The Auburn Experience

About Auburn University

Located in Auburn, AL, Auburn University offers a valuable degree and a community. There's a reason why our alumni proudly call themselves members of the Auburn Family long after their time in the classroom is over. Auburn University is a *Kiplinger*'s "Best Value" institution, offering a broad spectrum of opportunities for leadership and involvement at the campus, community, and national levels

THIS IS KNOWLEDGE GUIDING ACTION. THIS IS SUSTAINABLE PROGRESS.

THIS IS AUBURN.

Contact us: workingwithnature@auburn.edu



auburn.edu/sfws

Auburn University is an equal opportunity educational institution/employer.

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Careers Managing and Analyzing Data for Effective Decision Making

Geospatial and Environmental Informatics





What is Geospatial and Environmental Informatics?

Geospatial technologies such as geographic information systems (GIS), the global positioning system (GPS), satellite-based remote sensing, and computer simulations are tools commonly used today by all sectors of the economy for planning and decision making. These technologies have penetrated every aspect of our lives, from digital maps in vehicles to the management and maintenance of city infrastructure, regional forests, and agricultural lands.

Industry and government have grown increasingly reliant on geospatial technologies to manage the interface between human activity and the environment. Geospatial technology is also used for business purposes to forecast potential markets for retail and development.



Modeling

Researchers and analysts use layers of stored geographic information to analyze historical data and simulate, or predict, future human interaction with,



Planning

Ecological models enable leaders to assess environmental impacts of policy, development, and landuse planning as the basis for future decisions.



Development

Knowledge about past and future human behaviors and their impacts on policy and regulatory practices to allow for the sustainable use of resources.



The GSEI Degree at Auburn

The Geospatial and Environmental Informatics (GSEI) degree program brings together information technology, spatial science, data analysis, natural resources, and ecological modeling that enable us to explore and apply these new technologies and science to the sustainable management of the natural world and the efficient use of resources.

The Auburn GSEI degree program is collaboratively taught by world-renowned faculty from the School of Forestry and Wildlife Sciences, and the colleges of Agriculture, Sciences and Mathematics, Engineering, and Business. They are practitioners, researchers, and business leaders whose expertise is shaping global environmental policy and business development.

The GSEI program is aligned with the interdisciplinary Science, Technology, Engineering, and Math (STEM) program of the National Science Foundation, designed to enhance knowledge across multiple fields including ecology, agriculture, geosciences, climate change, and civil engineering. This STEM approach prepares students to be successful and highly competitive in a diverse and rapidly growing job market.



Who Hires GSEI Graduates?

Industries related to this field are projected for continuous growth. Professionals with skills in GSEI-related areas will be in high demand for collecting, collating, modeling, analyzing, visualizing, and communicating geospatial information.

Graduates can anticipate a wide variety of career opportunities within public agencies and government, private corporations, consulting firms, NGOs, and other international organizations as:

- Data and information specialists
- GIS/GPS field technicians
- Ecosystem modelers

- Business analysts
- Environmental consultants

