

# Geology

2017-2018  
Academic Year



## School of Science and Engineering

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[tulane.edu/sse/eens/academics/undergraduate/bs-geology.cfm](http://tulane.edu/sse/eens/academics/undergraduate/bs-geology.cfm)

GENERAL REQUIREMENTS FOR STUDENTS MATRICULATING IN ACADEMIC YEAR: 2017-2018

DEGREE: **BACHELOR OF SCIENCE**

TOTAL CREDITS: 120

MAJOR: **GEOLOGY**

MINIMUM CUMULATIVE GRADE POINT AVERAGE: 2.0

MINIMUM MAJOR GRADE POINT AVERAGE: 2.0

CORE CURRICULUM REQUIREMENTS			MAJOR REQUIREMENTS	60-67 CREDITS
<b>Area</b>	<b>Credits</b>	<b>To Be Selected From</b>	<b>Earth &amp; Environmental Sciences Required Courses</b>	
First Year Writing	4	ENGL 1010 or Equivalent	EENS 1110, 1115 – Physical Geology	
TIDES – 1 course in fall semester	1-1.5		EENS 1120/1125 – Earth History	
Foreign Language – Competence at 1020-Level (1-2 courses depending on placement and language)	3-8	Arabic, Chinese, French, German, Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, or Spanish	EENS 211 – Mineralogy	
Cultural Knowledge – 1 Humanities 1 Fine Arts	6	Courses designated Humanities and Fine Arts	EENS 2120 – Petrology	
Cultural Knowledge – Social Science	6	Courses designated Social Science	EENS 3270 – Sedimentation & Stratigraphy	
Quantitative Reasoning 2 Math courses	8	MATH 1210 and 1220 or equivalent	<u>EENS 3410 – Structural Geology</u>	
Scientific Inquiry – 1 Lab Science 1 Science or Math	7-8	Courses from departments designated Science and Math	EENS 3990 – Field Camp	
Writing Intensive	4	Consult Major	EENS 3090 – Paleontology	
Public Service – 1 <sup>st</sup> Tier 2 <sup>nd</sup> Tier		1000-3000-Level 3000-Level or above	Four Additional courses above the 4000 Level, including accompanying laboratories where scheduled. COLQ 4120 – Grand Canyon Colloquium can count as one of these electives. Students must earn a C- or better in 2110* to qualify for further enrollment in EENS courses.	
Western Traditions	3	Refer to Undergraduate Core Curriculum Guide	<b>Mathematics Required Courses</b>	
Outside Western Traditions Or Comparative Cultures Intl. Perspectives	3	Refer to Undergraduate Core Curriculum Guide	MATH 1210** and MATH 1220 or MATH 1310	
<i>This information is for students pursuing a minor in – GEOLOGY – REQUIREMENTS: five courses</i>			<b>Chemistry Required Courses</b>	
<ul style="list-style-type: none"> <li>EENS 1110/1115, 2110</li> <li>One additional 2000-Level course</li> <li>Two courses above the 3000-Level</li> </ul>			CHEM 1070, 1075 CHEM 1080, 1085	
			<b>Physics Required Courses</b>	
			PHYS 1210 or 1310 PHYS 1220 or 1320	
			*Must earn a C- or better in this course to qualify for further enrollment in EENS courses.	
			**MATH 1150 & 1160 may substitute for MATH 1210.	
			<b>NDA</b>	
			<b>CRDV 1090 – Majors, Internships, and Jobs – (1 credit)</b>	
			This course is not a requirement for this major! It is an option for students who are interested in career development.	
			Through this course students develop the necessary tools, skills, and resources to become career ready, learning what it takes to be an excellent candidate in today's competitive job market. While taking CRDV 1090 students will create and refine professional documents, explore careers, conduct job/internship searches, develop networking and interviewing skills, and learn to utilize professional social media in order to network more effectively. Students will learn about the job/internship search process and know how to actively use this information in the real world. Students will have the unique opportunity to take personality and strength assessments in order to learn about their talents, interests, and preferred work environments. Students participate in a Mock Interview event with professionals from New Orleans.	

- The Degree Plan and other information provided in this booklet serve only as advising tools. Newcomb-Tulane College advisors will help advise you on the core-curriculum, decide on a major, and consult on any academic success issues.
- Your major advisors will advise you on major requirements.
- Students with multiple majors will have more than one advisor and will need to consult with the appropriate advisor.
- Minors are not assigned an advisor, but a faculty member in the department is designated to advise minors.
- Become familiar with your major! By declaring early, you have access to a major advisor, are able to enroll in "majors only" classes, and are included in list serves that allow you to receive information about events, internships, and other opportunities.
- Pre-med and Pre-law students should also consult with the health professions advisor or the pre-law advisor.

# What Can I Do with a Major in... Geology

## GENERAL INFORMATION

- As an undergraduate, seek experiences such as research projects, volunteering with professors, summer jobs or internships.
- Learn to work independently and as part of a team.
- Develop the ability to communicate clearly.
- Gain competencies in computers and mathematics.
- Read scientific journals and join related professional and environmental organizations.
- Become familiar with your state's testing and licensing requirements and prepare accordingly.
- Obtain a business background to help in managing projects and assessing economic costs and benefits.
- Have a love of outdoors, an interest in nature and a desire to travel.

## SKILLS

- Ability to conduct and clearly explain scientific research
- Ability to make appropriate decisions and solve quantitative problems
- Ability to work with people from varied backgrounds
- Intellectual capacity to perform well in college
- Physical stamina, good vision, and manual dexterity
- Proficiency in reading, writing and memorization
- Thorough knowledge of geological principles and mathematics

### CAREER AREAS

#### ENVIRONMENTAL

- Surveying
- Geologic Mapping
- Astrogeology
- Space Sciences
- Natural Disaster Recovery
- Astronomy
- Geography
- Hydrology
- Oceanography

#### EDUCATION

- Teaching
- Research
- Administration
- Curatorship

#### ENERGY

- Geophysics
- Structural Geology
- Paleontology
- Mining Geology
- Mineralogy
- Sedimentology
- Sales

### EMPLOYERS

- Federal and state government agencies
- Private research foundations
- Manufacturers
- Survey companies
- Oil companies
- Research firms

- Public and private elementary, middle and high schools
- Two-year community colleges/technical institutes
- Four-year institutions
- Museums

- Mining companies
- Consulting firms
- Federal government agencies
- Natural resource companies (coal, quarries)
- Drilling companies
- Railroad companies
- Petroleum industry, including oil and gas exploration, production and refining
- State government
- Equipment suppliers

*If you think you might be interested in this major, but you are not absolutely sure, an exploratory advisor can help you explore major and career options, please go to:*



*If you are interested in information about Law Professions, please go to:*



*If you are interested in information about Health Professions, please go to:*



# What Can I Do with a Major in...

## Geology

### OTHER PROFESSIONAL OPPORTUNITIES

- Sales/Marketing
- Technical Writing
- Scientific Journalism
- Scientific Illustration
- Regulatory Affairs
- Administration/Management
- Intellectual Property/Patent Law

- Biotechnology industry
- Pharmaceutical and chemical companies
- Publishers: textbook, magazine, newspaper, book
- Software firms
- Regulatory agencies
- Law firms
- Legal departments of corporations

### PROFESSIONAL ORGANIZATIONS

American Association for the Advancement of Science  
[www.aaas.org](http://www.aaas.org)

American Geosciences Institute  
[www.agiweb.org](http://www.agiweb.org)

American Geophysical Union  
[www.agu.org](http://www.agu.org)

American Institute of Professional Geologists  
[www.aipg.org](http://www.aipg.org)

Association for Women Geoscientists  
[www.awg.org](http://www.awg.org)

Association for American State Geologists  
[www.stategeologists.org](http://www.stategeologists.org)

Geo Science Information Society  
[www.geoinfo.org](http://www.geoinfo.org)

Geological Society of America  
[www.geosociety.org](http://www.geosociety.org)

National Association of Geoscience Teachers  
[www.nagt.org](http://www.nagt.org)

National Association of State Boards of Geology  
[www.asbog.org](http://www.asbog.org)

Society of Exploration Geophysicists  
[www.seg.org](http://www.seg.org)

### RELATED WEBSITES & ASSOCIATIONS

American Geophysical Union  
[www.agu.org](http://www.agu.org)

Job Opportunities in Geology  
[www.earthworks-jobs.com](http://www.earthworks-jobs.com)

US Geological Survey Website  
[www.usgs.gov](http://www.usgs.gov)

Louisiana Geological Survey  
[www.lgs.lsu.edu](http://www.lgs.lsu.edu)

Science Careers  
[sciencecareers.sciencemag.org](http://sciencecareers.sciencemag.org)

Nature Jobs  
[www.nature.com/naturejobs](http://www.nature.com/naturejobs)

Museum of the Earth  
[www.museumoftheearth.org](http://www.museumoftheearth.org)

*For Jobs, internships, resume assistance,  
interviews, and self-assessments, please  
go to:*



*Tulane University is committed to your academic success  
and provide several services to assist.*