ABOUT THE MAJOR

The Earth and Environmental Sciences (EES) program and degree at UWG offers multiple concentrations for students to pursue education and career pathways focusing on the Earth's physical composition, its surface and atmospheric systems, and how these interact and are impacted by human activities. This broad area of interest, furthermore, is understood and explored using an integrated systems approach, emphasizing the spatial and temporal relationships within and between relevant natural and human systems. All EES students are prepared for future careers by gaining a particular skillset that enables them to analyze and explain conditions and processes that fall within this earth and environmental sciences framework. The culmination of this learning is the formulation, execution, and presentation of a faculty mentored research project. Based on existing faculty expertise, students majoring with a BS in EES can pursue one of three concentrations, each with its own thematic focus and methodology: 1) environmental sustainability, 2) geographic information systems, and 3) professional geology.

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.

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!

EARTH & ENVIRONMENTAL SCIENCES

PROFESSIONAL GEOLOGY CONCENTRATION

Bachelor of Science

60 CORE CREDIT HOURS

43 MAJOR CREDIT HOURS

17 ELECTIVE CREDIT HOURS

UNIVERSITY OF WEST GEORGIA

2025-2026

YEAR 1

TERM 1: FALL

C1: ENGL 1101 — 3 CREDIT HOURS
English Composition I

M: MATH 1113 — 3 CREDIT HOURS
Precalculus

F: GEOL 1121 + LAB — 4 CREDIT HOURS
Exploring Earth

I1: INSTITUTIONAL PRIORITY — 3 CREDIT HOURS

A1: HUMANITES — 3 CREDIT HOURS

MILESTONES:
- COMPLETE ENGL 1101 C OR BETTER
- COMPLETE MATH 1113 B OR BETTER

TERM 2: SPRING

C2: ENGL 1102 — 3 CREDIT HOURS
English Composition II

F: GEOG 1112 + LAB — 4 CREDIT HOURS
Weather and Climate

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

P1: HIST 2111 OR 2112 — 3 CREDIT HOURS
US History

MILESTONES:
- COMPLETE ENGL 1102 C OR BETTER
- COMPLETE GEOL 1121-1122 SEQUENCE C OR BETTER
- TARGET: 30 CREDIT HOURS COMPLETED.

16 FALL CREDIT HOURS + 14 SPRING CREDIT HOURS = 30 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.

YEAR 2

TERM 1: FALL

F: CHEM 1211 + LAB — 4 CREDIT HOURS
Principles of Chemistry I

GEOL 3004 — 4 CREDIT HOURS
Field Geology and Geologic Mapping

F: MATH 1401 OR 1634 — 3/4 CREDIT HOURS
Elementary Statistics or Calculus I

P2: POLS 1101 — 3 CREDIT HOURS
American Government

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

TERM 2: SPRING

GEOG/GEOL 2333 — 2 CREDIT HOURS
Intro to Research in Earth & Environmental Sciences

GEOL 3034 — 4 CREDIT HOURS
Structural Geology

F: GEOG 2553 — 3 CREDIT HOURS
Introduction to GIS and Mapping Sciences

A: HUMANITES — 3 CREDIT HOURS

T2: STEM COURSE — 3 CREDIT HOURS

I2: INSTITUTIONAL PRIORITY — 1 CREDIT HOUR

MILESTONES:
- COMPLETE CHEM 1212/1212L
- COMPLETE STRUCTURAL (GEOL 3034)
- PLAN FOR COURSES OFFERED ONLY ALTERNATE YEARS
- TARGET: 60 CREDIT HOURS COMPLETED
- COMPLETE GEOL/GEOL 2333

14/15 FALL CREDIT HOURS + 16 SPRING CREDIT HOURS = 30/31 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.

YEAR 3

TERM 1: FALL

GEOL 3014 — 4 CREDIT HOURS
Mineralogy and Crystallography

S1: HIST 1111 OR 1112 — 3 CREDIT HOURS
World History

GEOL ELECTIVE — 4 CREDIT HOURS

T3: STEM COURSE — 3 CREDIT HOURS

MILESTONES:
- COMPLETE MINERALOGY (GEOL 3014) C OR BETTER
- PLAN FOR COURSES OFFERED ONLY ALTERNATE YEARS
- TARGET: 75 CREDIT HOURS COMPLETED

TERM 2: SPRING

GEOL 3024 — 4 CREDIT HOURS
Igneous and Metamorphic Petrology

GEOL 4084 — 4 CREDIT HOURS
Hydrogeology

GEOL/GEOG 3333 — 1/3 CREDIT HOURS
Faculty-Mentored Research in Earth and Environmental Sciences

S2: SOCIAL SCIENCE ELECTIVE — 3 CREDIT HOURS

GEOL ELECTIVE — 3 CREDIT HOURS

MILESTONES:
- COMPLETE IG/MET (GEOL 3024) C OR BETTER
- TARGET: 90 CREDIT HOURS COMPLETED.
- COMPLETE GEOL/GEOG 3333

14 FALL CREDIT HOURS + 15/17 SPRING CREDIT HOURS = 29/31 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.

YEAR 4

TERM 1: FALL

GEOL 4034 — 4 CREDIT HOURS
Sedimentation and Stratigraphy

GEOL 4024 — 4 CREDIT HOURS
Paleontology

ELECTIVE — 3 CREDIT HOURS

GEOL/GEOG 4333 — 2 CREDIT HOURS
Earth & Environmental Sciences Capstone

ELECTIVE — 3 CREDIT HOURS

MILESTONES:
- TARGET: 105 CREDIT HOURS COMPLETED (104/105)
- COMPLETE GEOL/GEOG 4333

TERM 2: SPRING

GEOL 4604 — 4 CREDIT HOURS
Economic Geology

ELECTIVE — 4 CREDIT HOURS

ELECTIVE — 4 CREDIT HOURS

ELECTIVE — 3 CREDIT HOURS

MILESTONES:
- COMPLETE GEOL 4064
- TARGET: 120 CREDIT HOURS COMPLETED

16 FALL CREDIT HOURS + 15 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 (possible in even fall)
- Spring, even-numbered years: GEOL 4083 Environmental Geochemistry
- Spring, odd-numbered years: GEOL 4014 Geochemistry

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.