

# Sustainable Bioproducts

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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](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 provide GRE or GMAT test scores unless their 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

Graduate-level coursework		12
SBP 8111	Research Seminar I	1
SBP 8121	Research Seminar II	1
SBP 8000		6
Graduate-level electives		10
Graduate-level courses from other MSU departments as approved by the graduate committee		
SBP 7000 Direct Individual Study (no more than 6 hours total) may be used to satisfy 8000-level course requirements		
<b>Total Hours</b>		<b>30</b>

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

Graduate-level coursework		12
Major Required Courses: Campus 1 thesis option and non-thesis option		
SBP 8111	Research Seminar I	
SBP 8121	Research Seminar II	
OR		
Major Required Courses: Campus 5 non-thesis option		
SBP 8023	Professional Practices in Wood Products Industry (Professional Practices in Wood Products Industry)	3
SBP 8203	Graduate Capstone (Graduate Capstone Seminar)	3
Graduate-level electives		12-16
<b>Total Hours</b>		<b>30-34</b>

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.

Academic hours with half at the 8000 level or higher		24
SBP 9000	Research in Sustainable Bioproducts	20
Additional hours		10
<b>Total Hours</b>		<b>54</b>

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).