When considering college and career choices...

The University of Mississippi
Consider a different kind of classroom
Offering Undergraduate Degree Programs in Geology and Geological Engineering*

Geologists study Earth’s origins and its composition, processes, and history. Geologists investigate natural hazards, climate change, natural resources, and hydrology. Geological engineers design safe, economic, and efficient solutions to problems humanity faces within natural geological systems.

Both disciplines require training in the basic sciences and mathematics and apply these to natural geological systems. Students in our undergraduate programs enjoy working with applied sciences and the natural setting. Both disciplines help identify and clean up environmentally contaminated sites.

Scholarships

Scholarships available to students include:
• Nine scholarship and fellowship programs available from the School of Engineering.
• Out-of-state tuition waivers available for B.S. Geological Engineering students through the Southern Regional Education Board’s Academic Common Market for residents of Alabama, Arkansas, Delaware, Georgia, Kentucky, Louisiana, Maryland, Oklahoma, South Carolina, Tennessee, Virginia, and West Virginia.
• MESG/MTAG Scholarships available for Mississippi Residents.
• Department and Field Camp Scholarships.

Career Choices

• Mapping and resource assessment geologist for a state or federal government agency.
• Geotechnical engineer for a consulting company specializing in environmental remediation.
• Environmental hydrologist identifying the extent of groundwater contamination problem and designing a system to remove the contamination.
• Attorney specializing in natural resource or environmental law.
• Consulting engineer or geologist assessing hazard potential due to earthquake, flood, landslide, or unfavorable site geology.
• Hydrologist identifying a suitable source for community water needs.
• Project manager for a mining or oil and gas exploration company.
• State or federal inspector of major construction projects in difficult geological terrains.
• Oceanographer pursuing marine geological studies abroad a research vessel.
• Research scientist for a university-based research institution.
• Banker specializing in resource evaluation as loan collateral.
• Secondary school teacher or university professor in any of a dozen of geological subdisciplines.

Starting Salaries

• Salaries of recent graduates of the B.S. Geological Engineering program commonly range from $50,000 to $75,000 and are rising.
• Salaries of recent graduates of the B.S. Geology program commonly range from $40,000 to $50,000 and are rising.

Summary of Coursework required for the B.S. Geology Degree:

Basic Math & Science

Chemistry (2 Semesters)
Physics (2 Semesters)
Calculus (2 Semesters)
Probability and Statistics
Computer Programming

Geology Courses

Introductory Geology (Earth Dynamics)
Environmental Geology
Historical Geology
Geophysics
Hydrogeology
Mineralogy
Petrology
Sedimentology & Stratigraphy
Geomorphology
Introduction to Field Methods
Field Geology (summer course between Junior and Senior years)

Geology Electives

Three electives from the following list:
Environmental Geochemistry
Oceanography
Paleontology
Optical Mineralogy
Geographic Information Systems
Economic Geology
Two other elective from additional classes

Liberal Arts Courses

Freshmen Composition (2 Semesters)
Social Sciences (4 Semesters)
Applied Writing
Fine Arts Course
Speech Course
Other electives

Summary of Coursework required for the B.S. Geological Engineering Degree:

Basic Math & Science

Chemistry (2 Semesters)
Physics (2 Semesters)
Calculus (4 Semesters)
Probability and Statistics
Computer Programming

Geology Courses

Introductory Geology (Earth Dynamics)
Mineralogy
Petrology
Sedimentology & Stratigraphy
Geomorphology
Geophysics
Structural Geology
Hydrogeology
Introduction to Field Methods
Field Geology (summer course between Junior and Senior years)

Engineering Science Courses

Introductory Mechanics
Mechanics of Materials
Fluid Mechanics
Thermodynamics
Water Resource Engineering

Liberal Arts Courses

Freshmen Composition (2 Semesters)
Humanities Courses (2 Semesters)
Social Sciences Courses (2 Semesters)
Fine Arts Course
Engineering Economics

Geological Engineering Professional Courses

Engineering Geology
Rock Mechanics
Soil Mechanics
Geographic Information Systems
Subsurface Site Characterization
Geological Engineering Design
Technical Elective

* The B.S. Geological Engineering program is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 - telephone: (410) 347-7700.