



Distance Education

## Environmental Geospatial Technologies Bachelor's Degree (2020-2021)

The B.S. in Environmental Geospatial Technologies focuses on professional and applied Geographic Information Systems (GIS). Geospatial technology is one of the fastest growing industries and can be applied to multiple disciplines, ranging from environmental sustainability to emergency response. Students will complete applied, project-based coursework and a senior capstone project tailored to the professional skills required to further the student's career.

Graduates of the B.S. in Environmental Geospatial Technologies will be able to:

1. Create, organize, understand and analyze geospatial data.
2. Identify and quantify environmental geospatial patterns.
3. Create local, regional, and global solutions to environmental problems with geospatial technology.
4. Develop GIS workflows and solutions based on the environmental needs.
5. Collect and analyze data from various geospatial sources.
6. Critically evaluate information using scientific and quantitative reasoning skills.
7. Demonstrate proficiency in written, oral, and interpersonal communication, and in critical thinking.

### Program Core

CIST 101 Introduction to Coding for Environmental Applications

COMM 303 Communicating to Stakeholders

ENVS 301 Building Sustainable Communities

GISC 101 Introduction to Geographic Information Systems (GIS)

GISC 201 Geographic Information Systems for a Changing World

GISC 301 Applied Spatial Analysis and GIS Application

GISC 303 Conservation Cartography and Visualization

GISC 305 Environmental Impact Using Remote Sensing

GISC 307 Field Data Collection for GIS

GISC 401 Advanced GIS for Environmental Solutions

### Environmental Professional Core

EVPC 101 Professional Skills

EVPC 201 Environmental Issues: Deforestation, Biodiversity Loss, and Overpopulation **OR**

EVPC 202 Environmental Issues: Energy, Water Scarcity, and Waste

EVPC 301 Environmental Justice **OR**

EVPC 305 Building a Better World: Ethical Decision-Making

EVPC 401 Transformational Leadership

EVPC 490 Transdisciplinary Capstone

**General Education Core**

BIOL 103 Biology: Foundations of Life

BIOL 104 Biology: Foundations of Life Laboratory

BIOL 105 Biological Diversity, Ecology, and Evolution

BIOL 106 Biological Diversity, Ecology, and Evolution Laboratory

ENVS 201 The Warming Planet: Understanding Climate Change

MATH 101 College Algebra for Environmental Professionals

MATH 201 Statistics for Environmental Professionals

PSYC 101 Introduction to Psychology

An Arts course

2 Communication courses

A Humanities course

A Language course

**General Electives**

40 credits of general electives

College Wide Requirements: *A minimum of 120 earned credit hours, 30 credits at the 300 level or above, a minimum of 30 credits earned at Unity, and an overall cumulative GPA of 2.0 or above*