

NATURAL SCIENCES (MS) - GEOSCIENCES TRACK

Program Overview

The M.S. in Natural Sciences program develops a broad based scientific background in one of four tracks: Biology, Chemistry, Environmental Science, Geosciences. The program also develops the research skills necessary to design and conduct original research.

The opportunity to take graduate courses in a specific track or combine graduate courses from each of the tracks allows the student to design a graduate course of study to suit his or her own specific interests and goals. The two-year curriculum allows students to focus on required courses and complete research in a timely manner. Graduate assistantship employment opportunities provide tuition and competitive stipends.

The Natural Sciences Program has...

Broadly trained faculty with diverse areas of expertise with Southeastern, National and International research programs.

Well-equipped, modern laboratories as well as access to protected natural areas.

A wide variety of study abroad courses that allow students to conduct research projects abroad.

The Department of Earth and Space Sciences offers a Master's degree in Natural Sciences with a focus on the Geosciences (MNSgeo). Students accepted to the MNSgeo program complete 36 hours of coursework culminating in a written thesis, with 12 of the 36 course hours devoted to thesis research. Students in the MNSgeo program work with ESS faculty to develop a thesis research project as a requirement for graduation. ESS faculty are involved in a wide variety of research areas encompassing paleontology and paleoenvironments, sedimentology and stratigraphy, structural geology and tectonics, and interactions between the physical and human worlds.

Career Opportunities

Graduates of the program will be able to pursue a broad range of careers in the field of Natural Sciences. Common areas of employment include public agencies, non-profit organizations, government service, and private business. Students will also be prepared to move into a doctoral level degree program.

Program of Study

| Code | Title | Credit Hours |
|---|-------------------------------------|--------------|
| Area 1 Program Core | | |
| ENGL 5149G | Grant Writing | 3 |
| Area 1 Total | | 3 |
| Area 2 Program Requirements | | |
| Select the following courses (unless an equivalent course was taken 6-17 at the undergraduate level): | | |
| GEOL 5165G | Hydrology | |
| GEOL 5255G | Environmental Geology | |
| GEOL 6205 | Current Research in the Geosciences | |

| | | |
|--|--|-----------|
| GEOL 6705 | Graduate Seminar (may be repeated for credit) | |
| Electives - Select 4-15 credits from the following: ¹ | | 4-15 |
| ATSC 5116G | Meteorology | |
| ATSC 5117G | Global and Climate Change | |
| ENVS 6157 | The Geology of Georgia | |
| ENVS 5206G | Water Resources Management | |
| GEOL 5115G | Geochemistry | |
| GEOL 5135G | Oceanography | |
| GEOL 5175G | Physical Anthropology and Archeology | |
| GEOL 5215G | Geomorphology | |
| GEOL 5275G | Vertebrate Paleontology | |
| GEOL 5555G | Selected Topics in Geology | |
| GEOL 6705 | Graduate Seminar (maximum of 6 credits may be applied to Area 2) | |
| GEOL 6000 | Comprehensive Exam ² | 0 |
| Area 2 Total | | 21 |
| Area 3 Program Requirements | | |
| GEOL 6005 | Thesis Defense | 0 |
| Select the following for a total of 12 credits: | | 12 |
| GEOL 6905 | Thesis Research | |
| Area 3 Total | | 12 |
| Total Credit Hours | | 36 |

¹ Equivalent courses taken at the undergraduate level may not be repeated for credit.

² Students must pass GEOL 6000 Comprehensive Exam, which should be taken after completion of at least 18 hours of graduate level coursework.

Admission Requirements

In addition to the Columbus State University Graduate School Admissions requirements, all interested applicants must submit the following materials to be considered for admission for all tracks in the Natural Sciences program.

- Baccalaureate degree from an accredited college or university, demonstrated excellent preparation in the Biological, Chemical, Environmental and/or Geological Sciences or permission of the program director.
- Undergraduate grade point average of at least 3.0 on a 4.0 scale.
- A minimum combined score of 290 on the verbal and quantitative portions of the Graduate Record Exam. The GRE must have been taken in the last five years.
- A one page statement of experience and interests.
- Two letters of reference. References should come from persons familiar with the applicant's academic or professional experience.

Additional Program Requirements

The maximum course load for a graduate student in a given semester is 12 semester hours. The maximum course load for a student holding a graduate assistantship is 10 semester hours. Students in the Geosciences track must complete a thesis as part of their degree requirements.