MASTER OF ARTS IN THE FIELD OF ENVIRONMENTAL RESOURCE POLICY AND GRADUATE CERTIFICATE IN GEOGRAPHICAL INFORMATION SYSTEMS

The combined master of arts in environmental resource policy (ENRP) degree and graduate certificate in geographical information systems (GIS) program offers a multidisciplinary approach to environmental and sustainability studies, blending theory and practical experience with a curriculum that includes environmental economics, environmental law, public policy, research methods, and environmental science. Elective courses can be taken in almost any department at the University, including, but not limited to, biology, chemistry, geography, international affairs, public policy, economics, political science, engineering management and systems engineering, business administration, and public health. Students graduate prepared to enter environmental policy careers in government, nonprofit organizations, the private sector, and environmental advocacy groups. The GIS certificate curriculum guides students through all aspects of GIS theory and practice, from the science of cartography to analyzing geographical statistics to database design and geospatial modeling. Students are equipped with a solid grounding in geospatial theory and techniques as well as its practical applications.

REQUIREMENTS

The MA in Environmental Resource Policy requires 36 credits of appropriate graduate-level course work. Course work usually takes four semesters to complete on a full-time basis, and six to eight semesters on a part-time basis. Course work is divided into 24 credits of core requirements (eight courses) and 12 credits of electives (typically four courses).

REQUIRED COURSES:

- ENRP 6101          Environmental Science I – Physical Sciences (Year 1, Fall)
- ENRP 6102          Environmental Science II – Life Sciences (Year 1, Spring)
- ENRP 6140          Introduction to Environmental Law (Year 1, Spring)
- PPPA 6017          Introductory Microeconomics for Public Policy (Year 1, Spring)
- ECON 6237          Economics of the Environment and Natural Resources (Year 2, Fall)
- PPPA 6006          Policy Analysis (Year 1, Fall, Spring, or Summer)

ELECTIVES:

- PPPA 6002          Research Methods & Applied Statistics (Year 1, Fall or Spring)
- ENRP 6298          Capstone Course (Year 2, Spring)

GIS CERTIFICATE PROGRAM REQUIREMENTS

The Certificate program requires the completion of 12 graduate credits (typical). Students will take 2 required courses (GEOG 6304 (GIS I), GEOG 6305 (Geospatial Statistics), and 2 elective classes.

REQUIRED COURSES:

- GEOG 6304: GIS I (Fall, Spring, Summer)
- GEOG 6305: Spatial Statistics (Fall, Spring)

ELECTIVES:

- GEOG 6306: Advanced Geospatial Analysis (Spring) (Prerequisite: GEOG 6304)
- GEOG 6307: Digital Image Processing (Spring) (Prerequisite: GEOG 6303, GEOG 6304 & GEOG 6305)
- GEOG 6308: Programming for geographic applications (Fall) (Prerequisite: GEOG 6304 & GEOG 6305)
- GEOG 6309: GIS for Emergency Management (Fall) (Prerequisite: GEOG 6304)
- GEOG 6310: Geo-visualization & Cartography (Fall) (Prerequisite: GEOG 6304)
- GEOG 6311: Open Source GIS (Spring) (Prerequisite: GEOG 6304)