

## ABOUT THE MAJOR

Geology is the study of Earth including its structure, the materials of which it is composed and the processes that shape it. Geology is also concerned with the history of Earth and its life forms, the application of geologic knowledge to the search for natural resources, and understanding how humans interact with our physical environment. It is the study of rocks, minerals and water; of fossils, shorelines and mountains; of earthquakes, volcanoes and landslides. Although geology incorporates elements of chemistry, biology and physics it puts them together in a way that provides a unique framework for understanding planet earth. The Environmental Geology concentration prepares students to work in conservation, management and remediation of natural resources. This concentration includes a wider variety of courses than Professional Geology and requires more Biology and Chemistry. Students have the option of pursuing coursework in Sustainability, Geographic Information Systems and Environmental Policy.

## ABOUT THIS MAP

This program map is intended ONLY as a guide for students to plan their course of study. It does NOT replace any information in the Undergraduate Catalog, which is the official guide for completing degree requirements. Use this map to help plan and guide your experience at UWG, including academic, co-curricular, and discovery opportunities. Everyone's experience is different and activities in this map are suggestions. Always consult with your advisors whenever possible for new opportunities and updates.

Visit [westga.edu/program-maps](https://westga.edu/program-maps) for the latest version of this major map.



VISIT WOLFWATCH  
FOR MORE  
INFORMATION.



HAVE A QUESTION?  
CHECK IN WITH  
YOUR ADVISOR!



## WHERE CAN YOU GO WITH THIS DEGREE?

- Archaeologist
- Environmental Field Technician
- Environmental Protection Specialist
- Environmental Scientist
- Forester
- Geologist
- GIS Analyst
- Hydrographic Surveyor
- Quarry Manager
- Sustainability Engineer

## ADD A CERTIFICATE

- Atmospheric Science
- Cultural Heritage Management
- Geographic Information Systems
- Human Rights Advocacy
- Museum Studies
- Stream Restoration
- Wildlife Ecology

## HONORS COLLEGE

Consider joining if you have an Overall GPA of 3.2 and earned 15 college credit hours!

# GEOLOGY

## ENVIRONMENTAL CONCENTRATION

*Bachelor of Science*

# 60

CORE CREDIT HOURS

# 39

MAJOR CREDIT HOURS

# 21

ELECTIVE CREDIT HOURS



UNIVERSITY OF WEST GEORGIA

2024-2025

**TERM 1: FALL**

**C1: ENGL 1101** 3 CREDIT HOURS  
English Composition I

**MATH 1111** 3 CREDIT HOURS  
College Algebra

**I2: XIDS 2002** 2 CREDIT HOURS  
(Recommended) First-Year Seminar

**F: GEOL 1121 + LAB** 4 CREDIT HOURS  
Introduction to Geosciences I

**T1: BIOL 1107 + LAB** 4 CREDIT HOURS  
Principles of Biology I + Lab

- MILESTONES:**
- COMPLETE ENGL 1101 WITH C OR BETTER
  - COMPLETE MATH 1111 WITH B OR BETTER
  - TARGET: 15 CREDIT HOURS COMPLETED (THIS EXAMPLE = 16)

**TERM 2: SPRING**

**C2: ENGL 1102** 3 CREDIT HOURS  
English Composition II

**M: MATH 1113** 4 CREDIT HOURS  
Precalculus

**F: GEOL 1122 + LAB** 4 CREDIT HOURS  
Introduction to Geosciences II

**T2: BIOL 1108 + LAB** 4 CREDIT HOURS  
(Required Course) Principles of Biology II

- MILESTONES:**
- COMPLETE ENGL 1102 & MATH 1113 WITH C OR BETTER
  - COMPLETE GEOL 1121-1122 SEQUENCE
  - TARGET: 30 CREDIT HOURS COMPLETED (31)

**16 FALL CREDIT HOURS + 15 SPRING CREDIT HOURS  
= 31 CREDIT HOURS**

**CRUSH YOUR COURSEWORK**

- Take the Intro Geology sequence GEOL 1121+L, and GEOL 1122+L your first and second semesters.
- Enroll in CHEM 1211.
- Get confident with Wolf Watch and your Program Map.

**FIND YOUR PLACE**

- Attend a Geoscience Club meeting or event such as River Cleanup, or a professional talk.
- Find other student organizations that match your interests.

**BROADEN YOUR PERSPECTIVES**

- Explore a new-to-you culture or language through your core courses.
- Make an effort to be inclusive of others as you meet new faces on campus.

**CONNECT OFF-CAMPUS**

- Meet our Alumni at the Geosciences Career Night (Spring).
- Go to events in the Carrollton Community.

**TAKE CARE OF YOURSELF**

- Build friendships with other students.
- Learn about resources on campus such as the Counseling Center, Student Health Services, Center for Academic Success, and the Campus Center.

**PAVE YOUR PATH**

- Be proactive. Go to your professors' office hours, even before you need help in the class. These conversations can lead to connections.

**TERM 1: FALL**

**F: CHEM 1211 + LAB** 4 CREDIT HOURS  
(Required Course) Principles of Chemistry I

**GEOL 3004** 4 CREDIT HOURS  
Field Geology and Geologic Mapping

**MATH 1634** 4 CREDIT HOURS  
(Required Course) Calculus I

**GEOL 3603** 3 CREDIT HOURS  
Environmental Geology

- MILESTONES:**
- COMPLETE CHEM 1211/1211 WITH C OR BETTER
  - COMPLETE FIELD GEOLOGY (GEOL 3004) WITH C OR BETTER
  - PLAN FOR COURSES OFFERED ONLY ALTERNATE YEARS
  - TARGET: 45 CREDIT HOURS COMPLETED (46)

**TERM 2: SPRING**

**F: CHEM 1212 + LAB** 4 CREDIT HOURS  
(Required Course) Principles of Chemistry II

**T3: MATH 1401** 3 CREDIT HOURS  
(Required Course) Elementary Statistics

**GEOL 4093** 3 CREDIT HOURS  
Risk Assessment

**I1: ORAL COMMUNICATION** 3 CREDIT HOURS

**P: CITIZENSHIP** 3 CREDIT HOURS

- MILESTONES:**
- COMPLETE CHEM 1212/1212L
  - PLAN FOR COURSES OFFERED ONLY ALTERNATE YEARS
  - TARGET: 60 CREDIT HOURS COMPLETED (62)

**15 FALL CREDIT HOURS + 16 SPRING CREDIT HOURS  
= 31 CREDIT HOURS**

- Additional Information:**
- Speak with Advisor and Faculty Mentor about GEOL 4082 before Year 3.

**CRUSH YOUR COURSEWORK**

- Choose a track: Professional or Environmental.
- Explore courses in the core and follow the Geology Program Map for the geology track you choose.
- Love something outside of geology? Earn a minor or a certificate!

**FIND YOUR PLACE**

- Ask your professors about their research and seek out your own opportunities to do research.
- Start researching career paths.
- Become a TA for Physical Geology or Historical Geology.

**BROADEN YOUR PERSPECTIVES**

- Travel! Explore Travel Abroad opportunities or enroll in Regional Applications of Field Geology (offered summers) to see more of the US.

**CONNECT OFF-CAMPUS**

- Participate in an internship.
- Volunteer with a STEM school visit.

**TAKE CARE OF YOURSELF**

- Take a break from studying once in a while to enjoy events on campus.

**PAVE YOUR PATH**

- Apply for scholarships and REU opportunities.
- Attend a professional conference to network and connect with the scientific community.
- Research graduate school programs if you're considering that pathway.

**TERM 1: FALL**

- GEOL 3014** 4 CREDIT HOURS  
Mineralogy and Crystallography
- GEOL 4082** 1 CREDIT HOUR  
Geological Problems
- CHEM 2411 OR 3310** 3/4 CREDIT HOURS  
(Required Course) Organic Chemistry I or Analytical Chemistry
- C: HUMANITES** 3 CREDIT HOURS
- S: SOCIAL SCIENCES** 3 CREDIT HOURS

**MILESTONES:**

- COMPLETE MINERALOGY (GEOL 3014)
- RESEARCH (GEOL 4082) OKAY ANY SEMESTER
- PLAN FOR COURSES OFFERED ONLY ALTERNATE YEARS
- TARGET: 75 CREDIT HOURS COMPLETED (77)

**TERM 2: SPRING**

- GEOL 4084** 4 CREDIT HOURS  
Hydrogeology
- GEOL 4083 OR 4014** 4/3 CREDIT HOURS  
Environmental Geochemistry or Geochemistry
- C: HUMANITES** 3 CREDIT HOURS
- S: SOCIAL SCIENCES** 3 CREDIT HOURS

**MILESTONES:**

- PLAN FOR COURSES OFFERED ONLY ALTERNATE YEARS
- TARGET: 90 CREDIT HOURS COMPLETED (90/91)

**14/15 FALL CREDIT HOURS + 13/14 SPRING CREDIT HOURS = 27/29 CREDIT HOURS**

**CRUSH YOUR COURSEWORK**

- Choose a track: Professional or Environmental.
- Explore courses in the core and follow the Geology Program Map for the geology track you choose.
- Love something outside of geology? Earn a minor or a certificate!

**FIND YOUR PLACE**

- Ask your professors about their research and seek out your own opportunities to do research.
- Start researching career paths.
- Become a TA for Physical Geology or Historical Geology.

**BROADEN YOUR PERSPECTIVES**

- Travel! Explore Travel Abroad opportunities or enroll in Regional Applications of Field Geology (offered summers) to see more of the US.

**CONNECT OFF-CAMPUS**

- Participate in an internship.
- Volunteer with a STEM school visit.

**TAKE CARE OF YOURSELF**

- Take a break from studying once in a while to enjoy events on campus.

**PAVE YOUR PATH**

- Apply for scholarships and REU opportunities.
- Attend a professional conference to network and connect with the scientific community.
- Research graduate school programs if you're considering that pathway.

**TERM 1: FALL**

- GEOG 2202** 3 CREDIT HOURS  
Environmental Science
- P: CITIZENSHIP** 3 CREDIT HOURS
- F: MAJOR COURSE** 3 CREDIT HOURS
- ELECTIVE** 3 CREDIT HOURS
- ELECTIVE** 3 CREDIT HOURS

**MILESTONE:**

- TARGET: 105 CREDIT HOURS COMPLETED (106/105)

**TERM 2: SPRING**

- GEOL 4501** 1 CREDIT HOUR  
Geology Seminar
- ELECTIVE** 4 CREDIT HOURS
- ELECTIVE** 4 CREDIT HOURS
- ELECTIVE** 4 CREDIT HOURS
- ELECTIVE** 3 CREDIT HOURS

**MILESTONES:**

- COMPLETE GEOL 4064
- COMPLETE SEMINAR (GEOL 4501)
- TARGET: 120 CREDIT HOURS COMPLETED (122/121)

**15 FALL CREDIT HOURS + 16 SPRING CREDIT HOURS = 31 CREDIT HOURS**

**GEOLOGY COURSES OFFERED ONLY ALTERNATE YEARS:**

- Fall, odd-numbered years: GEOL 3603 Environmental Geology, GEOL 4003 Geomorphology, GEOL 4044 Engineering Geology
- Spring, even-numbered years: GEOL 4083 Environmental Geochemistry
- Spring, odd-numbered years: GEOL 4014 Geochemistry

**ELECTIVES OFFERED DURING SUMMER SESSIONS:**

- GEOL 2503 Introduction to Oceanography
- GEOL 2553 Geology of National Parks

**CRUSH YOUR COURSEWORK**

- Take upper-level electives to prepare you for your career/graduate programs.
- Study for the licensure exam (Professional Track students).

**FIND YOUR PLACE**

- Be a leader in the Program by being a Club officer.
- Serve as a TA again or seek other employment/volunteering opportunities on campus.

**BROADEN YOUR PERSPECTIVES**

- Read books or listen to podcasts to expand your thinking about how geosciences affects people and society.

**CONNECT OFF-CAMPUS**

- Become a member of a geology professional organization and get involved as soon as you can!

**TAKE CARE OF YOURSELF**

- Get organized with important dates! Graduation application, job application, grad school stuff, class projects, interviews....put all those dates in your phone so that you can stay on top of your busy schedule this final year.

**PAVE YOUR PATH**

- Request letters of recommendation from professors (at least 2 weeks before you need them).
- Apply to graduate programs in the fall or early winter or apply to jobs in the spring.