

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?

- Cartographer
- Geographer
- Geopolitical Analyst
- Geospatial Analyst
- GIS Specialist
- Landscape Architect
- Park Ranger
- Surveyor
- Teacher
- Urban Planner

ADD A CERTIFICATE

- Atmospheric Science
- Geographic Information Systems
- Stream Restoration

HONORS COLLEGE

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

EARTH & ENVIRONMENTAL SCIENCES

GIS CONCENTRATION

Bachelor of Science

60

CORE CREDIT HOURS

30

MAJOR CREDIT HOURS

30

ELECTIVE CREDIT HOURS



UNIVERSITY OF WEST GEORGIA

2025-2026

TERM 1: FALL

- C1: ENGL 1101** **3** CREDIT HOURS
English Composition I
- M: MATH 1113** **3** CREDIT HOURS
Precalculus
- I2: XIDS 2002** **2** CREDIT HOURS
First-Year Seminar
- T1: GEOG 1112 + LAB** **4** CREDIT HOURS
Weather and Climate
- A1: HUMANITIES** **3** CREDIT HOURS

MILESTONE:
• COMPLETE ENGL 1101; REQUIRED TO EARN C OR HIGHER

TERM 2: SPRING

- C2: ENGL 1102** **3** CREDIT HOURS
English Composition II
- P1: POLS 1101** **3** CREDIT HOURS
American Government
- F: GEOG 1013** **3** CREDIT HOURS
World Geography
- T2: GEOL 1121 + LAB** **4** CREDIT HOURS
Exploring Earth
- P2: HIST 2111 OR 2112** **3** CREDIT HOURS
US History

MILESTONES:
• COMPLETE ENGL 1102; REQUIRED TO EARN C OR HIGHER
• TARGET: 30 CREDIT HOURS COMPLETED

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

CRUSH YOUR COURSEWORK

- Take Geography core classes: GEOG 1112 + L, GEOG 1113 + L, and GEOG 1013.
- Take IMPACTS composition and math courses, plus your choice of IMPACTS Institution, Citizenship, and Social Science courses.
- Meet with your Geography mentor.

FIND YOUR PLACE

- Meet Geography faculty and learn about their research, and scholarship opportunities.
- Join a GIS and/or GTU club.
- Connect with junior/senior geography students.

BROADEN YOUR PERSPECTIVES

- Explore diversity, equity, and inclusion resources and opportunities across campus.
- Learn to pay attention to and respect differing viewpoints and experiences in class.

CONNECT OFF-CAMPUS

- Visit Wolves Vote to learn about the voting process and registration.
- Consider volunteering for a campaign or organization in your community.

TAKE CARE OF YOURSELF

- Visit the UWG Wellness Hub to find all the resources available to you!
- Visit Health Services.
- Get fit! Visit URec to see all your options.
- Visit the Center for Economic Education and Financial Literacy.

PAVE YOUR PATH

- Complete a self-assessment to see what careers and majors are right for you.
- Visit Office of Career and Graduate School Connections.
- Create your profile on Handshake.
- Consider applying for an on-campus job.

TERM 1: FALL

- F: MATH 1401** **3** CREDIT HOURS
Elementary Statistics
- F: GEOG 2553** **3** CREDIT HOURS
Intro to GIS and Mapping Sciences
- F: GEOG 1113 + LAB** **4** CREDIT HOURS
Landform Geography
- S2: HIST 1111 OR 1112** **3** CREDIT HOURS
World History
- T1: STEM COURSE** **3** CREDIT HOURS

MILESTONES:
• TARGET: 45 CREDIT HOURS COMPLETED
• COMPLETE GEOG 2553

TERM 2: SPRING

- GEOG/GEOL 2333** **2** CREDIT HOURS
Introduction to Research in Earth and Environmental Sciences
- T2: GEOG 2202 + LAB** **4** CREDIT HOURS
Environmental Science
- GEOG 3563** **4** CREDIT HOURS
Remote Sensing and GIS Integration
- A2: HUMANITIES** **3** CREDIT HOURS
- I1: ORAL COMMUNICATION** **3** CREDIT HOURS

MILESTONES:
• TARGET: 60 CREDIT HOURS COMPLETED
• COMPLETE GEOL/GEOL 2333
• COMPLETE GEOG 3563

**16 FALL CREDIT HOURS + 16 SPRING CREDIT HOURS
= 32 CREDIT HOURS**

CRUSH YOUR COURSEWORK

- Complete Area F in sophomore year.
- Complete GEOG 2083 in sophomore year.
- Complete faculty mentored research GEOG 4083 in your junior year.
- Take Geography Core courses when they are offered: GEOG 3643, 3800, 4553.
- Establish your concentration and take required courses as they are offered.
- Finish Core IMPACTS.

FIND YOUR PLACE

- Get involved in research and pursue internship opportunities.
- Volunteer for a leadership position in GIS and/or GTU club.
- Become an active participant and volunteer in the classroom, lab, and field trips.
- Attend a scientific conference.
- Get involved in other clubs related to your professional interests.

BROADEN YOUR PERSPECTIVES

- Take part in or help organize an implicit bias workshop.
- Dig deeper into study abroad opportunities.
- Learn a new language.
- Take part in cultural offerings on campus.

CONNECT OFF-CAMPUS

- Do volunteer work in your field.
- Ask your department about networking opportunities with alumni.
- Attend career fairs and events.
- Attend UWG sponsored events off-campus.

TAKE CARE OF YOURSELF

- Take a fitness class, climb the rock wall, or join an intramural team.
- Consider whether counseling is right for you: take a mental health screening.

PAVE YOUR PATH

- Draft your resume and attend a resume blitz.
- Learn about how to network on social media and update your Handshake profile.
- Draft your personal statement.
- Visit the graduate school to find out about graduate programs and admission requirements.

TERM 1: FALL

- ELECTIVE** 3 CREDIT HOURS
3000-4000 level Elective course
- GEOG 4553** 4 CREDIT HOURS
Geographic Information System
- T3: STEM COURSE** 4 CREDIT HOURS
- ELECTIVE** 3 CREDIT HOURS

- MILESTONES:**
- TARGET: 75 CREDIT HOURS COMPLETED
 - COMPLETE GEOG 4553

TERM 2: SPRING

- ELECTIVE** 3 CREDIT HOURS
3000-4000 level Elective course
- GEOG/GEOL 3333** 3 CREDIT HOURS
Faculty-Mentored Research in Earth and Environmental Sciences
- GEOG 4564** 4 CREDIT HOURS
Contemporary Remote Sensing Applications
- GEOG 4554** 4 CREDIT HOURS
Computer Cartography

- MILESTONES:**
- TARGET: 90 CREDIT HOURS COMPLETED.
 - COMPLETE GEOL/GEOG 3333
 - COMPLETE GEOG 4554

14 FALL CREDIT HOURS + 14 SPRING CREDIT HOURS = 28 CREDIT HOURS

CRUSH YOUR COURSEWORK

- Complete Area F in sophomore year.
- Complete GEOG 2083 in sophomore year.
- Complete faculty mentored research GEOG 4083 in your junior year.
- Take Geography Core courses when they are offered: GEOG 3643, 3800, 4553.
- Establish your concentration and take required courses as they are offered.
- Finish Core IMPACTS.

FIND YOUR PLACE

- Get involved in research and pursue internship opportunities.
- Volunteer for a leadership position in GIS and/or GTU club.
- Become an active participant and volunteer in the classroom, lab, and field trips.
- Attend a scientific conference.
- Get involved in other clubs related to your professional interests.

BROADEN YOUR PERSPECTIVES

- Take part in or help organize an implicit bias workshop.
- Dig deeper into study abroad opportunities.
- Learn a new language.
- Take part in cultural offerings on campus.

CONNECT OFF-CAMPUS

- Do volunteer work in your field.
- Ask your department about networking opportunities with alumni.
- Attend career fairs and events.
- Attend UWG sponsored events off-campus.

TAKE CARE OF YOURSELF

- Take a fitness class, climb the rock wall, or join an intramural team.
- Consider whether counseling is right for you: take a mental health screening.

PAVE YOUR PATH

- Draft your resume and attend a resume blitz.
- Learn about how to network on social media and update your Handshake profile.
- Draft your personal statement.
- Visit the graduate school to find out about graduate programs and admission requirements.

TERM 1: FALL

- GEOG/GEOL 4333** 2 CREDIT HOURS
Earth and Environmental Sciences Capstone
- GEOG 4755** 4 CREDIT HOURS
GIS Database Design
- ELECTIVE** 3 CREDIT HOURS
3000/4000 level Elective course
- ELECTIVE** 3 CREDIT HOURS
- ELECTIVE** 3 CREDIT HOURS

- MILESTONES:**
- TARGET: 105 CREDIT HOURS COMPLETED
 - COMPLETE GEOL/GEOG 4333

TERM 2: SPRING

- GEOG 4893** 4 CREDIT HOURS
Practicum in GIS
- ELECTIVE** 3 CREDIT HOURS
- ELECTIVE** 3 CREDIT HOURS
- ELECTIVE** 3 CREDIT HOURS
- ELECTIVE** 3 CREDIT HOURS

- MILESTONE:**
- TARGET: 120 CREDIT HOURS COMPLETED

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

CRUSH YOUR COURSEWORK

- Take capstone course, GEOG 4084
- Complete your research/internships.
- Present your research at geography's research night.
- Finish your degree requirements.

FIND YOUR PLACE

- Become a Geography Ambassador.
- Expand your professional network.
- Apply for internships in local industries or apply to graduate programs.
- Attend career fairs. Send your resume to one of our alumni.

BROADEN YOUR PERSPECTIVES

- Do a study abroad.
- Take some electives that fall outside your area or study.
- Explore diversity and inclusion issues in your research and/or internship.

CONNECT OFF-CAMPUS

- Ask for advice from professionals in your field of interest.
- Explore career shadowing opportunities.

TAKE CARE OF YOURSELF

- Explore a farmer's market for fresh produce.
- Develop a post-graduation exercise plan.
- Explore your loan repayment options and complete your exit counseling.

PAVE YOUR PATH

- Request references from professors and supervisors.
- Draft your resume cover letter and personal statement and revise it with career services.
- Attend business fairs and career fairs at UWG and across the state.
- Attend an interview workshop.
- Apply for graduate programs.