of Architecture

Callender, Jassen, M.F.A., University of Minnesota, Associate Professor, and Interim Director, School of Architecture (Director, Jackson Center)

Gines, Jacob A., M. Arch., University of Utah, Assistant Professor

Gregory, Alexis Denise, R.A., M.Arch., Clemson University, Associate Professor

Hall, Greg G., Ph.D., University of Hong Kong, Associate Dean and Professor

Herrmann, Hans C., R.A., M.Arch., Clemson University, Associate Professor

Lopez Barrera, Silvina, R.A., M.Arch., University of Iowa, Assistant Professor

Perkes, David, R.A., M.Arch., University of Utah, Professor and Director, Gulf Coast Community Design Studio

Poros, John, R.A., M.Arch., Harvard University GSD, Professor

Art

Bostic, Alexander, M.A., Syracuse University, Associate Professor

Bourgeois, Angi E., Ph.D., Emory University, Professor and Dean of College of Architecture, Art, and Design

Callander, Neil, M.F.A., Rutgers University, Assistant Professor Campbell, Critz, M.F.D., Parnham College (UK), Associate Professor Funderburk, T. Brent, M.F.A., East Carolina University, Giles Distinguished Professor Gootee, Marita, M.F.A., Indiana University, Professor Haupt, Jeffrey, M.F.A., Indiana University, Professor and Associate Dean Lippillo, Dominic, M.F.A., Ohio University, Assistant Professor Long, Robert J., M.F.A., Clemson University, Professor Martin, Gregory, M.F.A., Claremont Graduate University, Assistant Professor McCourt, Tim, M.F.A., University of Southern California, Professor Mixon, Jamie B., B.A., Mississippi State University, Professor Ngoh, Soon Ee, M.F.A., University of Massachusetts, Professor Powney, Jeralyn Suzanne, M.F.A., University of Houston, Associate Professor Seckinger, Linda K., M.F.A., Arizona State University, Professor Design Crumpton, Amy E., M.S., University of Tennessee, Associate Professor Fulton, Jeff, M.S., Pratt Institute, Assistant Professor

Hughes, Lauren, M.S., Ball State University, Assistant Professor

Miller, Beth R., Ph.D., Mississippi State University, Professor & Director, Interior Design

Riehm, William, M.S., University of Nebraska, Assistant Professor

COLLEGE OF ARTS & SCIENCES

Anthropology and Middle Eastern Cultures

Hardin, James W., Ph.D., University of Arizona, Associate Professor
Hoffman, David M., Ph.D., University of Colorado, Associate Professor
Ilahiane, Hsain, Ph.D., University of Arizona, Professor and Head
Lambert, Shawn, Ph.D., University of Oklahoma, Assistant Professor
McClellan, Kate, Ph.D., University of Michigan, Assistant Professor
Miller, Darcy Shane, Ph.D., University of Arizona, Associate Professor
Osterholtz, Anna J., Ph.D., University of Nevada, Assistant Professor
Peacock, Evan, Ph.D., University of Sheffield, Professor
Tijerina, Milena Melo, Ph.D., University of Texas-San Antonio, Assistant Professor
Williams, Karen G., Ph.D., Emory University, Associate Professor and Graduate Coordinator
Biological Sciences
Ballinger, Matthew, Ph.D., New York University, Assistant Professor

Barton, Brandon, Ph.D., Yale University, Assistant Professor

Brooks, Christopher P., Ph.D., University of North Carolina-Chapel Hill, Associate Professor

Brown, Lewis R., Ph.D., Louisiana State University, Research Professor Brown, Matthew W., Ph.D., University of Arkansas, Assistant Professor Counterman, Brian A., Ph.D., Duke University, Associate Professor Dapper, Amy, Ph.D., Indiana University, Assistant Professor Dawe, Angus L., Ph.D., University of Tennessee, Professor and Department Head Ervin, Gary N., Ph.D., University of Alabama, Professor Folk, Ryan, Ph.D., Ohio State University, Assistant Professor French, William Todd, Ph.D., Mississippi State University, Associate Professor Gordon, Donna M., Ph.D., University of Pennsylvania School of Medicine, Associate Professor and Graduate Coordinator, GBIO Gout, Jean Francois, Ph.D., University Lyon, Assistant Professor Jordan, Heather, Ph.D., University of Tennessee, Assistant Professor Klink, Vincent, Ph.D., University of Maryland, Associate Professor Lawton, Andrew, Ph.D., Yale University, Assistant Professor Li, Ling, Ph.D., Iowa State University, Assistant Professor Liu, Bin, Ph.D., Ph.D., Ohio State University, Assistant Research Professor Munn, Giselle Thibaudeau, Ph.D., University of Kansas, Professor and Associate Dean Outlaw, Diana C., Ph.D., University of Memphis, Associate Professor Range, Ryan C., Ph.D., Duke University, Assistant Professor Reichert, Nancy A., Ph.D., New Mexico State University, Professor Thornton, Justin A., Ph.D., University of Mississippi Medical Center, Associate Professor and Graduate Coordinator Wang, Ying,, Ph.D., Ohio State University, Assistant Professor Welch, Mark E., Ph.D., Indiana University, Associate Professor Chemistry

Creutz, Sidney, Ph.D., California Institute of Technology, Assistant Professor

Cui, Xin, Ph.D., University of Science and Technology of China, Assistant Professor

- Emerson, Joseph P., Ph.D., University of Georgia, Associate Professor
- Fitzkee, Nicholas C., Ph.D., Johns Hopkins University, Associate Professor

Gangishetty, Mahesh Kumar, Ph.D., University of Saskatchewan, Assistant Professor

- Gwaltney, Steven R., Ph.D., University of Florida, Professor
- Hollis, T. Keith, Ph.D., University of Chicago, Associate Professor
- MIsna, Debra Ann, PhD., University of Texas-Austin, Assistant Professor
- MIsna, Todd E., Ph.D., University of Texas-Austin, Professor
- Montiel, Virginia, Ph.D., University of York, Assistant Professor
- Munoz, Miguel, Ph.D., National Autonomous University of Mexico, Associate Professor
- Patrick, Amanda, Ph.D., University of Florida, Assistant Professor
- Scott, Colleen N., Ph.D., University of Pittsburgh, Assistant Professor

Smith, Dennis W., Jr., Ph.D., University of Florida, Professor and Department Head Stokes, Sean L., Ph.D., Mississippi State University, Assistant Clinical Professor Webster, Charles Edwin, Ph.D., University of Florida, Professor Wipf, David O., Ph.D., Indiana University, Professor and Graduate Coordinator Zhang, Dongmao, Ph.D., Purdue University, Professor Classical & Modern Languages and Literatures Arroyo, Silvia, Ph.D., University of Colorado, Associate Professor (Spanish) Bartera, Salvador, Ph.D., University of Virginia, Assistant Professor (Classics) Clark, Mark E., Ph.D., Indiana University, Associate Professor (Classics) Corrigan, Peter L., Ph.D., Cornell University, Professor and Department Head (Classics) Davisson, Brian M., Ph.D., University of California-Davis, Associate Professor (Spanish) and Graduate Coordinator DiGiulio, Scott J., Ph.D., Brown University, Assistant Professor (Classics) Gray, Sally H., Ph.D., University of North Carolina-Chapel Hill, Associate Professor (German) Harland, Robert J. E., Ph.D. University of Wales, Associate Professor (Spanish) Joo, Fumiko, Ph.D., University of Chicago, Assistant Professor (Asian Studies) Moser, Keith A., Ph.D., University of Tennessee, Professor (French) Moser, Kelly, Ph.D., Mississippi State University, Assistant Professor (Spanish) Pelaez, Sol I..., Ph.D., State University of New York at Buffalo, Assistant Professor (Spanish) Potter, Edward T., Ph.D., University of North Carolina-Chapel Hill, Associate Professor (German) Simpore, Karim, Ph.D., University of Louisiana-Lafayette, Associate Professor (French) Wolverton, Robert E., Ph.D., University of North Carolina-Chapel Hill, Professor (Classics) Zelaya, Karina, Ph.D., University of California-Davis, Assistant Professor (Spanish) Communication

Bazaa, Uyanga, Ph.D., Texas Tech University, Assistant Professor

Choi, Heesook, Ph.D., University of Missouri, Assistant Professor

Clevinger, Donna L., Ph.D., University of Michigan, Professor

Fisher, Melody, Ph.D., University of Southern Mississippi, Associate Professor and Graduate Coordinator

Forde, John E., Ph.D., University of Southern Mississippi, Professor

Hernandez, Terri, Ph.D., Texas Tech University, Assistant Professor

Likes, Terrence, Ph.D., University of Kentucky, Professor and Department Head

Loehwing, Melanie, Ph.D., Indiana University, Associate Professor

Matheny, James, M.F.A., University of Louisville, Assistant Professor

Nicholson, John H., Ph.D., University of Iowa, Associate Professor

Page, Tyler, Ph.D., University of Maryland, Assistant Professor

Poe, Philip, Ph.D., Texas Tech University, Associate Professor

Roussin, Wendy K., M.F.A., Indiana State University, Associate Professor

Seitz, Holli H., Ph.D., University of Pennsylvania, Assistant Professor
Smith, Glenn (Pete), Ph.D., University of Southern Mississippi, Associate Professor
Stockstill, William, M.F.A., University of Southern Mississippi, Assistant Professor
Strout, Lawrence N., Ph.D., Florida State University, Associate Professor
Williams, Kevin D., Ph.D., University of Georgia, Associate Professor

English

Anderson, Thomas P., Ph.D., Vanderbilt University, Professor and Associate Dean Atkinson, Theodore B., Ph.D., Louisiana State University, Associate Professor Claggett, Shalyn R., Ph.D., Vanderbilt University, Associate Professor and Graduate Coordinator DeGabriele, Peter, PhD., State University of New York at Buffalo, Associate Professor Dodds, Lara A., Ph.D., Brown University, Associate Professor Flowers, Katherine, Ph.D., University of Illinois, Assistant Professor Hagenston, Becky, M.F.A., University of Arizona, Professor Herd, Wendy, Ph.D., University of Kansas, Associate Professor Johnson, Holly, Ph.D., University of North Carolina-Chapel Hill, Professor Kardos, Michael P., Ph.D., University of Missouri, Professor Kelley, James B., Ph.D., University of Tulsa, Professor Little, Matthew W., Ph.D., University of Chicago, Associate Professor Lyons, Richard, Ph.D., University of Houston, Professor Marsh, Kelly, Ph.D., Pennsylvania State University, Professor Miller, Elizabeth, Ph.D., University of Maryland, Assistant Professor O'Neill, Bonnie C., Ph.D., Washington University, Associate Professor Pierce, Catherine, Ph.D., University of Missouri, Professor Pizer, Ginger B., Ph.D., University of Texas-Austin, Associate Professor Punday, Daniel, Ph.D., Pennsylvania State University, Professor and Department Head Shaffer, Donald M., Ph.D., University of Chicago, Associate Professor Smith, Megan, Ph.D., Michigan State University, Assistant Professor Spain, Andrea, Ph.D., State University of New York at Buffalo, Associate Professor Thorat, Dhanashree, Ph.D., University of Florida, Assistant Professor Vivier, Eric D., Ph.D., University of Wisconsin-Madison, Assistant Professor Ward, Jervette, Ph.D., University of Memphis, Associate Professor West, Robert M., Ph.D., University of North Carolina-Chapel Hill, Professor Geosciences

Ambinakudige, Shrinidhi S., Ph.D., Florida State University, Professor
Brown, Michael E., Ph.D., University of North Carolina-Chapel Hill, Professor
Clary, Renee M., Ph.D., Louisiana State University, Professor

Cooke, William H., III, Ph.D., Mississippi State University, Professor Crane Warden, Kelsey, Ph.D., University of Georgia, Assistant Professor Dash, Padmanava, Ph.D., Louisiana State University, Associate Professor Dyer, Jamie L., Ph.D., University of Georgia, Professor Fosu, Boniface, Ph.D., Utah State University, Assistant Professor Fraza, Erik, Ph.D., Florida State University, Assistant Clinical Professor Fuhrmann, Christopher M., Ph.D., University of North Carolina-Chapel Hill, Associate Professor Gabitov, Rinat I., Ph.D., Rensselaer Polytechnic Institute, Associate Professor Gutter, Barrett F., Ph.D., Mississippi State University, Assistant Clinical Professor Haney, Christa, Ph.D., Mississippi State University, Assistant Clinical Professor Kirkland, Brenda L., Ph.D., Louisiana State University, Professor Lalk, Sarah, Ph.D., Mississippi State University, Assistant Clinical Professor Meng, Qingmin, Ph.D., University of Georgia, Peking University (China), Associate Professor Mercer, Andrew E., Ph.D., University of Oklahoma, Professor and Graduate Coordinator Nagel, Athena, Ph.D., Mississippi State University, Assistant Clinical Professor Paul, Varun G., Ph.D., Missouri University of Science & Technology, Assistant Professor Rodgers, John C., III, Ph.D., University of Georgia, Professor and Department Head Rudzin Schwing, Johna, Ph.D., University of Miami, Assistant Professor Schmitz, Darrel W., Ph.D., Texas A&M University, Professor Sherman-Morris, Kathleen, Ph.D., Florida State University, Professor Skarke, Adam, Ph.D., University of Delaware, Professor Williams, Brian, Ph.D., University of Georgia, Assistant Professor Wood, Kimberly M., Ph.D., University of Arizona, Assistant Professor History Barbier, M. Kathryn, Ph.D., University of Southern Mississippi, Professor Bates, Toby Glenn, Ph.D., University of Mississippi, Associate Professor Brain, Stephen C., Ph.D., University of California-Berkeley, Associate Professor Damms, Richard V., Ph.D., Ohio State University, Associate Professor Freeman, Stephanie L., Ph.D., University of Virginia, Assistant Professor

Giesen, James C., Ph.D., University of Georgia, Associate Professor

Hay, William Anthony, Ph.D., University of Virginia, Professor

Hersey, Mark D., Ph.D., University of Kansas, Associate Professor

Hui, Alexandra E., Ph.D., University of California-Los Angeles, Associate Professor

Lang, Andrew F., Ph.D., Rice University, Associate Professor and Graduate Coordinator

Lavine, Matthew B., Ph.D., University of Wisconsin-Madison, Associate Professor

Marcus, Alan I., Ph.D., University of Cincinnati, William L. Giles Distinguished Professor and Department Head

Marshall, Anne E., Ph.D., University of Georgia, Associate Professor
Messer, Peter C., Ph.D., Rutgers University, Associate Professor
Osman, Julia, Ph.D., University of North Carolina-Chapel Hill, Associate Professor
Ridner, Judith A., Ph.D., College of William and Mary, Professor
Robinson, Morgan, Ph.D., Princeton University, Assistant Professor
Snyder, Christopher A., Ph.D., Emory University, Professor and Dean, Honors College
Soares, Leigh A., Ph.D., Northwestern University, Assistant Professor
Thompson, Courtney, Ph.D., Yale University, Assistant Professor
Wu, Shu-Hui, Ph.D., Free University of Berlin, Professor

Mathematics and Statistics

Dang, Dinh H., Ph.D., HoChiMinh City University, Professor (Mathematics) Dobson, Edward T., Ph.D., Louisiana State University, Professor (Mathematics) DuBien, Janice, Ph.D., Oklahoma State University, Associate Professor (Statistics) Fabel, Paul, Ph.D., University of Texas-Austin, Associate Professor (Mathematics) Kim, Seongjai, Ph.D., Purdue University, Professor (Mathematics) Lim, Hyeona, Ph.D., Michigan State University, Associate Professor (Mathematics) Liu, Yuan, Ph.D., University of Notre Dame, Assistant Professor (Mathematics) McBride, Matthew S., Ph.D., Purdue University, Assistant Professor (Mathematics) Miller, T. Len, Ph.D., Virginia Polytechnic Institute and State University, Professor (Mathematics) Miller, Vivien G., Ph.D., Mississippi State University, Professor (Mathematics) Neumann, Michael M., Ph.D., University of Saarbrucken (West Germany) Professor (Mathematics) Patil, Prakash N., Ph.D., University of North Carolina-Chapel Hill, Associate Professor (Statistics) Qian, Chuanxi, Ph.D., University of Rhode Island, Professor (Mathematics) Razzaghi, Mohsen, Ph.D., University of Sussex (England), Professor (Mathematics) and Department Head Sepehrifar, Mohammad, Ph.D., University of Central Florida, Assistant Professor (Statistics) and Graduate Coordinator Smith, Robert C., Ph.D., University of Arkansas, Associate Professor (Mathematics) Woody, Jonathan R., Ph.D., Clemson University, Assistant Professor (Statistics) Wu, Tung-Lung, Ph.D., University of Manitoba, Assistant Professor (Statistics) Xu, Xiangsheng, Ph.D., University of Texas-Austin, Professor (Mathematics) Yarahmadian, Shantia, Ph.D., Indiana University, Associate Professor (Mathematics) Zhang, Xu, Ph.D., Virginia Polytechnic Institute and State University, Assistant Professor (Mathematics) Zhou, Qian, Ph.D., University of Waterloo (Canada), Assistant Professor

Philosophy and Religion

Bickle, John, Ph.D., University of California-Irvine, Professor (Philosophy) and Department Head

Boyce, Kristin, Ph.D., University of Chicago, Assistant Professor (Philosophy)

Bruno, Michael George, Ph.D., University of Arizona, Assistant Professor (Philosophy) Clifford, Michael R., Ph.D., Vanderbilt University, Professor (Philosophy) Hall, Alicia, Ph.D., University of Minnesota, Assistant Professor (Philosophy) Holt, D. Lynn, Ph.D., Vanderbilt University, Professor (Philosophy) Moffatt, Barton, Ph.D., University of Minnesota, Associate Professor (Philosophy) Thompson, James Robert, Ph.D., Washington University in St. Louis, Associate Professor (Philosophy) Witt, Joseph D., Ph.D., University of Florida, Assistant Professor (Religion) Wylie, Danielle, Ph.D., University of Wisconsin-Madison, Assistant Professor (Philosophy) Physics and Astronomy Afanasjev, Anatoli, Ph.D., Latvian Academy of Sciences; Latvian State University, Professor Ariunbold, Gombojav, , Ph.D., Texas A&M University, Assistant Professor Arnoldus, Hendrik F., Ph.D., Utrecht University, Professor and Graduate Coordinator Clay, R. Torsten, Ph.D., University of Illinois, Professor Crider, Benjamin, Ph.D., University of Kentucky, Assistant Professor Dunne, James A., Ph.D., The American University, Professor Dutta, Dipangkar, Ph.D., Northwestern University, Professor El Fassi, Lamiaa, Ph.D., Mohammed V University (Morocco), Assistant Professor Kim, Seong-Gon, Ph.D., Michigan State University, Professor Novotny, Mark A., Ph.D., Stanford University, Professor and Department Head Pierce, Donna M., Ph.D., University of Maryland, Associate Professor Pradhan, Prabhakar, Ph.D., Indian Institute of Science, Assistant Professor Rupak Lan Tai Moong, Gautam, Ph.D., University of Washington, Associate Professor Tanner, Angelle M., Ph.D., University of California-Los Angeles, Associate Professor Waggoner, Charles A., Ph.D., Mississippi State University, Deputy Director, Institute for Clean Energy Technology and Research Professor Wang, Chuji, Ph.D., University of Science and Technology of China, Professor Wang, Kun, Ph.D., University of Georgia, Assistant Professor Winger, Jeffry A., Ph.D., Iowa State University, Professor Ye, Jinwu, Ph.D., Yale University, Professor Political Science and Public Administration Abutabenjeh, Sawsan, Ph.D., Old Dominion University, Assistant Professor Banerjee, Vasabjit, Ph.D., Indiana University, Assistant Professor Chamberlain, James A., Ph.D., University of Washington, Assistant Professor

Dimitrijevska-Markoski, Tamara, Ph.D., University of Central Florida, Assistant Professor

French, P. Edward, Ph.D., Mississippi State University, Professor

Holmes, Carolyn E., Ph.D., Indiana University, Assistant Professor

Merivaki, Thessalia, Ph.D., University of Florida, Assistant Professor

- Nukpezah, Julius A., Ph.D., University of North Texas, Assistant Professor Potter, Michael R., Ph.D., Virginia Polytechnic Institute and State University, Associate Professor and Graduate Coordinator Rush, Christine L., Ph.D., University of Georgia, Associate Professor Shaffer, Stephen D., Ph.D., Ohio State University, Professor Shoup, Brian D., Ph.D., Indiana University, Associate Professor and Department Head Stanisevski, Dragan, Ph.D., Florida Atlantic University, Associate Professor Tkach, Benjamin, Ph.D., Texas A&M University, Assistant Professor Travis, Rick, Ph.D., University of Georgia, Professor and Dean of College of Arts & Sciences Psychology Adams-Price, Carolyn E., Ph.D., West Virginia University, Associate Professor Armstrong, Kevin J., Ph.D., Illinois Institute of Technology, Associate Professor and Graduate Coordinator Berman, Mitchell E., Ph.D., Kent State University, Professor and Department Head Bradshaw, Gary L., Ph.D., Carnegie Mellon University, Professor DeShong, Hilary L., Ph.D., Oklahoma State University, Assistant Professor Dozier, Mary E., Ph.D., San Diego State University, Assistant Professor Eakin, Deborah K., Ph.D., University of Kansas, Associate Professor Jarosz, Andrew F., Ph.D., University of Illinois-Chicago, Assistant Professor Karimi, Hossein, Ph.D., University of California-Davis, Assistant Professor McKinney, Cliff, Ph.D., University of Central Florida, Associate Professor McMillen, Robert, Ph.D., University of Georgia, Professor Moss, Jarrod, Ph.D., Carnegie Mellon University, Associate Professor Nadorff, Danielle K., Ph.D., West Virginia University, Assistant Professor Nadorff, Michael R., Ph.D., West Virginia University, Associate Professor Oliveros, Arazais, Ph.D., University of Central Florida, Assistant Professor Porter, Bennett W., Ph.D., University of Houston, Assistant Professor Pratte, Michael S., Ph.D., University of Missouri, Assistant Professor Sinclair, H. Colleen, Ph.D., University of Minnesota, Associate Professor Soares, Julia, Ph.D., University of California-Santa Cruz, Assistant Professor Stafford, Emily S.H., Ph.D., Auburn University, Assistant Professor Stafford, Ty, Ph.D., Auburn University, Assistant Clinical Professor Wilson, Rodney T., Fuller Graduate School of Psychology, Assistant Professor Winer, Eric Samuel, Ph.D., University of Illinois-Chicago, Associate Professor Sociology Allison, Rachel, Ph.D., University of Illinois-Chicago, Associate Professor
- Barranco, Raymond Edward, Ph.D., Louisiana State University, Associate Professor Boltz, Laura D., Ph.D., University of Alabama, Assistant Professor

Boyd, Robert L., Ph.D., University of North Carolina-Chapel Hill, Professor Brown, Dustin C., Ph.D., University of Texas-Austin, Assistant Professor Cistrunk, Kenya Y., Ph.D., University of Georgia, Associate Professor Cook, Amanda P., Ph.D., Mississippi State University, Associate Professor Crudden, Adele, Ph.D., Mississippi State University, Professor Hagerman, Margaret Ann, Ph.D., Emory University, Associate Professor and Graduate Coordinator Haynes, Stacy H., Ph.D., Pennsylvania State University, Professor Johnson, Kecia R., Ph.D., North Carolina State University, Associate Professor Kelly, Kimberly C., Ph.D., University of Georgia, Associate Professor King, Sanna, Ph.D., University of Hawai'i, Assistant Professor Leap, Braden T., Ph.D., University of Missouri, Assistant Professor May, David C., Ph.D., Mississippi State University, Professor Miller, Gabe, Ph.D., Texas A&M University, Assistant Professor Parisi, Domenico, Ph.D., Pennsylvania State University, Professor Perry, Ashley M., Ph.D., Louisiana State University, Assistant Clinical Professor Peterson, Lindsey, Ph.D., Ohio State University, Assistant Professor Rader, Nicole E., Ph.D., Southern Illinois University, Professor and Department Head Ralston, Margaret L., Ph.D., University of Missouri, Associate Professor Robertson, Angela A., Ph.D., Mississippi State University, Research Professor Sutton, Tara, E., Ph.D., University of Georgia, Assistant Professor Swindell, Marian L., Ph.D., University of Alabama, Associate Professor Thompson, Diego. Ph.D., Iowa State University, Assistant Professor

COLLEGE OF BUSINESS

Adkerson School of Accountancy

Addy, Noel D., Ph.D., C.P.A., University of Florida, Associate Professor
Berglund, Nathan R., Ph.D., C.P.A., Oklahoma State University, Assistant Professor
Ennis, Kevin L., Ph.D. C.P.A., C.M.A., Jackson State University, Associate Professor
Herring, Clyde, Ph.D., C.P.A., University of Alabama, Associate Clinical Professor
Hunt, Emily, Ph.D., University of Arkansas, Assistant Professor
Hunt, Joshua, Ph.D., University of Arkansas, Assistant Professor
Mauldin, Shawn, Ph.D., C.P.A., C.M.A., C.F.P., University of Mississippi, Professor and Director
Stancill, Alan, Ph.D., C.P.A., Virginia Polytechnic Institute and State University, Assistant Professor
Trinkle, Brad S., Ph.D., C.I.S.A., University of Alabama, Assistant Professor
Walker, A. Kelly, J.D., University of Alabama, LL.M., University of Florida, Assistant Clinical Professor and Graduate Coordinator

Finance and Economics

Blank, Douglas Brian, II, Ph.D., University of Tennessee, Assistant Professor (Finance)

Campbell, Randall C., Ph.D., Louisiana State University, Professor (Economics)

Cline, Brandon N., Ph.D., University of Alabama, Associate Professor (Finance) and John Nutie and Edie Dowdle Professor of Finance, Co-Director of the Institute for Market Studies, and Graduate Coordinator (Finance)

González Lozano, Heriberto, Ph.D., University of Pittsburgh, Assistant Clinical Professor (Economics)

Highfield, Michael J., Ph.D., CFA, CTP, University of Kentucky, Professor (Finance), Warren Chair of Real Estate Finance

Kennedy, Kendall J., Ph.D., Purdue University, Assistant Professor (Economics)

Li, Cheng, Ph.D., University of Miami, Assistant Professor (Economics)

Liano, Kartono, Ph.D., University of Alabama, Professor (Finance)

Miller, Thomas W., Jr., Ph.D., University of Washington, Professor (Finance) and Lee Chair of Financial Institutions and Consumer Finance

Orozco-Aleman, Sandra L., Ph.D., University of Pittsburgh, Associate Professor (Economics)

Rogers, Kevin E., Ph.D., University of Georgia, Professor (Economics) and Paul and Mary Jo Karre Associate Dean, College of Business

Roskelley, Kenneth D., Ph.D., University of Arizona, Professor (Finance) and Renasant Bank Faculty Fellow in Finance

Spurlin, William Paul II, Ph.D., University of Mississippi, Associate Professor (Finance)

Taboada, Alvaro G., Ph.D., CFA, Ohio State University, Associate Professor (Finance) and BancorpSouth Professor of Finance

Thomas, M. Kathleen, Ph.D., Georgia State University, Professor (Economics) and Department Head

Williamson, Claudia R., Ph.D., West Virginia University, Associate Professor (Economics), Co-Director of the Institute for Market Studies and Graduate Coordinator

Wiseman, Travis, Ph.D., West Virginia University, Assistant Clinical Professor (Economics) & Director of the International Business Program

Management and Information Systems

Chrisman, James J., Ph.D., University of Georgia, Professor (Management) and Department Head

Ellen, B. Parker, Ph.D., Florida State University, Assistant Professor (Management)

Fugate, Mel, Ph.D., Arizona State University, Professor (Management)

Long, Rebecca G., Ph.D., Louisiana State University, Professor and Meridian Division Head (Management)

Marett, Kent, Ph.D., Florida State University, Associate Professor (Information Systems)

Markin, Erik T., Ph.D., University of Mississippi, Assistant Professor (Management)

Marler, Laura, D.B.A., Louisiana Tech University, Associate Professor (Management)

McLarty, Benjamin D., Ph.D., Louisiana State University, Assistant Professor (Management)

Medina, Michele, Ph.D., Ph.D., University of North Texas, Assistant Professor (Management)

Oswald, Sharon L., Ph.D., University of Alabama, Professor and Dean, College of Business

Otondo, Robert F., Ph.D., Arizona State University, Associate Professor (Information Systems) and Graduate Coordinator

Sherlock, Chelsea, Ph.D., University of Mississippi, Assistant Professor (Management)

Shin, Seungjae, Ph.D., University of Pittsburgh, Professor (Information Systems)

Sikolia, David, Ph.D., Oklahoma State University, Assistant Clinical Professor (Information Systems)

Singh, Kulraj, Ph.D., University of Memphis, Assistant Professor (Management)

Soleimanof, Sohrab, Ph.D., Oklahoma State University, Assistant Professor (Management)

Templeton, Gary F., Ph.D., Auburn University, Associate Professor (Information Systems)

Warkentin, Merrill, Ph.D., University of Nebraska-Lincoln, Professor (Information Systems) and Graduate Coordinator

Marketing, Quantitative Analysis, and Business Law

Adams, Frank G., Ph.D., University of Alabama, Assistant Professor (Marketing)

Breazeale, Michael J., Ph.D., Mississippi State University, Assistant Professor (Marketing)

Collier, Joel E., Ph.D., University of Memphis, Professor (Marketing)

Esmark, Carol Lee, Ph.D., University of Tennessee, Assistant Professor (Marketing)

Faello, Joseph, Ph.D., Mississippi State University, Assistant Professor

Farmer, Robert Adam, Ph.D., University of Kentucky, Assistant Professor (Marketing)

France, Stephen, Ph.D., Rutgers University, Assistant Professor (Quantitative Analysis)

Hill, William Wesley II, Ph.D., University of Alabama, Associate Professor and Division Head (Marketing)

Lueg, Jason E., Ph.D., University of Alabama, Professor (Marketing)

McNeil, Stacey, Ph.D., Jackson State University, Assistant Professor

Moore, Melissa, Ph.D., University of Connecticut, Professor (Marketing) and Department Head

Moore, Robert S., Ph.D., University of Connecticut, Professor (Marketing)

Ponder, Nicole, Ph.D., University of Alabama, Professor (Marketing) and Director of Graduate Studies in Business

Qu, Yingge, Ph.D., Georgia State University, Assistant Professor

Shanahan, Kevin J., Ph.D., New Mexico State University, Associate Professor (Marketing)

Wang, Xinchang, Ph.D., Georgia Institute of Technology, Ph.D., National University of Singapore, Assistant Professor (Quantitative Analysis)

Young, Carlton Chenault, Ph.D., University of Alabama-Birmingham, Associate Professor

COLLEGE OF EDUCATION

Counseling, Educational Psychology, and Foundations

Abernathy, Larry Ty, Ph.D., Mississippi State University, Associate Research Professor

Ahonle, Zaccheus, Ph.D., University of Texas-Austin, Assistant Professor

Bates-Brantley, Kayla, Ph.D., University of Southern Mississippi, Assistant Professor

Borgen, John, Ph.D., Nova Southeastern University, Assistant Professor

Cutts, Qiana M., Ph.D., Georgia State University, Assistant Professor

Dooley, Katherine, Ph.D., University of Alabama, Professor

Elder, Anastasia D., Ph.D., University of Michigan, Professor

Gadke, Daniel L., Ph.D., Illinois State University, Associate Professor, Graduate Coordinator (EPY), Department Head

Gallo, Katarzyna Z., Ph.D., Mississippi State University, Assistant Professor

Goldberg, Rebecca M., Ph.D., University of Florida, Associate Professor

Hall, Kimberly Renee, Ph.D., Mississippi State University, Professor

Henington, Carlen, Ph.D., Texas A&M University, Professor

Justice, Cheryl A., Ph.D., University of Mississippi, Associate Professor

Karami, Sareh, Ph.D., Purdue University, Assistant Professor

Looby, Eugenie J., Ph.D., University of Georgia, Professor

Mazahreh, Laith G., Ph.D., University of Mississippi, Associate Professor McCleon, Tawny E., Ph.D., Mississippi State University, Associate Professor Palmer, Charles D., Ph.D., University of Arkansas, Associate Professor and Graduate Coordinator (COE) Prince, Debra L., Ph.D., Mississippi State University, Associate Professor Ripple, Hailey E., Ph.D., Mississippi State University, Assistant Professor Smith, Hallie, Ph.D., Mississippi State University, Assistant Professor Stratton-Gadke, Kasee K., Ph.D., Central Michigan University, Associate Professor Wei, Tianlan (Elaine), Ph.D., Texas Tech University, Associate Professor Wildmon, Mark, Ph.D., Mississippi State University, Assistant Professor Windham, Melissa, Ph.D., Regent University, Assistant Clinical Professor Wolverton, Robert E., Jr., Ed.D., Mississippi State University, Professor Wozny, Darren A., Ph.D., Iowa State University, Professor Xu, Jianzhong, Ed.D., Columbia University, Professor Curriculum, Instruction, and Special Education Alley, Kathleen M., Ph.D., University of South Florida, Associate Professor Anthony, Kenneth V., Ph.D., Mississippi State University, Associate Professor Binford, Paul E., Ph.D., Indiana University, Associate Professor Brenner, Devon G., Ph.D., Michigan State University, Professor Coffey, Kenneth, Ed.D., University of Alabama, Professor Cornelious, Linda F., Ph.D., Florida State University, Professor and Department Head Devlin, Sandy D., Ed.D., University of Alabama, Professor and Graduate Coordinator (Special Education) Fondren, Kellie, Ph.D., Mississippi State University, Assistant Professor Franz, Dana, Ph.D., Texas A&M University, Professor Hanna, Tania, Ph.D., University of Southern Mississippi, Assistant Clinical Professor Hopper, Peggy F., Ph.D., University of Tennessee, Professor and Graduate Coordinator (Secondary Education) Javorsky, Kristin, Ph.D., University of Nebraska, Assistant Professor Jayroe, Teresa, Ph.D., Mississippi State University, Professor and Dean Leffler, Jeffrey, Ph.D., Mississippi State University, Assistant Professor Lemley, Stephanie M., Ph.D. University of South Florida, Associate Professor Lindsey, Gail, Ed.D., Mississippi State University, Assistant Clinical Professor Miller, Nicole C., Ph.D., Mississippi State University, Associate Professor Ratliff, Lindon, Ph.D., University of Mississippi, Associate Professor Robichaux-Davis, Rebecca R., Ph.D., Auburn University, Professor and Graduate Coordinator (Elementary Education)

Walker, Ryan M., Ph.D., University of Arkansas, Associate Professor

Zhbanova, Ksenia, Ed.D., University of Northern Iowa, Assistant Professor

Educational Leadership

Blackbourn, Richard L., Ed.D., Mississippi State University, Professor Briscoe, Kaleb, Ph.D., University of Nebraska-Lincoln, Assistant Professor Coats, Linda T., Ph.D., Mississippi State University, Professor Fincher, Mark Edward, Ph.D., University of North Texas, Associate Professor Flanigan Operton, Rosalind, Ph.D., Mississippi State University, Assistant Clinical Professor King, Stephanie B., Ph.D., Mississippi State University, Professor and Graduate Coordinator Labat, Myron, Ph.D., University of Southern Mississippi, Associate Professor McMullen, Leigh Ann, Ph.D., Mississippi State University, Assistant Clinical Professor Molina, Danielle K., Ph.D., University of Michigan, Associate Professor Moyen, Eric A., Ph.D., University of Kentucky, Professor and Department Head Operton, Rosalind, Ph.D., Mississippi State University, Assistant Clinical Professor Tharp, Paula, Ph.D., University of Mississippi, Assistant Professor White, Carol Cutler, Ph.D., North Carolina State University, Assistant Professor Williams, Frankie, Ph.D., University of South Carolina, Clinical Professor Winkler, Christa, Ph.D., Ohio State University, Assistant Professor Instructional Systems and Workforce Development Adams, James H., Ed.D., Oklahoma State University, Professor Beriswill, Joanne E., Ph.D., Indiana University, Associate Professor Bracey, Pamela K., Ph.D., University of North Texas, Associate Professor Francom, Gregory, Ph.D., University of Georgia, Assistant Clinical Professor Lee, Sang Joon, Ph.D., University of Georgia, Associate Professor Okojie, Mabel C.P.O., Ph.D., Ohio State University, Professor Patole, Swapnil, Ph.D., Lamar University, Assistant Professor Sun, Yan, Ph.D., Purdue University, Assistant Professor Wyatt, John E., Ph.D., Southampton Institute, Associate Professor Yu, Chien, Ph.D., Ohio State University, Professor and Graduate Coordinator Yu, Wei-Chieh (Wayne), Ph.D., Mississippi State University, Assistant Professor Kinesiology Agiovlasitis, Stamatis, Ph.D., Oregon State University, Professor

Brown, Stanley P., Ph.D., University of Southern Mississippi, Professor and Department Head
Chander, Harish, Ph.D., University of Mississippi, Associate Professor
Chen, Chih-Chia, Ph.D., Arizona State University, Associate Professor
Gillen, Zachary M., Ph.D., University of Nebraska, Assistant Professor
Holmes, Megan E., Ph.D., Michigan State University, Associate Professor
Knight, Adam C., Ph.D., Auburn University, Professor and Graduate Coordinator

Lamberth, John, Ph.D., University of Southern Mississippi, Associate Professor
Lee, Younghan, Ph.D., Seoul National University (Korea), Associate Professor
Lim, Soyoun, Ph.D., University of Texas-Austin, Assistant Professor
Pan, Zhujun, Ph.D., Louisiana State University, Associate Professor
Smith, JohnEric William, Ph.D., Auburn University, Associate Professor
Twietmeyer, Gregg, Ph.D., Pennsylvania State University, Associate Professor
Vickers, John Bradley, Ph.D., University of Georgia, Associate Professor
Wax, Benjamin, Jr., Ph.D., University of Mississippi, Associate Professor
Zimmerman, Matthew H., Ph.D., Indiana University, Assistant Professor

Music Education

Aarhus, Craig H., D.M.A., University of Iowa, Associate Professor
Baker, Jason, D.M.A., University of North Texas, Professor
Damm, Robert J., Ph.D., University of North Texas, Professor
Edwards-Henry, Jackie, Ph.D., University of Oklahoma, Professor
Fontaine, Jeanette, D.M.A., University of Alabama, Assistant Professor
Kopetz, Barry E., D.M.E., Indiana University, Professor and Head
Human, Richard, Jr., D.A., Ball State University, Associate Professor
Kirkland, Anthony B., D.M.A., University of Maryland, Associate Professor
Lee, Christy, D.M.A., Florida State University, Associate Professor
Packwood, Gary D., D.M.A., Louisiana State University, Associate Professor
Sebba, Rosangela Yazbec, D.M.A., University of Southern Mississippi, Professor
Sobaskie, James William, Ph.D., University of Wisconsin-Madison, Associate Professor
Taylor, Clifton D., Jr., D.M.A., University of South Carolina, Associate Professor
BAGLEY COLLEGE OF ENGINEERING

Aerospace Engineering

Belk, Davy M., Ph.D., Mississippi State University, Professor
Cheng, Yang, Ph.D., Harbin Institute of Technology (China), Associate Professor
Kim, Han-Gyu, Ph.D., University of Washington, Assistant Professor
Lv, Yu, Ph.D., Stanford University, Assistant Professor
Narsipur, Shreyas, Ph.D., North Carolina State University, Assistant Professor
Sescu, Adrian, Ph.D., University of Toledo, Associate Professor and Graduate Coordinator
Sescu, Carmen, Ph.D., University of Toledo, Assistant Clinical Professor
Sullivan, Rani W., Ph.D., Mississippi State University, Assistant Professor and Interim Head
Sun, Chuangchuang, Ph.D., Ohio State University, Assistant Professor

Tian, Zhenhua, Ph.D., University of South Carolina, Assistant Professor

Weed, Richard A., Ph.D., Georgia Institute of Technology, Associate Research Professor

Biological Engineering

Elder, Steven H., Ph.D., University of Michigan, Professor and Graduate Coordinator

Lu, Yuzhen, Ph.D., Michigan State University, Assistant Professor

Parajuli, Prem B., Ph.D., Kansas State University, Professor

Paz, Joel O., Ph.D., Iowa State University, Professor

Pote, Jonathan W., Ph.D., University of Arkansas, Senior Research Associate

Thomasson, J. Alex, Ph.D., University of Kentucky, Professor and Department Head

To, Filip Suminto D., Ph.D., Mississippi State University, Professor

Wijewardane, Nuwan, Ph.D., University of Nebraska, Assistant Professor

Yu, Fei, Ph.D., University of Minnesota, Professor

Biomedical Engineering

Elder, Steven H., Ph.D., University of Michigan, Professor and Graduate Coordinator

Priddy, Lauren B., Ph.D., Georgia Institute of Technology, Assistant Professor

Simpson, C. LaShan, Ph.D., Clemson University, Associate Professor

To, Filip Suminto D., Ph.D., Mississippi State University, Professor

School of Chemical Engineering

Amirlatifi, Amin, Ph.D., Missouri University of Science and Technology, Assistant Professor

Bricka, R. Mark, Ph.D., Purdue University, Associate Professor

Elmore, Billy B., Ph.D., University of Arkansas, Director, Hunter Henry Chair and Associate Professor

French, W. Todd, Ph.D., Mississippi State University, Professor

Heshmati, Mohammad, Ph.D., University of Wyoming, Assistant Clinical Professor

Hill, Priscilla J., Ph.D., University of Massachusetts, Associate Professor

Keith, Jason M., Ph.D., University of Notre Dame, Professor, Earnest W. Deavenport, Jr. Chair, and Dean, College of Engineering

Kundu, Santanu, Ph.D., Clemson University, Associate Professor

Meng, Dong, Ph.D., Colorado State University, Assistant Professor and Graduate Coordinator

Mirabolghasemi, Maryam, Ph.D., University of Texas, Assistant Professor

Pearson, Larry E., Ph.D., Mississippi State University, Assistant Clinical Professor

Rai, Neeraj, Ph.D., University of Minnesota, Associate Professor

Toghiani, Hossein, Ph.D., University of Missouri, Professor & Endowed Professorship

Xiang, Yizhi, Ph.D., Zhejiang University of Technology (China), Assistant Professor

Civil and Environmental Engineering

Ermagun, Alireza, Ph.D., University of Minnesota, Assistant Professor

Freyne, Seamus F., Ph.D., P.E., University of Oklahoma, Associate Professor

Gude, Veera Gnaneswar, Ph.D., P.D., New Mexico State University, Kelly Gene Cook, Sr. Endowed Chair and Associate Professor

Gullett, Philip M., Ph.D., P.E., University of California-Davis, Associate Professor

Howard, Isaac L., Ph.D., P.E., University of Arkansas, Materials and Construction Industries Endowed Chair, Professor, and Interim School Director Lynn, Thomas J., Ph.D., P.E., University of South Florida, Assistant Clinical Professor Magbanua, Benjamin S., Jr., Ph.D., P.E., Vanderbilt University, Associate Professor and Undergraduate Coordinator Ramirez-Avila, John J., Ph.D., Mississippi State University, Associate Professor Saeed Rokooei, Ph.D., University of Nebraska-Lincoln, Assistant Professor Vahedifard, Farshid, Ph.D., P.E., University of Delaware, Civil and Environmental Engineering Advisory Board Endowed Professor, Professor, and Graduate Coordinator Wang, Jun, Ph.D., McMaster University, Assistant Professor Zhang, Li, PhD., P.E., Virginia Polytechnic Institute and State University, Professor **Computational Engineering** Afanasjev, Anatoli, Ph.D., Latvian Academy of Sciences; Ph.D., Latvian State University, Professor Amirlatifi, Amin, Ph.D., Missouri University of Science and Technology, Assistant Professor Ball, John E., Ph.D., Mississippi State University, Associate Professor Bammann, Douglas J., Ph.D., University of Illinois, Professor Banicescu, Ioana, Ph.D., Polytechnic University, New York, Professor Belk, Davy M., Ph.D., Mississippi State University, Professor Bethel, Cindy L., Ph.D., University of South Florida, Professor Bhushan, Shanti, Ph.D., Mississippi State University, Assistant Professor Bian, Linkan, Ph.D., Georgia Institute of Technology, Associate Professor Burgreen, Greg W., Ph.D., Old Dominion University, Associate Research Professor Cariño, Ricolindo L., Ph.D., La Trobe University (Australia), Associate Research Professor Collins, Eric, Ph.D., Mississippi State University, Assistant Research Professor Crider, Benjamin, Ph.D., University of Kentucky, Assistant Professor El Kadiri, Haitham, Ph.D., Ecole Des Mines de Paris, Professor, Head, and Endowed Chair Fowler, James E., Ph.D., Ohio State University, Professor and Endowed Professorship Gullett, Philip, Ph.D., P.E., University of California-Davis, Associate Professor Gurbuz, Ali Cafer, Ph.D., Georgia Institute of Technology, Assistant Professor Hammi, Youssef, Ph.D., University of Technology of Troyes (France), Associate Professor Haupt, Tomasz A., Ph.D., Institute of Nuclear Physics (Poland), Associate Research Professor Hu, Mengqi, Ph.D., Arizona State University, Assistant Professor Iannucci, Stefano, Ph.D., University of Rome, Tor Vergata (Italy), Assistant Professor Kim, Seong-Gon, Ph.D., Michigan State University, Professor Kim, Seongjai, Ph.D., Purdue University, Professor Lim, Hyeona, Ph.D., Michigan State University, Associate Professor Luke, Edward A., Ph.D., Mississippi State University, Professor

Marcum, David L., Ph.D., Purdue University, Professor

Mohammadi-Aragh, Jean, Ph.D., Virginia Polytechnic and State University, Assistant Professor Moorhead, Robert J., Ph.D., North Carolina State University, Professor and Director, Geosystems Research Institute Motoyama, Keiichi, Ph.D., University of Tsukuba (Japan), Research Professor Novotny, Mark A., Ph.D., Stanford University, Professor and Head, Physics and Astronomy Oppedal, Andrew L., Ph.D., Mississippi State University, Assistant Research Professor Perkins, Andy D., Ph.D., University of Tennessee, Professor Priddy, Matthew, Ph.D., Georgia Institute of Technology, Assistant Professor Rahimi, Shahram, Ph.D., University of Southern Mississippi, Professor and Department Head (CSE) Rai, Neeraj, Ph.D., University of Minnesota, Associate Professor Ramkumar, Mahalingam, Ph.D., New Jersey Institute of Technology, Associate Professor Samiappan, Sathish, Ph.D., Mississippi State University, Assistant Research Professor Sescu, Adrian, Ph.D., University of Toledo, Associate Professor and Graduate Coordinator Singh, Prashant, Ph.D., Virginia Polytechnic Institute and State University, Assistant Professor Stone, Tonya W., Ph.D., Mississippi State University, Associate Professor Swan, J. Edward, II, Ph.D., Ohio State University, Professor Tang, Bo, Ph.D., University of Rhode Island, Assistant Professor Tian, Wenmeng, Ph.D., Virginia Polytechnic Institute and State University, Assistant Professor Tong, Xiaoling, Ph.D., University of Delaware, Assistant Research Professor Walden, Clayton, Ph.D., Mississippi State University, Associate Professor and Executive Director, CAVS Wang, Xiao, Ph.D., Mississippi State University, Assistant Research Professor Yarahmadian, Shantia, Ph.D., Indiana University, Associate Professor Zhang, Li, Ph.D., Virginia Polytechnic and State University, Professor

Computer Science and Engineering

Banicescu, Ioana, Ph.D., New York University-Polytechnic Institute, Professor Bethel, Cindy L., Ph.D., University of South Florida, Professor Bhowmik, Tanmay, Ph.D., Mississippi State University, Assistant Professor Chen, Jingdao, Ph.D., Georgia Institute of Technology, Assistant Professor Chen, Zhiqian, Ph.D., Virginia Polytechnic and State University, Assistant Professor Hansen, Eric, Ph.D., University of Massachusetts, Associate Professor Iannucci, Stefano, Ph.D., University of Rome Tor Vergata, Assistant Professor Jankun-Kelly, T.J., Ph.D., University of California-Davis, Associate Professor and Graduate Coordinator Jones, James Adam, Ph.D., Mississippi State University, Assistant Professor Luke, Edward Allen, Ph.D., Mississippi State University, Professor Mittal, Sudip, Ph.D., University of Maryland-Baltimore County, Assistant Professor Perkins, Andy D., Ph.D., University of Tennessee, Professor Popescu, George V., Ph.D., Rutgers University, Assistant Research Professor

Rahimi, Shahram, Ph.D., University of Southern Mississippi, Professor and Department Head Ramkumar, Mahalingam, Ph.D., New Jersey Institute of Technology, Associate Professor Swan, J. Edward, II, Ph.D., Ohio State University, Professor Torri, Stephen, Ph.D., Auburn University, Associate Professor Trawick, George, Ph.D., Auburn University, Associate Clinical Professor Young, Maxwell, Ph.D., University of Waterloo, Assistant Professor Electrical and Computer Engineering Adhikari, Uttam, Ph.D., Mississippi State University, Assistant Research Professor Ball, John E., Ph.D., Mississippi State University, Associate Professor and Endowed Chair Choi, Seungdeog, Ph.D., Texas A&M University, Associate Professor Dabbiru, Lalitha, Ph.D., Mississippi State University, Assistant Research Professor Diao, Junming, Ph.D., Brigham Young University, Assistant Professor Du, Qian (Jenny), Ph.D., University of Maryland-Baltimore County, Professor and Endowed Professorship, and Graduate Coordinator Follett, Randolph F., Ph.D., Mississippi State University, Associate Professor Fowler, James E., Ph.D., Ohio State University, Professor, Endowed Professorship Fu, Yong, Ph.D., Illinois Institute of Technology, Professor and Endowed Professorship Goodin, Christopher, Ph.D., Vanderbilt University, Assistant Research Professor Green, Ryan B., Ph.D., Virginia Commonwealth University, Assistant Professor Gurbuz, Ali, Ph.D., Georgia Institute of Technology, Assistant Professor Igbal, Umar, Ph.D., Queen's University, Assistant Clinical Professor Jones, Bryan A., Ph.D., Clemson University, Associate Professor Karimi Ghartemani, Masoud, Ph.D., University of Toronto, Professor Khan, Samee, Ph.D., University of Texas-Arlington, Professor and Endowed Chair, and Department Head Koshka, Yaroslav, Ph.D., University of South Florida, Professor Kurum, Mehmet, Ph.D., George Washington University, Assistant Professor Liu, Chun-Hung, Ph.D., University of Texas-Austin, Assistant Professor Luo, Chaomin, Ph.D., University of Waterloo, Associate Professor Luo, Yu, Ph.D., University of Connecticut, Assistant Professor Marojevic, Vuk, Ph.D., Barcelona Tech--UPC (Spain), Associate Professor Miah, Khalid, Ph.D., University of Texas-Austin, Assistant Clinical Professor Mohammadi-Aragh, Mahnas J., Ph.D., Virginia Polytechnic Institute and State University, Assistant Professor Moorhead, Robert J., Ph.D., North Carolina State University, Director, GRI & Endowed Professor and Professor Park, Chanyeop, Ph.D., Georgia Institute of Technology, Assistant Professor Samiappan, Sathish, Ph.D., Mississippi State University, Assistant Research Professor Shi, Jian, Ph.D., Mississippi State University, Assistant Research Professor Tang, Bo, Ph.D., University of Rhode Island, Assistant Professor

Zhao, Junbo, Ph.D., Virginia Polytechnic Institute and State University, Assistant Professor

Engineering Education

Elmore, Bill B., Ph.D., University of Arkansas, Hunter Henry Chair, Associate Professor, and Director (CHE) Freyne, Seamus F., Ph.D., University of Oklahoma, Assistant Professor Hill, Priscilla J., Ph.D., University of Massachusetts, Associate Professor Knizley, Alta, Ph.D., Mississippi State University, Assistant Clinical Professor Mohammadi-Aragh, Mahnas J., Ph.D., Virginia Polytechnic Institute and State University, Assistant Professor Rahimi, Shahram, Ph.D., University of Southern Mississippi, Professor and Department Head (CSE) Simpson, Chartrisa LaShan, Ph.D., Clemson University, Associate Professor Strawderman, Lesley, P.E., Ph.D., Pennsylvania State University, Associate Professor and Graduate Coordinator Sullivan, Rani, Ph.D., Mississippi State University, Associate Professor and Interim Head (ASE) Whittington, Wilburn, Ph.D., Mississippi State University, Assistant Professor Industrial and Systems Engineering Babski-Reeves, Kari, Ph.D., Mississippi State University, Professor, Associate Dean, and Department Head Bian, Linkan, Ph.D., Georgia Institute of Technology, Associate Professor and Graduate Coordinator Burch, Reuben F., V, Ph.D., Mississippi State University, Associate Professor Carruth, Daniel W., Ph.D., Mississippi State University, Associate Research Professor Jaradat, Ra'ed, Ph.D., Old Dominion University, Associate Professor Ma, Junfeng, Ph.D., Pennsylvania State University, Assistant Professor Marufuzzaman, Mohammad, Ph.D., Mississippi State University, Associate Professor Morshedlou, Nazanin, Ph.D., University of Oklahoma, Assistant Professor Pirim, Harun, Ph.D., Mississippi State University, Assistant Clinical Professor Smith, Brian, Ph.D., University of Arkansas, Associate Professor and Undergraduate Coordinator Strawderman, Lesley, P.E., Ph.D., Pennsylvania State University, Professor Tian, Wenmeng (Meg), Ph.D., Virginia Polytechnic Institute and State University, Assistant Professor Walden, Clayton T., Ph.D., Mississippi State University, Associate Professor and CAVS Executive Director Wang, Haifeng, PhD., State University of New York at Binghamton, Assistant Professor

Mechanical Engineering

Adibi Sedeh, Sara, Ph.D., National University of Singapore, Assistant Research Professor
Bammann, Douglas J., Ph.D., University of Illinois, Professor and Endowed Professorship
Barrett, Christopher, Ph.D., Mississippi State University, Assistant Professor
Bhushan, Shanti, Ph.D., Mississippi State University, Associate Professor
Brauer, Shane A., Ph.D., Mississippi State University, Assistant Clinical Professor
Cho, Heejin, Ph.D., Mississippi State University, Associate Professor
Dickel, Doyl, Ph.D., Clemson University, Assistant Professor
Doude, Haley R., Ph.D., Mississippi State University, Assistant Research Professor

El Kadiri, Haitham, Ph.D., Ecole Des Mines de Paris, Whiteside & Coleman Professor and Department Head Hammi, Youssef, Ph.D., University of Technology of Compiegne/Troyes (France), Associate Professor Joonsik, Hwang, Ph.D., Korea Advanced Institute of Science and Technology, Assistant Professor Knizley, Alta, Ph.D., Mississippi State University, Assistant Clinical Professor Li, Like, Ph.D., University of Florida, Assistant Professor Marcum, David L., Ph.D., Purdue University, Exxon Mobil Professor Miralami, Raheleh, Ph.D., University of Nebraska, Assistant Research Professor Oppedal, Andrew L., Ph.D., Mississippi State University, Assistant Research Professor Priddy, Matthew W., Ph.D., Georgia Institute of Technology, Assistant Professor Singh, Prashant, Ph.D., Michigan State University, Associate Professor Singh, Prashant, Ph.D., Mississippi State University, Associate Professor Singh, Aaron, Ph.D., Mississippi State University, Assistant Clinical Professor Stone, Tonya W., Ph.D., Mississippi State University, Associate Professor Xu, Ben, Ph.D., University of Arizona, Assistant Professor

COLLEGE OF FOREST RESOURCES

Forestry

Auel, John B., PhD., Mississippi State University, Assistant Extension Professor Evans, David L., Ph.D., Louisiana State University, Professor Frey, Brent R., Ph.D., Yale University, Assistant Professor Gordon, Jason S., Ph.D., Pennsylvania State University, Associate Extension Professor Grace, Laura A., Ph.D., Swedish University of Agricultural Sciences, Professor Grado, Stephen C., Ph.D., Pennsylvania State University, Professor Grala, Robert K., Ph.D., Iowa State University, Professor Granger, Joshua J., Ph.D., University of Tennessee, Assistant Professor Grebner, Donald L., Ph.D., Virginia Polytechnic Institute and State University, Professor and Department Head Himes, Austin, Ph.D., Oregon State University, Assistant Professor Hopper, George M., Ph.D., Virginia Polytechnic Institute and State University, Professor Hughes, H. Glenn, Ph.D., Texas A&M University, Extension Professor Kanieski da Silva, Bruno, Ph.D., North Carolina State University, Assistant Research Professor Kushla, John D., Ph.D., Oregon State University, Extension/Research Professor Ma, Qin (Christine), Ph.D., University of California-Merced, Assistant Professor Matney, Thomas G., Ph.D., Virginia Polytechnic Institute and State University, Professor McConnell, Thomas Eric, Ph.D., Mississippi State University, Assistant Professor Munn, Ian A., Ph.D., North Carolina State University, Professor; Associate Dean, College of Forest Resources

Polinko, Adam, Ph.D., University of British Columbia, Assistant Professor
Poudel, Krishna, P., Ph.D., Oregon State University, Assistant Professor
Renninger, Heidi J., Ph.D., Boston University, Assistant Professor
Roberts, Scott D., Ph.D., Utah State University, Professor
Rousseau, Randall J., Ph.D., Mississippi State University, Extension/Research Professor
Sabatia, Charles O., Ph.D., Virginia Polytechnic Institute and State University, Assistant Professor
Schultz, Emily B., Ph.D., North Carolina State University, Professor
Self, Andrew Brady, Ph.D., Mississippi State University, Assistant Extension Professor
Siegert, Courtney, Ph.D., University of Delaware, Associate Professor
Sun, Changyou, Ph.D., Michigan State University, Assistant Professor
Yang, Jia, Ph.D., Auburn University, Assistant Professor

Sustainable Bioproducts

Barnes, H. Michael, Ph.D., State University of New York, Professor Franca, Frederico J., Ph.D., Mississippi State University, Assistant Research Professor Franca, Tamara, Ph.D., Mississippi State University, Assistant Professor Hassan, El Barbary M., Ph.D., Ain Shams University (Egypt), Professor Kim, Yun Sang, Ph.D., Georgia Institute of Technology, Assistant Professor Mohammadabadi, Mostafa, Ph.D., Washington State University, Assistant Professor Nicholas, Darrel D., Ph.D., North Carolina State University, Professor Owens, Frank, Ph.D., Mississippi State University, Assistant Professor Seale, R. Dan, Ph.D., Clemson University, Professor Shmulsky, Rubin, Ph.D., Mississippi State University, Professor; Department Head and Graduate Coordinator Stokes, C. Elizabeth, Ph.D., Mississippi State University, Associate Professor Street, Jason Tyler, Ph.D., Mississippi State University, Associate Professor Verly Lopes, Dercilio, Ph.D., Mississippi State University, Assistant Research Professor Zhang, Jilei, Ph.D., Purdue University, Professor Zhang, Xuefeng, Ph.D., Mississippi State University, Assistant Research Professor Wildlife, Fisheries and Aquaculture Aarattuthodiyil, Suja, Ph.D., University of Arkansas, Assistant Research Professor Allen, Peter J., Ph.D., University of California-Davis, Associate Professor Avery, Jimmy L., Ph.D., Louisiana State University, Extension Professor Baker, Beth, Ph.D., Mississippi State University, Assistant Extension Professor Burger, L. Wes, Ph.D., University of Missouri, Associate Director, MAFES/FWRC and Professor Burger, Leslie M., Ph.D., Mississippi State University, Assistant Extension Professor

Cebrian, Just, Ph.D., University of Politecnica Catalunya, Research Professor and Associate Director, NGI

Colvin, Michael E., Ph.D., Iowa State University, Assistant Professor Correa, Sandra B., Ph.D., Texas A&M University, Assistant Professor Davis, J. Brian, Ph.D., Mississippi State University, Associate Professor Demarais, Stephen, Ph.D., Mississippi State University, Professor Drymon, James Marcus, Ph.D., University of South Alabama, Assistant Extension Professor Dunn, Corey, Ph.D., University of Missouri, Assistant Professor Evans, Kristine O., Ph.D., Mississippi State University, Assistant Professor Greenway, Terrence E., Ph.D., Mississippi State University, Assistant Research Professor Hileman, Eric, Ph.D., Northern Illinois University, Assistant Professor Hunt, Kevin M., Ph.D., Texas A&M University, Professor and Graduate Coordinator Iglay, Raymond, Ph.D., Mississippi State University, Assistant Research Professor Jones, W. Daryl, Ph.D., Mississippi State University, Extension Professor Karunakaran, Ganesh K., Ph.D., University of Arkansas, Assistant Research Professor Kouba, Andrew J., Ph.D., University of Florida, Professor and Department Head Li, Menghe H., Ph.D., Auburn University, Research Professor McConnell, Mark D., Ph.D., Mississippi State University, Assistant Professor Miranda, Leandro E., Ph.D., Mississippi State University, Unit Leader and Professor Mischke, Charles C., Ph.D., Iowa State University, Research Professor Morin, Dana J., Ph.D., Virginia Polytechnic Institute and State University, Assistant Professor Neal, J. Wesley, Ph.D., North Carolina State University, Extension Professor Rush, Scott A., Ph.D., University of Georgia, Associate Professor Sparks, Eric, Ph.D., University of South Alabama, Assistant Extension Professor Street, Garrett M., Ph.D., University of Guelph, Assistant Professor Strickland, Bronson K., Ph.D., Mississippi State University, Extension Professor Vilella, Francisco J., Ph.D., Louisiana State University, Assistant Unit Leader and Professor Wang, Guiming, Ph.D., Oregon State University, Professor Wise, David, Ph.D., Clemson University, Research Professor Woodrey, Mark S., Ph.D., University of Southern Mississippi, Assistant Research Professor Yamamoto, Fernando, Ph.D., Texas A&M University, Assistant Research Professor

COLLEGE OF VETERINARY MEDICINE

Basic Sciences

Abdelhamed, Hossam, D.V.M., Alexandria University, Assistant Research Professor

Carr, Russell, Ph.D., Mississippi State University, Associate Professor and Graduator Coordinator, Environmental Toxicology

Chambers, Janice E., Ph.D., Mississippi State University, Professor and Director, Center for Environmental Health Sciences

Coyne, Cody P., D.V.M., Ph.D., University of California, Professor

Feng, Zhi-Xin, Ph.D., Nanjing Agricultural University (China), Visiting Researcher

Hanson, Larry, Ph. D., Louisiana State University, Professor and Graduate Coordinator, Basic Sciences; Clinical Sciences; Pathobiology and Population Medicine

Howell, George Eli, III, Ph.D., University of Mississippi Medical Center, Assistant Research Professor

Kaplan, Barbara L., Ph.D., Michigan State University, Assistant Professor

Karsi, Attlla, Ph.D., Auburn University, Associate Professor

Lawrence, Mark L., D.V.M., Ph.D., Louisiana State University, Professor

Nanduri, Bindu, Ph.D., University of Arkansas for Medical Sciences, Assistant Professor

Park, Joo Youn, Ph.D., Washington State University, Assistant Research Professor

Petrie-Hanson, Lora, Ph.D., Mississippi State University, Associate Professor

Pharr, G. Todd, Ph.D., Mississippi State University, Associate Professor

Pinchuk, Lesya M., M.S., Ph.D., Institute of Medical Genetics, Moscow (Russia), Associate Professor

Pruett, Stephen B., Ph.D., Louisiana State University School of Medicine, Professor

Ross, Matthew K., Ph.D., University of California, Associate Professor

Rosser, Thomas Graham, Ph.D., Mississippi State University, Assistant Research Professor

Seo, Keun Seok, D.V.M., Seoul National University; Ph.D., University of Idaho, Assistant Research Professor

Shao, Guo-Qing, Ph.D., Nanjing Agricultural University (China), Professor, Director of Porcine Disease Control Laboratory, Jiangsu Academy of Agricultural Sciences (China)

Varela-Stokes, Andrea S., D.V.M., Ph.D., Tufts University School of Veterinary Medicine; Ph.D., University of Georgia, Associate Professor

Wan, Xiu-Feng (Henry), Ph.D., Mississippi State University, Associate Professor

Wang, Chinling, D.V.M., Ph.D., University of Georgia, Associate Professor

Wang, Ran, Ph.D., Nanjing Agricultural University (China), Professor, Jiangsu Academy of Agricultural Sciences (China)

Clinical Sciences

Archer, Todd M., D.V.M., Mississippi State University, Associate Professor

Beasley, Michaela, D.V.M, Mississippi State University, Assistant Clinical Professor

Betbeze, Caroline, D.V.M., Mississippi State University, Assistant Clinical Professor

Brashier, Michael, D.V.M., Louisiana State University, Associate Professor

Butler, James Ryan, D.V.M., Mississippi State University, Assistant Professor

Cade, Jeb, Ph.D., Mississippi State University, Assistant Clinical Professor

Castaldo, Sarah, D.V.M., Mississippi State University, Assistant Clinical Professor

Eddy, Alison L., D.V.M., Virginia-Maryland Regional College of Veterinary Medicine, Assistant Clinical Professor

Eubanks, Diana L., D.V.M., College of Veterinary Medicine, University of Georgia, Associate Clinical Professor

Fontenot, Robin L., D.V.M., Mississippi State University, Assistant Clinical Professor

Gallaher, Hayley, D.V.M., University of Wisconsin, Assistant Clinical Professor

Grace, Sharon K. Fooshee, D.V.M., Mississippi State University, Clinical Professor

Jaffe, Michael, D.V.M, University of Missouri, Associate Professor

Langston, V. Cory, D.V.M., Ph.D., University of Illinois, Professor Lathan, Patty A., D.V.M., University of Pennsylvania; Assistant Professor Lee, Alison, D.V.M., Washington State University, Assistant Research Professor Linford, Robert L., D.V.M., Colorado State University; Ph.D., University of California, Professor Mackin, Andrew J., D.V.S., University of Guelph (Canada), Professor and Department Head McLaughlin, Ron M. Jr., D.V.M., University of Missouri; D.V.Sc., Ontario Veterinary College, Professor and Interim Associate Dean for Administration Meyer, Robert E., D.V.M., Cornell University, Professor Mochal-King, Cathleen Ann, D.V.M., Iowa State University, Assistant Clinical Professor Natalini, Claudio Correa, Ph.D., University of Minnesota, Associate Professor Senter, Lucy H., D.V.M, Mississippi State University, Director, Laboratory Animal Resources and University Veterinarian Shivley, Jacob, D.V.M., Mississippi State University, Associate Clinical Professor and Service Chief, Shelter Medicine Shores, James Andrew, Ph.D., D.V.M., Auburn University, Clinical Professor Swanson, Elizabeth A. (Betsy), D.V.M, Iowa State University, Assistant Professor Sullivant, Alyssa, M.S., D.V.M., Mississippi Sate University, Assistant Professor Swiderski, Cyprianna E., D.V.M., University of Maryland; Ph.D., Louisiana State University, Associate Professor Syrcle, Jason, D.V.M., University of Missouri, Assistant Clinical Professor Telle, Mary, D.V.M., Mississippi State University, Assistant Clinical Professor Thomason, John M., D.V.M., Virginia-Maryland Regional College of Veterinary Medicine, Assistant Professor Woodruff, Kimberly A., D.V.M., Mississippi State University, Assistant Clinical Professor Pathobiology and Population Medicine Armour, Natalie K., Ph.D., University of Georgia, Associate Clinical Professor Austin, Frank W., D.V.M., Ph.D., Louisiana State University, Professor Bailey, R. Hartford, Ph.D., Texas A&M University, Professor Banda, Alejandro, D.V.M., National University of Mexico; Ph.D., University of Georgia, Associate Clinical Professor Baughman, Brittany, D.V.M., Mississippi State University, Assistant Clinical Professor Baumgartner, Wes A., Ph.D., Louisiana State University; D.V.M., University of Illinois, Assistant Professor Brett, James A., D.V.M., Mississippi State University, Associate Clinical Professor Bulla, Camilo, Ph.D., Universidade Estadual Paulista Júlio de Mesquita Filho (Brazil), Associate Professor Christiansen, David L., D.V.M., Ph.D., Mississippi State University, Assistant Clinical Professor Epperson, William Boyd, D.V.M., Ohio State University, Professor and Department Head Fleming, Sherrill, D.V.M., University of Guelph (Canada), Associate Professor Gaunt, Patricia S., D.V.M., Ph.D., Louisiana State University, Professor Griffin, Matthew J., Ph.D., Mississippi State University, Associate Research Professor Hoblet, Kent H., D.V.M., M.S., Ohio State University, Professor and Dean, College of Veterinary Medicine Huston, Carla L., D.V.M., Ph.D., Ohio State University, Associate Professor Jack, Sherman W., D.V.M., Ohio State University; Ph.D., Ohio State University, Professor

Khaitsa, Margaret, Ph.D., Ohio State University, Professor

Khoo, Lester H., V.M.D., University of Pennsylvania; Ph.D., North Carolina State University, Professor

King, Elmer, Ph.D., Mississippi State University, Associate Clinical Professor

Magee, Danny L., D.V.M., Auburn University; M.A.M., University of Georgia, Clinical Professor/Director, Poultry Diagnostics Lab

Moore, Debra, D.V.M., Tuskegee University, Assistant Clinical Professor

Morgan, Timothy W., D.V.M., University of Missouri College of Veterinary Medicine; Ph.D., Iowa State University, Associate Professor

Olivier, Alicia Kathleen, Ph.D., Iowa State University, Assistant Professor

Pace, Lanny W., D.V.M., Mississippi State University; Ph.D., Louisiana State University, Professor

Pesato, Michael E., Ph.D., D.V.M., Mississippi State University, Assistant Clinical Professor

Pulido-Landinez, Martha, D.V.M., National University of Colombia; Ph.D., Federal University of Rio Grande do Sul. Porto Alegre (Brazil), Associate Clinical Professor

Reichley, Stephen, Ph.D., Mississippi State University, Assistant Clinical Professor

Ryan, Peter L., Ph.D., University of Guelph (Canada), Professor and Associate Provost

Smith, David R., Ph.D., D.V.M., Ohio State University, Professor

Smith, Jack D., D.V.M., Mississippi State University, Associate Professor

Stilwell, Justin, Ph.D., University of Georgia, Assistant Clinical Professor

Stilwell, Natalie K., Ph.D., University of Florida, Assistant Clinical Professor

Williams, Matthew, D.V.M., Tuskegee University, Assistant Clinical Professor

Wills, Robert W., D.V.M., University of Missouri; Ph.D., Iowa State University, Professor and Interim Department Head, Basic Sciences

Woolums, Amelia, Ph.D., University of California-Davis, Professor

Yan, Lifang, Ph.D., Mississippi State University, Assistant Clinical Professor

Graduate Degree Forms

Required degree program forms used by master's, educational specialist, and doctoral students are posted on the Graduate School website (http:// www.grad.msstate.edu/). Please click here (https://www.grad.msstate.edu/students/forms/) for student forms and here (https://www.grad.msstate.edu/ faculty-staff/forms/) for faculty/staff forms. Although the major professor and committee are integral to the process, the student is primarily responsible for the completion of the forms and their timely submission to the Graduate School. The student and the department are strongly encouraged to retain copies of all submitted forms.

Graduation

Degree candidates **must apply** for graduation online via MyState and pay the required fee by the final date set by the Office of the Registrar for the semester of graduation. Deadline and fee information are posted on the Graduate Academic Calendar and on the Registrar's website. The degree applicant must arrange cap and gown rental through the MSU Barnes & Noble Bookstore. Degree candidates should be present at commencement for official conferral.

A student who applies for graduation in a certain semester but does not graduate must apply again in a subsequent semester. The applicant will pay a fee for the new application, as degree applications and application fees shall not be applied to future semesters.

Other Information

This section of the Graduate Catalog provides information on a variety of topics, including the University campuses; consortia in which the University is a member; contact information for the Graduate School and other offices; course numbering information; University policies related to FERPA, Nondiscrimination, and Equal Opportunity; Graduate School Mission and History; University Mission and Vision; and Officers of the University.

Postbaccalaureate Certificate Programs

A post-baccalaureate certificate is a stand-alone academic program beyond the bachelor's degree that does not meet the requirements of a master's degree. Students in post-baccalaureate programs must have completed a bachelor's degree.

- Applied Behavior Analysis. Coordinator: Dr. Dan Gadke. Email: dgadke@colled.msstate.edu
- Cognitive Science. Coordinator: Dr. Kevin Armstrong. Email: kja3@msstate.edu
- Companion Animal Management. Coordinator: Ms. Jessica Graves. Email: jessica.graves@msstate.edu
- Cyber Operations. Coordiantor: Dr. T.J. Jankun-Kelly. Email: tjk@cse.msstate.edu
- Geospatial and Remote Sensing. Coordinator: Dr. John Rodgers. Email: jcr100@msstate.edu
- Public Design. Coordinator: David Perkes. E-mail: dperkes@gccds.msstate.edu
- Teaching of English to Speakers of Other Languages. (TESOL). Coordinator: Dr. Megan Smith. Email: ms4004@msstate.edu
- Veterans Certificate Program. Coordinator: Dr. James Adams. Email: jadams@colled.msstate.edu
- Vision Specialist in Vocational Rehabilitation. Coordinator: Ms. Sylvia Stinson-Perez. Email: ssp258@msstate.edu

Consortia

Mississippi State University is a member of several consortia that have specific missions as described below. Further information concerning these programs may be obtained from the Office of the Vice President for Research and Economic Development.

Alliance for System Safety of UAS through Research Excellence (ASSURE)

Twenty-three of the world's leading research institutions and a hundred leading industry, government partners comprise the Alliance for System Safety of UAS through Research Excellence, or ASSURE. ASSURE possesses the expertise, infrastructure and outstanding track record of success that the FAA Center of Excellence for Unmanned Aircraft Systems demands. Members include Mississippi State University, Drexel University, Embry-Riddle Aeronautical University, Kansas State University, Montana State University, New Mexico State University, North Carolina State University, Oregon State University, University of Alabama-Huntsville, University of Alaska-Fairbanks, University of California-Davis, University of Kansas, University of North Dakota, The Ohio State University, Wichita State University, Auburn University-Affiliate Member, Concordia - Affiliate Member, Indiana State University - Affiliate Member, Sinclair Community College - Affiliate Member, Technion-Israel Institute of Technology - Affiliate Member, Tuskegee University - Affiliate Member, and University of Southampton - Affiliate Member. http://www.assureuas.org/

Mississippi-Alabama Sea Grant Consortium (M-ASGC)

The Mississippi-Alabama Sea Grant Consortium is a research, educational, and service group including the following institutions:

- Mississippi State University
- Jackson State University
- University of Mississippi
- University of Southern Mississippi
- University of Alabama (Tuscaloosa)
- University of Alabama (Birmingham)
- University of South Alabama
- Auburn University
- Gulf Coast Research Laboratory

The Consortium was initiated by Mississippi State University, the University of Mississippi, and the University of Southern Mississippi in 1970 with both state and federal funding. It currently operates with approximately \$1,100,000 per year and has research, education, and advisory service programs in marine law, fisheries, environment, and engineering. Graduate students are involved in the Consortium's research programs in the same manner as in other funded research with the University. Faculty members working through the Consortium work in conjunction with faculty members at the other institutions; thus, opportunity for multidisciplinary, multi-university cooperation is provided. In September 1982, member institutions of MASGC were designated as Sea Grant Colleges "for sustained excellence in research, education, and public service dedicated to wise use of America's marine resources." The MASGC Consortium program is managed by a full-time director who is responsible to an administrative council appointed by the heads of the member institutions. The Consortium offices are located at the Gulf Coast Research Laboratory, Ocean Springs, MS 39564.

Mississippi Research Consortium (MRC)

The Mississippi Research Consortium aims to develop and sustain nationally competitive research programs in the state of Mississippi. Alongside supporting basic and applied research, the consortium has several additional goals: first, to increase public awareness of science, engineering, and mathematics at all educational levels to develop a scientifically literate citizenry who can fuel the science and engineering industry in Mississippi with the state's own human resources; second, to establish and maintain a solid scientific infrastructure in our university system by developing equipment

and facility resources, collaboration resources, private sector links, and federal laboratory partnerships; and, third, to expand the state's economic opportunities through technology and knowledge transfer, including greater commercialization, increased technical assistance, and the education of a workforce that can support technology-based industries.

Formed in 1986, the Mississippi Research Consortium (MRC) includes Mississippi's four research universities: Jackson State University, Mississippi State University, the University of Mississippi, and the University of Southern Mississippi. The MRC's Board of Directors is comprised of the Chief Research Officers from these institutions. The board serves as the Science and Technology Research Advisors to both the Executive Branch and the Legislature and integrates science and technology initiatives with economic development plans in Mississippi. The creation of the Mississippi Universities Research Authority (MURA) Act of 1992 was the product of the collaboration among the MRC, MRC Technology Transfer Task Force, and the Board of Trustees of State Institutions of Higher Learning.

The MRC's member institutions work from an attitude of mutual respect and trust. All agree that their individual institutions have secured more resources by combining efforts than any one of them could have accomplished independently. This cooperative attitude has been successfully conveyed to faculty members, who often initiate collaborative efforts and recommend that certain proposals are directed through MRC. Generally, the MRC operates by forming faculty teams from several universities to address research opportunities. The organization has received praise from the National Science Foundation and others, and has been cited as a national model for how best to form a state science and technology infrastructure. MRC often works with all of the state's eight public universities and the UM Medical Center to strengthen research components.

Not long after its inception, MRC became involved not only with joint research activities but also with human resource development programs and science policy at both the state and national levels.

Oak Ridge Associate Universities (ORAU)

Since 1949, students and faculty of Mississippi State University have benefited from its membership in Oak Ridge Associated Universities, located in Oak Ridge, Tennessee. ORAU is a consortium of 86 colleges and universities and a contractor for the U.S. Department of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to assist their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members. Through the Oak Ridge Institute for Science and Education, the DOE facility that ORAU operates, undergraduates, graduates, postgraduates, as well as faculty, enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, geological sciences, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics.

The Southeastern Universities Research Association (SURA)

SURA is a consortium of colleges and universities in the southern United States and the District of Columbia established in 1980 as a non-stock, nonprofit corporation. SURA serves as a venue for cooperation through which colleges, universities, and other organizations may cooperate, as well as with the government in acquiring, developing, and using laboratories and other research facilities and in furthering knowledge and the application of that knowledge in the physical, biological, and other natural sciences and engineering. SURA's goals are to foster excellence in scientific research, to strengthen the scientific and technical capabilities of the nation and of the Southeast, and to provide outstanding training opportunities for the next generation of scientists and engineers.

University Space Research Alliance (USRA)

As part of USRA's governance structure, Mississippi State University is one of 105 Ph.D.-granting universities that help oversee USRA to ensure that it meets its public purpose. Member universities ensure broad public oversight of the corporation as it pursues its non-profit purpose of "development and application of space-related science, technology, and engineering." The member universities elect an independent board of directors which governs USRA and appoints the USRA president. University members receive no direct benefit from membership. Their oversight is provided solely as a public service, and all USRA activities are conducted without bias or preference.

Interuniversity Consortium for Political and Social Research (ICPSR)

ICPSR seeks research data and pertinent documents from researchers, including PIs, research agencies, and government entities. ICPSR processes, preserves, and disseminates the data and documents. ICPSR also provides education, training, and instructional resources to help users understand and analyze research. http://www.icpsr.umich.edu/icpsrweb/content/membership/index.html (http://www.icpsr.umich.edu/icpsrweb/content/membership/index.html (http://www.icpsr.umich.edu/icpsrweb/content/membership/).

Institute for Mathematics and its Applications (IMA)

IMA connects scientists, engineers, and mathematicians in order to address scientific and technological challenges in a collaborative and engaging environment, developing transformative new mathematics and exploring its applications while training the next generation of researchers and educators. http://www.ima.umn.edu/about/

Contact Information

The Graduate School

Box G 617 Allen Hall Mississippi State, MS 39762 E-Mail: gradapps@grad.msstate.edu (grad@gradapps.msstate.edu) Website: www.grad.msstate.edu (http://www.grad.msstate.edu/) Telephone: 662-325-7400 Fax: 662-325-1967 *For information regarding graduation admissions, application status, academic records, degree audits, and assistantships.*

The Office of the Registrar

Box 5268 Garner Hall Mississippi State, MS 39762 Website: www.registrar.msstate.edu (http://www.registrar.msstate.edu/) Telephone: 662-325-2022 *For information regarding Mississippi State University transcripts, registration problems, and online graduation application.*

Assistantships

Please contact the Office of the Graduate School or the appropriate office/department offering assistantships.

Financial Aid

Student Financial Aid Box 6035 Garner Hall Mississippi State, MS 39762 Website: www.sfa.msstate.edu (http://www.sfa.msstate.edu/) Telephone: 662-325-2450 *For information regarding Mississippi State University financial holds, billing, and account balance.*

Housing

Housing and Residence Life Box 9502 Herbert Hall Mississippi State, MS 39762 Website: www.housing.msstate.edu (http://www.housing.msstate.edu/) Telephone: 662-325-3555

International Services

International Institute Box 6144 116 Allen Hall Mississippi State, MS 39762 Telephone: 662-325-8929 *For information regarding Mississippi State University Immigration Orientation, I-20s, and DS2019.*

Course Numbering Information

All course numbers consist of four digits. The first (left) digit indicates the level of preparation required and the fourth (right) digit indicates the number of semester hours. The two middle digits are reserved for the departments to distinguish one course from another. If the fourth digit is zero (0), this means that credit is variable and will be set in consultation with the professor. For example, ACC 4000 Directed Individual Study could be a 2- or 3-hour course.

Courses that are in close sequence, such as two semesters of a survey course or a sequence of numbers for a seminar in a particular field, may be listed with a hyphen (-) between the two four-digit numbers (e.g., AGN 8711-8731 Seminar).

When the same course is offered on both undergraduate and graduate levels, two numbers are used to designate the two levels of credit (e.g., EN 4333/6333 Southern Literature). Students enrolled for graduate credit will be required to complete assignments above and beyond those students enrolled for undergraduate credit. A graduate student who took a split-level course as an undergraduate cannot take the same course for credit on the graduate level.

The following course numbers, 4990, 6990, and 8990, designate Experimental Courses and will be used for no more than two years unless an extension is granted.

Course Numbers	Level of Credit
1001-2999	Lower division courses (Undergraduate credit only)
3001-4999	Upper division courses (Undergraduate credit only)
4001	Directed Individual Study (Undergraduate credit only)
5001-5999	Fifth year undergraduate or Professional courses
6011-6999	Courses for graduate credit only
7011-7999	Courses for graduate credit only
8011-8999	Courses for graduate credit only
9011-9999	Courses for graduate credit only
7000	Directed Individual Study (Graduate credit only)
8000	Master's level research and thesis
9000	Doctoral level research and dissertation

See General Requirements of the Graduate School and specific program information for course requirements.

Definitions

Academic Degree

Degree is the title to be conferred by the University upon completion of the academic program. Some degrees include the name of the field of study (Master of Landscape Architecture, Master of Professional Accountancy); others (Master of Arts, Master of Science) do not.

Concentration

At the graduate level, the concentration is a subprogram offered within a graduate major. Each concentration is approved by the Graduate Council. The concentration, as well as the degree and program, may appear on the student's transcript.

Dual (Concurrent) Degrees

An applicant may apply and be admitted to more than one degree program concurrently. This requires *prior* approval of each department. If the student is approved to pursue two same-level degrees (master's or doctoral) concurrently at MSU, no more than 12 hours of coursework from one degree program may be applied toward meeting the requirements for the second degree.

Graduate Program - Major

The graduate program is the student's major. Programs offered at Mississippi State University are approved by the Graduate Council and the Board of Trustees of State Institutions of Higher Learning. The program name appears with the degree on the student's transcript.

Graduate Program - Minor

A minor is a current block of coursework derived from a current MSU degree program or concentration other than the major department program. If a minor is chosen, the student's graduate committee must include a Graduate Faculty member from the minor field, and the graduate coordinator from the minor field must sign approval of coursework. See requirements in the master's, educational specialist, and doctoral sections.

Honor Code

The MSU Honor Code, effective August 1, 2007, states: "As a Mississippi State University student, I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do." The complete policy is available at: http://www.honorcode.msstate.edu (http://www.honorcode.msstate.edu/).

Interdisciplinary Program

An interdisciplinary program is offered through more than one department or college.

Equal Opportunity Statement

Mississippi State University is firmly committed to Equal Employment Opportunity, Affirmative Action, and compliance with all Federal, State, and local laws that prohibit employment discrimination. Discrimination based on race, color, ethnicity, sex (including pregnancy and gender identity), religion, national origin, disability, age, sexual orientation, genetic information, status as a U.S. veteran and or any other status protected by state or federal law is prohibited in all employment decisions including, but not limited to, recruitment, employment, training, promotion, compensation, benefits, disciplinary actions, and termination. All personnel actions are administered without regard to the above factors and are based only on valid job requirements.

Mississippi State University will take affirmative action to recruit, employ, and advance minorities, women, qualified individuals with disabilities, disabled veterans, recently separated veterans, Armed Forces service medal veterans, and other protected veterans.

Employees of and applicants to Mississippi State University will not be subject to harassment, intimidation, threats, coercion, or discrimination because they have engaged or may engage in any of the following activities: (1) filing a compliant; (2) assisting or participating in a review, investigation, compliance evaluation, hearing or any other activities related to the administration of Section 503 of the Rehabilitation Act of 1973 (Section 503), the provisions of the Vietnam Era Veterans' Readjustment Assistance Act or 1974 (VEVRAA), or any Federal, State, or local law regarding EEO for qualified individuals with disabilities or qualified protected veterans; (3) opposing any act or practice made unlawful by section 503, VEVRAA, or their implementing regulations or any other Federal, State, or local law requiring equal opportunity for qualified individuals with disabilities or qualified protected by section 503, VEVRAA or their implementing regulations.

Mississippi State University has developed a written Affirmative Action Program which includes an audit and reporting system. In order to ensure implementation of the University's Affirmative Action Program, Judy Spencer is designated as the EEO/AA Coordinator for Mississippi State University.

The Affirmative Action Program is available for inspection by any employee or applicant for employment upon request during office hours at the Office of Human Resources Management. For additional information, concerning the University's Equal Opportunity and Affirmative Action Program, please call 662-325-3713.

Graduate School Mission and History

Mission

The mission of the Graduate School is to:

- provide graduate students advanced academic study beyond the baccalaureate;
- provide graduate students opportunities in which to develop methods of independent and systematic investigation;
- · provide graduate students with opportunities for professional development; and
- · provide graduate students and faculty with an environment conducive to learning and scholarly activities.

In fulfilling this mission, the Graduate School will promote, enhance, develop, and monitor graduate studies at Mississippi State University (MSU) and provide individuals with effective, efficient, and courteous assistance in admission, registration, academic progress, graduation, and post-graduation services.

History and Organization

Established in 1878 under the Morrill-Nelson Land-Grant College Act of 1862, Mississippi Agricultural and Mechanical College functioned with a defined mission to provide higher education to Mississippi students, primarily in the fields of agriculture and engineering; its secondary mission was to train reserve officers for the U.S. Army. Departments in academic disciplines such as mathematics, physical sciences, biological sciences, English, history, government, and languages were developed to provide a more generalized college curriculum for all students.

In the early years some science departments granted master's degrees, but the primary emphasis was educating young men for careers in an agrarian society, in farming or agricultural products processing and manufacturing. Little oversight of post-graduate programs existed until a Graduate Committee of the General Faculty was established in 1914; this committee functioned until 1936, when the need for greater oversight was recognized. Thus, the Graduate School was established, a graduate dean appointed, and graduate education became an integral part of Mississippi State College (MSC). Degrees in the former "service departments" were offered as the Colleges of Arts and Sciences, Business, and Education developed.

As graduate study expanded in the South following WWII, the Conference of Deans of Southern Graduate Schools exerted a positive influence to maintain the quality of the new graduate offerings. The graduate dean at Mississippi State became a key member of the Conference, and his guidance in program development resulted in the establishment of several strong research-based doctoral programs. The first doctoral degree was granted in agronomy in 1953, followed by sociology and later engineering. In 1958 Sputnik changed the face of graduate education and university research throughout the nation, and the school was renamed Mississippi State University. The overwhelming concern for higher education resulted in emerging Congressional support for graduate fellowship programs.

In 1960, a new MSU president modified the administrative infrastructure, positioning the University to make successful proposals for fellowships, research equipment and facilities, and faculty research support awards. The Office of Research and Graduate Studies was created, headed by the Dean of the Graduate School and Coordinator of Research. A strong Graduate Council was established to enforce quality criteria for existing graduate programs and ensure adherence to criteria by proposed new programs. All graduate programs received approval from the Graduate Council, the Academic Council, the President, and the Board of Trustees of the Mississippi Institutions of Higher Learning. Graduate programs flourished with support from the competitive institutional fellowship award programs funded by National Science Foundation (NSF), National Aeronautical Space Administration (NASA), the Office of Education, and Department of Defense (DOD). New doctoral faculty were recruited, the contract research program expanded, and additional doctoral programs, specialized institutes, and centers were approved. The title of Dean of the Graduate School and Coordinator of Research was changed to Vice President for Research and Graduate Studies in 1969; the Associate Dean became Dean of the Graduate School.

In 1987, due to the expanding research activity and the increase in graduate enrollment, the Graduate School was separated from the Office of Research and reported administratively to the Office of the Provost. In 1999, in a move to simplify graduate admissions and day-to-day operational matters, the Graduate School as such was abolished and replaced by an Office of Graduate Studies with a Director reporting to the Office of the Provost. In July 2004, the Office of Graduate Studies was realigned with the Office of Vice President for Research and Graduate Studies. In July 2006, the Office of Graduate Studies resumed reporting to the Office of the Provost, and the Director's title was changed to Dean and Associate Vice President for Academic Affairs. In 2007, the name was changed to the Graduate School.

The Graduate Council remains the chief oversight body for all graduate programs. The Office of the Graduate School functions to maintain admission records and promote student services, while the policies of the Graduate Council are administered by the departments and colleges. Off-campus degree programs are now offered in specialized areas at various locations inside and outside of the state.

MSU is a member institution of the Council of Graduate Schools in the U.S. and the Conference of Southern Graduate Schools. Through active participation in these bodies, the leadership for graduate studies at MSU is involved with national developments, including federal programs supporting graduate education and research. The current research expenditures at MSU exceed \$265 million per year, a significant portion of which is support for graduate research assistants. Teaching assistantships are available in most academic departments.

HEOA Disclosure Statements

Mississippi State University's Federal Disclosure Requirements are available from the University web site at http://www.provost.msstate.edu/heoa (http:// www.provost.msstate.edu/heoa/). The Higher Education Opportunity Act report contains the following information:

- Campus Security: Jeanne Clery Disclosure for Campus Security, campus crime statistics, Campus Sex Crime Prevention Act, and Fire Safety
- Campus Emergency Procedures
- Drug and Alcohol Policies
- Financial Aid Information and Cost of Attendance
- · Health and Safety Information: immunization and missing persons information
- Institutional Information: accreditation, characteristics of students, degree programs, degree program improvement plans, disability support services, FERPA information, retention and graduation rates, peer-to-peer file sharing, post-graduate employment information, readmission of veterans, transfer credit, withdrawal procedures, voter registration, and satisfactory progress standards.

Student Grievances

An Academic Grievance is a deviation from standard or appropriate practices or University policy or procedure pertaining to the conduct of academic activities, including mentoring. The action(s) adversely impacts the ability of a student to progress toward timely fulfillment of degree requirements. The Graduate Student Academic Grievance Procedure (AOP 12.37 (http://www.policies.msstate.edu/policypdfs/1237.pdf)) has established standardized procedures concerning such grievances. The procedures contained in AOP 12.37 (http://www.policies.msstate.edu/policypdfs/1237.pdf) are designed to address academic grievances of graduate students and to provide a mechanism to resolve them. Graduate students may contact the Graduate School concerning this process.

Office of Compliance and Integrity

The Office of Compliance & Integrity (http://www.oci.msstate.edu/) is committed to ethical conduct and compliance with all applicable laws, regulations and policies and works to ensure the University's compliance in a wide range of areas for the entire MSU community. These areas include, among others, FERPA; Title IX and sexual misconduct; discrimination, harassment, and retaliation; and the Americans with Disabilities Act.

Non-Academic Grievances

The Office of the Dean of Students (http://www.students.msstate.edu) assists students who feel they have a grievance but are unsure of the proper course of action. This office can advise the graduate student in determining if the grievance should be referred to the Graduate School or some other office within the University. The student and the Office of the Dean of Students may at that point refer to the following as a method of resolution of a grievance that is not otherwise provided a remedy by University Policy or Academic Operating Policy and Procedure (AOP) within the University.

University Mission and Vision

Mission

Mississippi State University is a public, land-grant university whose mission is to provide access and opportunity to students from all sectors of the state's diverse population, as well as from other states and countries, and to offer excellent programs of teaching, research, and service.

Enhancing its historic strengths in agriculture, natural resources, engineering, mathematics, and natural and physical sciences, Mississippi State offers a comprehensive range of undergraduate and graduate programs; these include architecture, the fine arts, business, education, the humanities, the social and behavioral sciences, and veterinary medicine.

The University embraces its role as a major contributor to the economic development of the state through targeted research and the transfer of ideas and technology to the public, supported by faculty and staff relationships with industry, community organizations, and government entities.

Building on its land-grant tradition, Mississippi State strategically extends its resources and expertise throughout the entire state for the benefit of Mississippi's citizens, offering access for working and place-bound adult learners through its Meridian Campus, Extension, and distance learning programs.

Mississippi State is committed to its tradition of instilling among its students and alumni ideals of diversity, citizenship, leadership, and service.

Vision

Mississippi State University will be a leading public research university that is globally aware and involved, accessible and responsive to the many constituencies it serves, and fully integrated with the intellectual, social, and economic development of the state, while delivering excellent programs of teaching, research, and service.

University Officers

President's Cabinet

Name	Title
Mark E. Keenum	President
John Cohen	Athletic Director
Terry Dale Cruse	Associate Vice President and Head of MSU Meridian
Rasheda Forbes	Assistant Vice President for Multicultural Affairs
Regina Hyatt	Vice President for Student Affairs
Julie Jordan	Vice President for Research and Economic Development
Joan Lucas	General Counsel
Reuben Moore	Interim Vice President for Agriculture, Forestry, and Veterinary Medicine
John P. Rush	Vice President for Development and Alumni
David R. Shaw	Provost and Executive Vice President
Don A. Zant	Vice President for Budget and Planning

Academic Deans

Name	Title
Richard L. Blackbourn	Dean, College of Education
Angi E. Bourgeois	Dean, College of Architecture, Art, and Design
Thomas P. Anderson	Interim Dean, University Libraries
Kent H. Hoblet	Dean, College of Veterinary Medicine
Scott Willard	Interim Dean, College of Agriculture & Life Sciences
Wes Burger	Interim Dean, College of Forest Resources
Jason Keith	Dean, Bagley College of Engineering
Sharon L. Oswald	Dean, College of Business
Peter Ryan	Dean, Graduate School
Christopher A. Snyder	Dean, Shackouls Honors College
Rick Travis	Dean, College of Arts and Sciences

Mississippi Board of Trustees of State Institutions of Higher Learning

Name	Title
Officers of the Board:	
Hal Parker	President
Dr. Ford Dye	Vice President
Dr. Alfred Rankins, Jr.	Commissioner of Higher Education
Board Members:	
Dr. Steven Cunningham	
Tom Duff	
Shane Hooper	

nn H. Lamar	
eanne Carter Luckey	
ruce Martin	
r. Alfred E. McNair, Jr.	
hip Morgan	
ee Ogletree	
r. J. Walt Starr	

The Board maintains offices at 3825 Ridgewood Road, Jackson, Mississippi. **Student Life**

Student life is a very important part of the university experience. Mississippi State University provides a variety of services and activities that promote graduate students' personal development through engagement in critical thinking, self-awareness, and healthy lifestyle choices in a dynamic and diverse environment. Many of these opportunities, activities, and services are detailed under this Student Life section of the Graduate Catalog.

Assessment and Testing

The Office of Assessment and Testing Services (Computer Based Testing) serves as the University's testing center for national standardized computerbased and paper/pencil tests such as ACT, CLEP, GMAT, GRE, Praxis, LSAT, MCAT, MAT, and TOEFL. Registration information can be obtained on the Office's website (https://www.cbt.msstate.edu/testing/). Email testing@saffairs.msstate.edu or call 662-325-6610 for more information.

Books and Supplies

Mississippi State University leases its bookstore to Barnes & Noble to provide textbooks and related supplies to the students, faculty, and staff. As a benefit of this arrangement, a percentage of the sales is returned to the University each year which is used for, among other items, scholarships, faculty increases, and departmental support. The bookstore's retail areas also include clothing, gifts, electronics, and trade books and offers in excess of 20,000 general reading and reference titles. The store features a Starbucks Café and is located at Cullis Wade Depot. For detailed information visit their website (http://msstate.bncollege.com/).

The Career Center

Interim Director: Dr. Brent Fountain

300 Montgomery Hall Mississippi State University, MS 39762 Telephone: 662-325-3344 Website: http://www.career.msstate.edu (http://www.career.msstate.edu/) E-mail: askelton@career.msstate.edu

Graduate students may enhance their studies with relevant experience through programs offered by the Career Center. Cooperative education and internships are available. Cooperative Education requires students to complete two work periods, one of which may be a summer. Internships are one semester in duration and may occur during any academic period (fall, spring, summer). Students are encouraged to seek specific information prior to, or immediately upon, enrollment in the graduate program.

These credit-hour programs will be included on a graduate student's transcript but cannot be used to satisfy course-hour requirements on a graduate student's program of study:

Graduate Courses

CP 8013	First Work Semester (Approval of Cooperative Education Office, acceptance by employing organization, and admission to the University and Graduate School.)	3
CP 8023	Second Work Semester (CP 8013)	3
CP 8033	Third Work Semester (CP 8023)	3
CP 8043	Fourth Work Semester (CP 8033)	3
CP 8053	Fifth Work Semester (CP 8043)	3

Dining Services

MSU Dining offers a number of dining choices throughout campus. For locations and more information, visit the University Dining Services' website (http://www.campusdish.com/en-US/CSS/msstatedining/).

Graduate Student Association

The Graduate Student Association (GSA) (http://grad.msstate.edu/current/orgs/gsa/) provides an important forum for all graduate students at MSU. The GSA president represents graduate students as a voting member of the Graduate Council and reports monthly to that body. The GSA plans events that impact the academic and social lives of graduate students as well as involvement in community service projects. Meetings are monthly and activities are posted on the Graduate School website (http://www.grad.msstate.edu/).

Health Services

Student Health Center

University Health Services and The Longest Student Health Center are designed to give primary medical care to students with mental and physical health issues. The Health Center is open during regular school sessions to all MSU students. It is recommended that all students use the Student Health Center as their preferred provider of care while at MSU. The Center is staffed with well-qualified family practice physicians, nurse practitioners, and registered nurses to provide primary medical care for students. Ancillary services include pharmacy, laboratory, x-ray, and physical therapy. The health fee covers the physician's professional charge for an unlimited number of clinic visits. Ancillary services are provided on a fee-for-service basis. Those who need more specialized care than the Health Center can provide will be referred to the appropriate resource. For an appointment call 662-325-7539. Clinic hours are 8:00 a.m. to 5:00 p.m., Monday, Tuesday, Wednesday, and Friday; 9:00 a.m. to 5:00 p.m. on Thursday. Health records should be sent directly to the Student Health Center where they are kept confidential. Health records are not a part of the school records and are kept indefinitely for future reference. For medical records, call 662-325-0706 or by email at health@msstate.edu.

Student Health Insurance

International Students

The Student Health Insurance Plan is required for international students. International students are enrolled when the student enrolls for classes at MSU. International students who have alternate insurance equivalent to the MSU Plan and meet the coverage requirement of the Affordable Care Act of 2010 may request a waiver from the MSU Plan. Such waiver request is to be submitted by the 10th day of class to the Director of The Student Health Center at Room 361 of The Student Health Center. The telephone number is 662-325-5895.

Domestic Students

Domestic students may enroll in the Student Health Insurance Plan. The plan is compliant with The Affordable Care Act of 2010. Information about the plan is available at www.health.msstate.edu (http://www.health.msstate.edu/) under the Student Health Center Insurance link. The telephone number is 662-325-5895.

Student Counseling Services

Student Counseling Services, located in 115C Hathorn Hall, offers a variety of clinical and consultation services free to MSU students Monday through Friday, 8:00 a.m. to 5:00 p.m. Appointments may be made in person or by calling 662-325-2091.

Student Counseling Services staff is composed of experienced professionals with training in counseling, social work, and psychology who are knowledgeable in facilitating personal growth and development. Student Counseling Services offers individual and group counseling, referral for psychiatric evaluations and medication management, workshops, and walk-in urgent care. Consultation regarding student concerns is available to concerned faculty, staff, students, and family members. For more information about services, please visit the Student Counseling Services website at http://www.health.msstate.edu/scs (http://www.health.msstate.edu/scs/).

The Sexual Assault Response Team (SART) is a service of Student Counseling Services. SART responds to sexual assaults through crisis response, assessment, advocacy, and provides consultation and referral for the victim and the accused. SART is available to help anyone who reports a violation of the sexual assault policy. The SART includes a coordinator and designated individuals from the University Police Department, the Longest Student Health Center, the Department of Housing & Residence Life, the Dean of Students Office, and Student Counseling Services. For information or to report a sexual assault, students and members of the University community may contact the SART Coordinator or the Victim Advocate at Student Counseling Services at 662-325-2091.

Health Promotion and Wellness

The Department of Health Promotion and Wellness provides resources and educational programs to the MSU community. Topics covered by the department include the following:

- Alcohol and drug education
- Tobacco cessation
- · Mental health awareness
- Cancer awareness
- · Sexual health and responsibility education
- Nutrition services
- Physical activity opportunities
- Violence prevention
- Sexual assault prevention
- Bystander intervention

The Department of Health Promotion and Wellness engages students through initiatives to promote complete mental, physical, and social well-being. Through initiatives of Health Promotion and Wellness, students are empowered to achieve optimal lifelong well-being. The department provides a variety of free services to help students make healthier choices and improve well-being at MSU such as the opportunity to meet with a registered dietitian or complete a smoking cessation program. The department houses a Collegiate Recovery Program which supports students in recovery from behavioral or process addictions such as substance use disorders or eating disorders. Students will find support and resources from the Collegiate Recovery Community and be supported in the collegiate environment. The department supports and promotes the healing, renewal, safety, and justice for survivors of intimate partner violence, sexual assault, and stalking through education, awareness, and advocacy efforts.

The Health Promotion and Wellness Department hosts programs, presentations, and campus-wide awareness campaigns for various health topics. To request a program for your organization or to learn more about the department and services offered, please visit www.health.msstate.edu/health (http:// www.health.msstate.edu/health/).

Housing Services

Department of Housing and Residence Life Dogwood Hall, Ground Floor Box 9502 Mississippi State, MS 39762 Phone: 662-325-3555 Fax: 662-325-4663 Email: housing@saffairs.msstate.edu Website: h (http://www.housing.msstate.edu/apply/)ttp://my.housing.msstate.edu (http://my.housing.msstate.edu)

Residence Hall Facilities

MSU provides living accommodations for students, including a limited number of private rooms for students, including a limited number of private rooms for upper-classmen and graduate students. Current housing fees are posted at www.housing.msstate.edu (http://www.housing.msstate.edu/).

Application for On-Campus Living

MSU offers a convenient online application process for its on-campus housing. A student must first be admitted to the University before applying for housing. A non-refundable \$75.00 application fee is required. For more information, visit the website at h (http://www.housing.msstate.edu/apply/)ttp:// my.housing.msstate.edu (http://my.housing.msstate.edu), call 662-325-3555, or email housing@saffairs.msstate.edu.

Information Technology

The Office of the CIO and Information Technology Services (ITS) deliver a rich, robust, and capable information technology environment to all students, faculty, and staff in support of the learning, research, and service missions of the institution. An expansive wired and wireless campus network spans over two hundred academic and administrative buildings, all residence halls, and many outdoor areas. The network links hundreds of large-scale computer systems and servers with thousands of desktop, laptop, and mobile devices. Access to remote branches of the University, as well as the Mississippi Optical Network, Internet, and Internet 2, is provided through high-speed, wide-area connections from the campus network. ITS also provides a wide array of information resources and services to the University community. These resources include BullyMail, the student email system; Exchange, the faculty/staff email system; myState, the University's Web portal; myState Mobile, MSU's mobile app for iOS and Android devices; and myCourses, MSU's learning management system for online and distance learning. Open access computer labs in Griffis Hall, the Learning Center, and Mitchell Memorial Library are available to all students, while a number of departmental computer labs are available to students in specific disciplines. An H.323 network facilitates real-time, interactive video classes and video conferencing from the campus to sites throughout the state, the region, and the world. Additionally, ITS makes available a large and growing number of classrooms equipped with state-of-the-art instructional technology to facilitate and enhance classroom instruction. Finally, a number of software packages such as Autodesk, Camtasia, and Microsoft Office are available at no cost for installation and use on student, faculty, and staff personally-owned desktop and laptop computers. Details on the information technology environment and available services can be found at the ITS website (http://www.its.msstate.edu/).

Office of Institutional Diversity and Inclusion

The Office of Institutional Diversity and Inclusion, located at 106 McArthur Hall, offers information and resources to promote a diverse and inclusive working and learning environment for the entire MSU community. Visit the website (http://www.oidi.msstate.edu/) for information on diversity events, assistance with education and training, and recruitment efforts.

International Services

Interim Associate Vice President and Executive Director: Dr. Dan Reynolds

116 Allen Hall PO Box 6144 Mississispi State, MS 39762 Telephone: 662-325-8632 Website: http://international.msstate.edu/about/index.php (http://international.msstate.edu/about/)

The International Institute at Mississippi State University fully integrates our land-grant institution's 130-plus years of leadership, teaching, research, and service into the global area. Founded in June 2011, the Institute serves as the guide and champion of the University's international education, global engagement, and development activities. The Institute's mission enriches and expands the academic, research and cultural experiences of faculty, students, staff, and community through global outreach, research, and academic programs. The International Institute houses the English Language Institute, International Communications and Protocol, International Recruitment and Retention, International Services Office, International Research Development, and the Office of Study Abroad. These units within the Institute cover a broad range of international services to support and promote globalization internally on campus and through external outreach.

International Services

International Services, a unit of the International Institute within the Division of Academic Affairs, advises and provides information to students, research scholars, visiting professors, and MSU faculty and administrators about rules and regulations of immigration. International Services serves as the University liaison between the U.S. Citizenship and Immigration Services (USCIS), the U.S. Department of State, and the Mississippi State University international community holding F and J visas. By administering both the F-1 Student and J-1 Exchange Visitor Programs, International Services provides documents for qualified non-immigrants to enter the United States. International advisors inform students about maintenance of lawful status, work authorization, enrollment requirements, extension of stay, and other immigration issues. Semi-annual orientation programs for new students along with additional immigration workshops are conducted by this office as well as annual international student services including orientation sessions, utility shuttles during holiday breaks, and offering an international tax software program.

The International Services office is located in 116 Allen Hall and can be contacted by telephone at 662-325-8929. Additional information can be found at the International Services website (http://www.international.msstate.edu/current/services/index.php/).

English Language Institute (ELI)

Instructor/Coordinator: Susan Parr 103 Memorial Mississippi State, MS 39762 Telephone: 662-325-2648 Website: www.eli.msstate.edu (http://www.eli.msstate.edu)

The English Language Institute provides high-quality intensive English and culture program to support all international students. The ELI is responsible for the administration of the intensive English language courses for those students who score less than 550 on the paper-based Test of English as a Second Language (oefl). Other score equivalents are TOEFL internet-based test: 79-80 and International English Language Testing System (IELTS): 6.5. For details, please visit the ELI website.

Study Abroad

The Office of Study Abroad (OSA) offers the students and faculty of Mississippi State University the opportunity to explore academic opportunities outside of the United States. Nearly all programs offer academic credit that will apply toward a degree at MSU. OSA provides resources, assistance, and services related to planning a study abroad (academic programs and academic credit, finances and scholarships, travel documents, health issues, air transportation, communications, etc) and while studying abroad (arriving in a new country, living abroad, culture shock, emergencies while abroad, and returning to the US). For detailed information, please visit the Study Abroad website (http://international.msstate.edu/abroad/). For faculty who are developing a study abroad course, planning resources can be obtained at the Faculty Study Abroad website (http://international.msstate.edu/faculty/ abroad/).

Learning and Teaching Centers

The Learning Center

The Learning Center is a resource to help Mississippi State University students improve their academic performance. The Learning Center offers services to both graduate and undergraduate students which include university courses, support programs, workshops, seminars, tutoring services, and state of the art technology labs. Open to all students, these services are particularly designed to promote academic enrichment. The Center offers both credit courses and non-credit services to graduate and undergraduate students. The Center is located in 267 Allen Hall, and the telephone number is 662-325-2957. Detailed information can be obtained at the The Learning Center's website (http://www.tlc.msstate.edu/).

The Center for Teaching and Learning

The Center for Teaching and Learning is a resource to help Mississippi State University faculty and graduate students maximize the learning experience both inside and outside the classroom. The mission of the Center is to foster a university culture where quality teaching and engaged learning is revered and practiced. The Center's faculty development programs and services emphasize knowledge, techniques, and issues related to teaching and learning. The Center is located in 2205 Mitchell Library, and the telephone number is 662-325-2083. Detailed information can be obtained at the Center for Teaching and Learning's website (http://www.ctl.msstate.edu/).

Library System

The Mississippi State University Library System (http://library.msstate.edu/) is composed of the Main Library (Mitchell Memorial Library) and its library branches which include Architecture, the College of Veterinary Medicine, the Jackson Center Library, and the Meridian Campus.

The University Libraries include a collection of over 2,000,000 volumes and over 80,000 journal/serial titles, including print and electronic formats. The Libraries regularly receive many of the publications of leading universities and scholarly societies. The Library is a selective Government Document Depository and United Nations Depository. The Libraries provide a full complement of full text journals as well as scholarly journals in electronic format and accessible remotely from office and dorms on campus as well as at home and from a distance off campus. Through the Libraries web page, patrons have access to a wide variety of databases and full text journals.

The resources of the Special Collections Department include materials of research value on the local, state, regional, and national levels. Among the valuable documentation in the Archives of the University are papers of the University's presidents and other officers, college, division, and departmental records, faculty papers, records of committees and University-related organizations. The Manuscripts Division includes many significant collections, especially in the areas of journalism, civil rights, agricultural, and political history. Among the most important are the Turner Catledge Papers, Hodding and Betty Werlein Carter Papers, Mississippi Republican Party Papers, and the Delta and Pine Land Papers. The Mississippiana Collection contains significant works about Mississippi and by Mississippi authors and a large rare book collection. The Congressional and Political Research Center houses the papers of Senator John C. Stennis, Congressmen G.V. "Sonny" Montgomery, David Bowen, Charles Griffin, Mike Espy, Chip Pickering, and the Ulysses S. Grant Presidential Collection.

The Templeton Music Collection, a unique collection of ragtime, blues, show tunes, and war song sheet music is highly recognized and used by musicians, scholars, and researchers throughout the region and nation. Digitized portions of this collection are available on the web. A ragtime/jazz festival is held each March.

The Library provides over one hundred computers for students in the Computer Commons Lab and Reference Department. Students who want to use the sound capabilities of the Internet may plug their own headphones into headphone jacks on the PC's and Macs. The lab also offers two laser printers and a color laser printer. The Library's Computer Commons Lab is open until 1:45 a.m. Sunday through Thursday; until 7:45 p.m. on Friday; and until 5:45 p.m. on Saturday.

The Instructional Media Center (IMC) provides an environment for educational technology activities and a learning center to utilize techniques related to digital multimedia. The staff provides assistance in identifying, digitizing, and organizing content materials, including resources from the Libraries' collections for use in web page design or presentation. IMC houses computers with CD-ROM players, computers with flatbed scanners that can be used for scanning documents, pictures, photos, etc., typewriters, TV/VCR stations for students to listen to music as required for various courses. Two of these stations also have record players. Music composition stations consist of electronic keyboards attached to Mac computers. The IMC also provides small listening areas with TVs and VCRs for groups to view videos for classes. The Libraries provide a full range of individual reference services, including one-on-one consultations and online Chat. Three rooms with individual computer stations are available for class and group instruction and workshops. There is also a large auditorium and a presentation room for class and student use.

The Libraries, a charter member of the Southern Library Network (LYRASIS), hold memberships in the American Library Association, Association of College and Research Libraries, the Networked Digital Library of Theses and Dissertations (NDLTD), EDUCAUSE, EPSCOR/ESIG libraries, CNI and CLR, and was a founding member of SPARC. The Libraries are one of five supporting regional libraries within the National Agricultural Library Aquaculture Library Network, established to link the research and extension activities of the Regional Research Centers with the Network. The Main Library plays a major role in Mississippi's statewide consortium MAGNOLIA (Mississippi Alliance for Gaining New Opportunities through Library Information).

The Libraries offer extensive research assistance for graduate students in person, by appointment, and virtually. The Reference Desk is staffed in person and via Chat with our research librarian faculty for 60 hours per week. These librarians are each subject specialists who are available by appointment to aid at any point in research or to serve as an introduction to all the Library has to offer.

The Reference Department within the University Libraries provides group tables and individual study carrels as well as 41 desktop computers with black/ white and color printing and adaptive technologies along with specialized print and electronic resources to further explore research interests or assist in investigating new areas of disciplines. The Reference Department is a strong resource when developing new areas of research. For teaching assistants, research librarians are available to teach Library orientations, advanced research skills, and specialized workshops per request. Additionally, they are available to create class-specific online research guides that can be integrated with MyCourses.

The Libraries are also a 95% U.S. government document depository, as well as acting as a depositor of United Nations documents. In addition to the print collection, more and more appears digitally in the Libraries' Online Catalog. Older documents, as well as newspaper and historical documents, are also located in the microform collection. The Library has a complete collection of Mississippi State Adopted textbooks for students in the College of Education.

The MSU Libraries has a great deal to offer Distance Learning graduate students as well, including Library Express, Interlibrary Loan, Virtual Consultations, virtual research assistance, Survival Skills workshops, podcasts, online Library account management, and more.

Parking Services

Congratulations to our graduate students at Mississippi State University! Graduate students *who hold assistantships* should contact Parking Services for information regarding their permits. All parking areas are marked clearly and identified properly by appropriate signs. The Office of Parking Services website (http://www.parkingservices.msstate.edu/) provides complete information regarding regulations, services, and permit application. Call the office for assistance at 662-325-3526 or visit in the Roberts Building at 412 Lee Boulevard.

Regulations for the control, direction, parking, and general regulation of traffic and automobiles on campus have been approved by the Board of Trustees for State Institutions of Higher Learning. Any person who regularly or occasionally operates or parks a motor vehicle on the campus and streets of Mississippi State University will register such vehicle at the beginning of each school year or within 24 hours (excluding weekends and holidays) after it is first brought on the University campus or streets. The permit issued must be properly displayed on the vehicle. Parking areas are assigned to residence hall students, commuter students, and staff.

Recreational Sports

The University's Department of Recreational Sports provides students with unique recreation programs, services, and facilities that support and encourage the development of a healthy lifestyle. The programs and services include the following:

- · Aquatics (http://www.recsports.msstate.edu/programs-and-activities/aquatics/)
- Fitness & Group Exercise (http://www.recsports.msstate.edu/programs-and-activities/fitness/)
- Golf (http://www.golf.msstate.edu/)
- Intramural Sports (http://www.recsports.msstate.edu/programs-and-activities/intramurals/)
- Outdoor Adventures (http://www.recsports.msstate.edu/programs-and-activities/outdoor-adventures/)
- Spirit Groups (http://www.spiritgroups.msstate.edu/)
- · Sports Clubs (http://www.recsports.msstate.edu/programs-and-activities/sportsclubs/)

The University's major student recreational facilities include the following:

- Sanderson Center (http://www.recsports.msstate.edu/facilities/sanderson-center/)
- RecPlex (http://www.recsports.msstate.edu/facilities/recplex/)
- Chadwick Lake (http://www.recsports.msstate.edu/facilities/chadwick-lake/)
- · Sawyer Tennis Courts (http://www.recsports.msstate.edu/facilities/sawyer-tennis-courts/)
- Disc Golf Course (http://www.recsports.msstate.edu/facilities/disc-golf-course/)
- MSU Golf Course (http://golf.msstate.edu/)

For more information, go to the University's website for Recreational Sports (http://www.recsports.msstate.edu/).

Office of Technology Management

As a land-grant university, research is core to Mississippi State University's mission. The University is classified as a "RU/VH: Research Universities (very high research activity)", the highest research classification, in the Carnegie Classification of Institutions of Higher Education. The University is also considered a "Top 100" public research institution, according to the most recent data from the National Science Foundation. Research being a fundamental part of the University's culture significantly contributes to many graduate students' success. Please refer to the website of the University's research university's culture significantly contributes to many graduate students' success.

Office of Research and Economic Development (http://www.research.msstate.edu/) for detailed information about the following aspects of research at the University.

- · Interdisciplinary Research Institutes and Centers (http://www.research.msstate.edu/ci/)
- Sponsored Programs Administration (http://spa.msstate.edu/)
- Office of Regulatory Compliance and Safety (http://www.orc.msstate.edu/)
- Office of Environmental Health and Safety (http://www.ehs.msstate.edu/)
- Office of (http://www.oett.msstate.edu/)Technology Management (http://www.oett.msstate.edu/)

As part of the University's strategic plan, State of Excellence: 2012-1017 (http://www.msstate.edu/web/excellence/), research priority areas have been identified for the University. These priorities are used in directing future investments such as new faculty hires, infrastructure development, and resource allocation. They are not to the exclusion of other important academic, research and service areas on our campus. They are broadly defined intentionally, and each should be viewed across many colleges and disciplines, with both basic and applied research. The University strives for an interdisciplinary approach to these research areas and includes research in its broad definition, to include all forms of scholarship and creative endeavors. For more detailed information about each of these research areas, please refer to the Research Focus Areas (http://www.president.msstate.edu/downloads/ focusareas.pdf) section of the University strategic plan or the website of the University's Office of Research and Economic Development (http:// www.research.msstate.edu/) .

Environment and Energy

- Water
- · Food and Fiber Production and Safety
- Energy and Sustainability
- Natural Resources and Environmental Sustainability

Health and Education

· Health and Education Disparity

Knowledge Management Systems

- · Data to Decisions
- Homeland Security
- Public Policy

Mobility Systems and Materials

- · Mobility Systems
- Material Sciences and Engineering

International Development

Veterans Services

The G.V. "Sonny" Montgomery Center for America's Veterans works to develop and implement a variety of programs to provide student support services focused on the special needs of today's military veterans, service members, dependents, and survivors. The Center offers a comprehensive educational benefits counseling program to help students maximize VA educational benefits. The Center also provides assistance with Active Duty/National Guard/ Reserve tuition assistance. The Center offers a variety of programs to facilitate the transition to school and to help ensure campus policies to better serve veterans, service members, dependents, and survivors. The Center for America's Veterans also offers Veteran Work Study positions and a graduate assistantship. Mississippi State University now offers priority registration for eligible veterans, service members, dependents, and survivors. Nusz Hall is located at 250 Bailey Howell Drive (across from the Sanderson Center) and provides a veteran and military-dependent friendly atmosphere as well as a computer lab, individual study rooms, lounge with kitchenette, multi-purpose room and office space for the Student Veteran Association (SVA). Complimentary services for veterans and dependents include free printing, copying, scanning, and faxing. More detailed information is available on the Center's website (http://www.veterans.msstate.edu/).

Graduate Catalog A-Z Index

Α

- A-Z Index (p. 310)
- Academic Performance (p. 44)
- Academic Policies (p. 34)

- Adkerson School of Accountancy (p. 145)
- Admission Policies (p. 5)
- Admission Status Categories (p. 10)
- Admission Status Change (p. 12)
- Aerospace Engineering (p. 203)
- Agribusiness Management (p. 57)
- Agricultural and Biological Engineering (p. 60)
- Agricultural and Extension Education (p. 80)
- Agricultural Economics (p. 58)
- Agriculture and Life Sciences (p. 53)
- Animal and Dairy Sciences (p. 66)
- Animal Nutrition (p. 63)
- Animal Physiology (p. 64)
- Anthropology and Middle Eastern Cultures (p. 104)
- Application Process (p. 5)
- Applied Physics (p. 207)
- Architecture, Art, and Design (p. 100)
- Arts & Sciences (p. 102)
- Assessment and Testing (p. 304)

В

- Biochemistry, Molecular Biology, Entomology, and Plant Pathology (p. 68)
- Biological Engineering (p. 205)
- Biological Sciences (p. 107)
- Biomedical Engineering (p. 207)
- Books and Supplies (p. 304)
- Business (p. 144)
- Business Administration Ph.D. (p. 148)

С

- Career Center (p. 304)
- Certificate Programs (p. 209)
- Certificate Programs (p. 297)
- Chemical Engineering (p. 210)
- Chemistry (p. 109)
- Civil and Environmental Engineering (p. 214)
- Classical and Modern Languages and Literatures (p. 111)
- Colleges and Degree Programs (p. 48)
- Communication (p. 112)
- Computational Engineering (p. 218)
- Computer Science and Engineering (p. 220)
- Consortia (p. 297)
- Contact Information (p. 298)
- Counseling, Educational Psychology, and Foundations (p. 162)
- Course Numbering Information (p. 299)
- Curriculum, Instruction, and Special Education (p. 173)

D

- Definitions (p. 300)
- Degrees and Majors Offered (p. 23)
- Dining Services (p. 305)
- Doctoral Degree Requirements (p. 39)

Ε

- Education (p. 159)
- Educational Leadership (p. 178)
- Educational Specialist Degree Requirements (p. 39)
- Electrical and Computer Engineering (p. 226)
- Engineering (p. 200)
- Engineering Education (p. 229)
- English (p. 114)
- Enrollment & Registration (p. 42)
- Environmental Toxicology (p. 251)
- Equal Opportunity Statement (p. 300)

F

- Fashion Design and Merchandising (p. 85)
- Finance and Economics (p. 153)
- Food Science, Nutrition, and Health Promotion (p. 73)
- Forest Resources (p. 243)
- Forestry (p. 243)

G

- Gender Studies Certificate Program (p. 115)
- Genetics (p. 78)
- Geosciences (p. 116)
- Gerontology Certificate (p. 86)
- Graduate Assistantships (p. 31)
- Graduate Calendar (p. 259)
- Graduate Committee (p. 47)
- Graduate Council (p. 259)
- Graduate Faculty (p. 261)
- Graduate Forms (p. 296)
- Graduate School Mission & History (p. 301)
- Graduate Student Association (p. 305)
- Graduation (p. 296)

Η

- Health Services (p. 305)
- HEOA Disclosure Statements (p. 302)
- History (p. 122)
- Housing Services (p. 306)
- Human Development and Family Science (p. 87)
- Human Sciences, School of (p. 79)

- Industrial and Systems Engineering (p. 231)
- Information Technology (p. 306)
- Institutional Diversity and Inclusion (p. 307)
- Instructional Systems and Workforce Development (p. 187)
- International Services (p. 307)

Κ

• Kinesiology (p. 192)

L

- Landscape Architecture (p. 90)
- Learning and Teaching Centers (p. 308)
- Legal Resident Status (p. 14)
- Libraries (p. 308)

Μ

- Management and Information Systems (p. 154)
- Marketing, Quantitative Analysis, and Business Law (p. 157)
- Master of Business Administration (p. 157)
- Master of Engineering (p. 239)
- Master of Physician Assistant Studies (p. 51)
- Master's Degree Requirements (p. 37)
- Mathematics and Statistics (p. 128)
- Mechanical Engineering (p. 241)
- Meridian Campus (p. 258)
- Music Education (p. 198)

0

- Office of Academic Affairs (p. 50)
- Office of Technology Management (p. 309)
- Online Education (p. 257)
- Other Information (p. 296)

Ρ

- Parking Services (p. 309)
- Philosophy and Religion (p. 132)
- Physics and Astronomy (p. 133)
- Plant and Soil Sciences (p. 92)
- Political Science and Public Administration (p. 134)
- Poultry Science (p. 98)
- Program of Study Policies (p. 35)
- Psychology (p. 138)

R

- Recreational Sports (p. 309)
- Requirements Quick Reference (p. 15)

S

- School of Architecture (p. 101)
- Sociology (p. 142)
- Student Grievances (p. 302)
- Student Life (p. 304)
- Sustainable Bioproducts (p. 246)

Т

• Tuition, Fees, and Exemptions (p. 12)

U

- University Mission & Vision (p. 302)
- University Officers (p. 303)

V

- Veterans Services (p. 310)
- Veterinary Medical Science (p. 253)
- Veterinary Medicine (p. 250)

W

• Wildlife, Fisheries, and Aquaculture (p. 248)

Index

Α

A-Z Index	310
Academic Performance	44
Academic Policies (graduate)	34
Adkerson School of Accountancy	145
Admission Status Categories	10
Admission Status Change	12
Admissions Information (graduate)	5
Aerospace Engineering	203
Agribusiness Management	57
Agricultural and Biological Engineering	60
Agricultural and Biological Engineering	205
Agricultural and Extension Education	80
Agricultural Economics	58
Agriculture and Life Sciences	53
Animal and Dairy Sciences	66
Animal Nutrition	63
Animal Physiology	64
Anthropology and Middle Eastern Cultures	104
Application Process	5
Applied Physics	207
Architecture, Art, and Design	100
Arts & Sciences	102
Assessment and Testing	304

В

Biochemistry, Molecular Biology, Entomology, and Plant Pathology	68
Biological Sciences	107
Biomedical Engineering	207
Books and Supplies	304
Business	144
Business Administration - Ph.D.	148

С

Career Center	304
Certificate Programs	209
Certificate Programs	297
Chemical Engineering	210
Chemistry	109
Civil and Environmental Engineering	214
Classical and Modern Languages and Literatures	111

Colleges and Degree Programs	. 48
Communication	112
Computational Engineering	218
Computer Science and Engineering	220
Consortia	297
Contact Information	298
Counseling, Educational Psychology, and Foundations	162
Course Numbering Information	299
Curriculum, Instruction, and Special Education	173

D

Definitions	
Degrees and Majors Offered 23	
Dining Services	
Doctoral Degree Requirements	

Ε

Education	
Educational Leadership 178	
Educational Specialist Degree Requirements	
Electrical and Computer Engineering 226	
Engineering 200	
Engineering Education	
English 114	
Enrollment & Registration	
Environmental Toxicology	
Equal Opportunity Statement	

F

Fashion Design and Merchandising	
Finance and Economics 153	
Food Science, Nutrition, and Health Promotion	
Forest Resources 243	
Forestry 243	

G

Gender Studies Certificate Program	15
Genetics	78
Geosciences 1	16
Gerontology Certificate	86
Graduate Assistantships	31
Graduate Calendar 29	.59
Graduate Catalog	5
Graduate Committee	47
Graduate Council 29	.59

Graduate Faculty	261
Graduate Forms	296
Graduate School Mission & History	301
Graduate Student Association	305
Graduation	296
H	
Health Services	305
HEOA Disclosure Statements	302
History	122
Housing Services	306
Human Development and Family Science	87
Human Sciences, School of	79
1	
Industrial and Systems Engineering	231
Information Technology	306
Institutional Diversity and Inclusion	307
Instructional Systems and Workforce Development	187
International Services	307
Κ	
Kinesiology	192
L	
Landscape Architecture	90
Learning and Teaching Centers	308
Legal Resident Status	14
Libraries	308
M	
Management and Information Systems	154
Marketing, Quantitative Analysis, and Business Law	157
Master of Business Administration	157

Master of Physician Assistant Studies	. 51
Master's Degree Requirements	. 37
Mathematics and Statistics	128
Mechanical Engineering	241
Meridian Campus	258
Music Education	198

Office of Academic Affairs	. 50
Office of Technology Management	309
Online Education	257
Other Information	296

Ρ

Parking Services	309
Philosophy and Religion	132
Physics and Astronomy	133
Plant and Soil Sciences	. 92
Political Science and Public Administration	134
Poultry Science	. 98
Program of Study Policies	. 35
Psychology	138
R	
Recreational Sports	309
Requirements Quick Reference	. 15
S	
School of Architecture	101
Sociology	142
Student Grievances	302
Student Life	304
Sustainable Bioproducts	246
т	
Tuition, Fees, and Exemptions	. 12
U	
University Mission & Vision	302
University Officers	303
V	
Veterans Services	310
Veterinary Medical Science	253
Veterinary Medicine	250
W	
Wildlife, Fisheries, and Aquaculture	248