Bachelor of Science in Environmental, Sustainability, and Geographic Studies

Careers in ESGS - Students who complete the B.S. in Environmental, Sustainability, and Geographic Studies degree at Western Kentucky University will be able to pursue careers that include the following:

- Environmental Management
- GIS, Planning, and Development
- Broadcast Meteorology
- Resource Sustainability
- Social and Cultural Analysis
- Diplomatic Service
- Business, Industry, and Tourism

Students who enter graduate school and pursue a M.S. or Ph.D. in the Geosciences will be able to pursue careers that include the following:

- University professor
- Geospatial research
- Sustainability and Environment
- Planning and GIS
- Consulting

WKU is home to CHNGES, an interdisciplinary research group that aims to better understand landscape/atmosphere/water/human interactions. The Institute, directed by Drs Polk and North, involves students in all aspects of this work to increase their critical thinking skills and technical expertise in the environmental discipline and to prepare them for success in a global society. Other research clusters include cultural geography, environment and sustainability, climate, planning and GIS, and physical geography.

WKU has been home to the Kentucky Climate Center since 1978, and the Kentucky Mesonet since 2005. The Kentucky Climate Center is the State Climate Office for Kentucky and home to the State Climatologist, Dr. Stuart Foster. The mission of the Kentucky Climate Center is to conduct research and disseminate information of climatic variability and change, influences of the natural environment upon human activity, and impacts of human activity upon the natural environment.

Facilities at Western Kentucky University

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B.S. in Environmental, Sustainability, and Geographic Studies at WKU

The B.S. in Environmental, Sustainability, and Geographic Studies degree requires a minimum of 53 semester hours of GIS and geography courses, plus supporting coursework. A minor or second major is NOT required. Students majoring in ESGS learn the concepts and skills necessary for a variety of career opportunities that require a solid foundation in spatial thinking and analysis.

Why Major in ESGS?

- ESGS offers a broader knowledge base than any other single discipline;
- ESGS offers a global perspective or world view on place and society;
- ESGS focuses on human-environment relationships and variations in environmental quality;
- ESGS has the tools to analyze and manage space effectively and successfully;
- The ESGS degree is holistic, in that it combines both the human and physical aspects of place and space.

B.S. in ESGS Curriculum

Core requirements (32 credit hours)
- GEOG/L 103 or GEOL 111 or METR 121 Physical Geography
- GEOG 110 World/Regional Geography
- GEOG 280 Intro to Environmental Science
- GEOG 300 Writing in the Geosciences
- GEOG 316 Fundamentals of GIS
- GEOG 317 GIS
- GEOG 380 Global Sustainability
- GEOG 391 Spatial Data Analysis
- GEOG 452/475/495 Internship or Practicum
- GEOG 499 Professional Development

Professional Courses (21 credit hours)
Custom-designed electives to meet each student's career goals:
- Karst Geoscience and Water Resources
- Environmental Science and Climate
- Tourism and Development
- Cultural Geography - Spatial Science

Other requirements (6 or more hours)
- MATH 116 Algebra
- MATH 183 Statistics (prereq for GEOG 391)

Other additional requirements exist advanced coursework. Speak to an advisor about your elective course options. See a sample 4-year degree program on our website at http://www.wku.edu/geoweb/documents/esgs-fouryearplan.pdf

Why focus on Environmental, Sustainability, and Geographic Studies at Western Kentucky University?

The B.S. in ESGS program at WKU is the largest such program in Kentucky or Tennessee. Students can become more directly involved in faculty-sponsored research, with opportunities for co-authorship of peer-reviewed research articles, and presentation of re-search results at professional meetings, conferences, and workshops.

Faculty research a variety of human-environment issues that both inform the coursework students take and provide students with opportunities to engage in a number of projects that directly influence the human condition.