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.

### 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) 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 8343 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 course may not be used to satisfy more than one requirement. 3
  ECE 6413 Digital Signal Processing
  ECE 8401 Current Topics in Remote Sensing
  ECE 8473 Digital Image Processing
  GR 6323 Cartographic Sciences
  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 12