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 for the latest version of this major map.
YEAR 1

TERM 1: FALL

A1: ENGL 1101
   English Composition I   3 CREDIT HOURS

MATH 1111
   College Algebra    3 CREDIT HOURS

B2: XIDS 2002
   (Recommended First-Year Seminar)  2 CREDIT HOURS

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

D1: BIOL 1107 + LAB
   Principles of Biology I + Lab  4 CREDIT HOURS

MILESTONES:
- COMPLETE ENGL 1101 WITH C OR BETTER
- COMPLETE MATH 1111 WITH B OR BETTER
- TARGET: 16 FALL CREDIT HOURS + 15 SPRING CREDIT HOURS
  = 31 CREDIT HOURS

TERM 2: SPRING

A1: ENGL 1102
   English Composition II  3 CREDIT HOURS

A2: MATH 1113
   Precalculus   4 CREDIT HOURS

F: GEOL 1122 + LAB
   Principles of Geosciences II  4 CREDIT HOURS

D1: BIOL 1108 + LAB
   (Required Course) Principles of Biology II  4 CREDIT HOURS

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

TERM 1: FALL

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

GEOL 3004
   Field Geology and Geologic Mapping   4 CREDIT HOURS

MATH 1634
   (Required Course) Calculus I  4 CREDIT HOURS

GEOL 3603
   Environmental Geology  4 CREDIT HOURS

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

TERM 2: SPRING

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

D2: MATH 1401
   (Required Course) Elementary Statistics  3 CREDIT HOURS

GEOL 4093
   Risk Assessment   3 CREDIT HOURS

B1: ORAL COMMUNICATION
   3 CREDIT HOURS

E: SOCIAL SCIENCES
   3 CREDIT HOURS

MILESTONES:
- COMPLETE CHEM 1212/1212 + LAB ORAL COMMUNICATION + LAB
- PLAN FOR COURSES OFFERED ONLY ALTERNATE YEARS
- TARGET: 45 CREDIT HOURS COMPLETED

Additional Information:
- Speak with Advisor and Faculty Mentor about GEOL 4082 before Year 3.
- Choose a track: Professional or Environmental.
- Graduate from the core and follow the Geology Program Map for the geology track you choose.
- A recommended course is Field Geology and Geologic Mapping at 4 CREDIT HOURS. This course is recommended for students interested in geology.
- Take a break from studying once in a while to enjoy events on campus.
- Ask your professors about their research and seek out your own opportunities to do research.
- Attend a professional conference to network and learn about the scientific community.
- Become a TA for Physical Geology or Historical Geology.
- Enroll in CHEM 1212 + LAB (required course) Principles of Chemistry I at 4 CREDIT HOURS.
- Travel! Explore Travel Abroad opportunities or enroll in Regional Applications of Field Geology (offered summers) to see more of the US.
- Apply for scholarships and REU opportunities.
- Volunteer with a STEM school visit.
- Participate in an internship.

PAVE YOUR PATH

- Take a break from studying once in a while to enjoy events on campus.
- Ask your professors about their research and seek out your own opportunities to do research.
- Attend a professional conference to network and learn about the scientific community.
- Become a TA for Physical Geology or Historical Geology.
- Enroll in CHEM 1212 + LAB (required course) Principles of Chemistry I at 4 CREDIT HOURS.
- Travel! Explore Travel Abroad opportunities or enroll in Regional Applications of Field Geology (offered summers) to see more of the US.
- Apply for scholarships and REU opportunities.
- Volunteer with a STEM school visit.
- Participate in an internship.

PAVE YOUR PATH

- Take a break from studying once in a while to enjoy events on campus.
- Ask your professors about their research and seek out your own opportunities to do research.
- Attend a professional conference to network and learn about the scientific community.
- Become a TA for Physical Geology or Historical Geology.
- Enroll in CHEM 1212 + LAB (required course) Principles of Chemistry I at 4 CREDIT HOURS.
- Travel! Explore Travel Abroad opportunities or enroll in Regional Applications of Field Geology (offered summers) to see more of the US.
- Apply for scholarships and REU opportunities.
- Volunteer with a STEM school visit.
- Participate in an internship.

PAVE YOUR PATH

- Take a break from studying once in a while to enjoy events on campus.
- Ask your professors about their research and seek out your own opportunities to do research.
- Attend a professional conference to network and learn about the scientific community.
- Become a TA for Physical Geology or Historical Geology.
- Enroll in CHEM 1212 + LAB (required course) Principles of Chemistry I at 4 CREDIT HOURS.
- Travel! Explore Travel Abroad opportunities or enroll in Regional Applications of Field Geology (offered summers) to see more of the US.
- Apply for scholarships and REU opportunities.
- Volunteer with a STEM school visit.
- Participate in an internship.

PAVE YOUR PATH

- Take a break from studying once in a while to enjoy events on campus.
- Ask your professors about their research and seek out your own opportunities to do research.
- Attend a professional conference to network and learn about the scientific community.
- Become a TA for Physical Geology or Historical Geology.
- Enroll in CHEM 1212 + LAB (required course) Principles of Chemistry I at 4 CREDIT HOURS.
- Travel! Explore Travel Abroad opportunities or enroll in Regional Applications of Field Geology (offered summers) to see more of the US.
- Apply for scholarships and REU opportunities.
- Volunteer with a STEM school visit.
- Participate in an internship.

PAVE YOUR PATH

- Take a break from studying once in a while to enjoy events on campus.
- Ask your professors about their research and seek out your own opportunities to do research.
- Attend a professional conference to network and learn about the scientific community.
- Become a TA for Physical Geology or Historical Geology.
- Enroll in CHEM 1212 + LAB (required course) Principles of Chemistry I at 4 CREDIT HOURS.
- Travel! Explore Travel Abroad opportunities or enroll in Regional Applications of Field Geology (offered summers) to see more of the US.
- Apply for scholarships and REU opportunities.
- Volunteer with a STEM school visit.
- Participate in an internship.

PAVE YOUR PATH

- Take a break from studying once in a while to enjoy events on campus.
- Ask your professors about their research and seek out your own opportunities to do research.
- Attend a professional conference to network and learn about the scientific community.
- Become a TA for Physical Geology or Historical Geology.
- Enroll in CHEM 1212 + LAB (required course) Principles of Chemistry I at 4 CREDIT HOURS.
- Travel! Explore Travel Abroad opportunities or enroll in Regional Applications of Field Geology (offered summers) to see more of the US.
- Apply for scholarships and REU opportunities.
- Volunteer with a STEM school visit.
- Participate in an internship.
### YEAR 3

#### TERM 1: FALL
- **GEOL 3014** Mineralogy and Crystallography 4 CREDIT HOURS
- **GEOL 4082** Geological Problems 1 CREDIT HOURS
- **CHEM 2411 OR 3310** (Required Course) Organic Chemistry I or Analytical Chemistry 3/4 CREDIT HOURS
- **C: FINE ARTS/HUMANITES** 3 CREDIT HOURS
- **E: 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** Hydrogeology 4 CREDIT HOURS
- **GEOL 4083 OR 4014** Environmental Geochemistry or Geochemistry 4/3 CREDIT HOURS
- **C: FINE ARTS/HUMANITES** 3 CREDIT HOURS
- **E: 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

### YEAR 4

#### TERM 1: FALL
- **GEOG 2202** Environmental Science 3 CREDIT HOURS
- **E: SOCIAL SCIENCES** 3 CREDIT HOURS
- **F: MAJOR COURSE** ELECTIVE 3 CREDIT HOURS
- **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)

#### TERM 2: SPRING
- **GEOL 4501** Geology Seminar 1 CREDIT HOUR
- **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 4003 Environmental Geology, GEOL 4014 Geomorphology, GEOL 4044 Engineering Geology
- Spring, even-numbered years: GEOL 4003 Environmental Geology, GEOL 4014 Geomorphology

#### ELECTIVES OFFERED DURING SUMMER SESSIONS:
- GEOL 2503 Introduction to Oceanography
- GEOL 3553 Introduction to Geology

### 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.
- Apply to graduate programs in the fall or early winter or apply to jobs in the spring.

### 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.