
Environmental Information Systems

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Environmental Information Systems

The cross disciplinary minor in environmental information systems is designed for undergraduates interested in using computer and information management technology to solve environmental problems and improve environmental stewardship. Some examples of environmental information systems are database systems to track and report hazardous materials in factories, decision support systems to facilitate risk analysis and management, GIS-based natural resource inventory systems and automated business management systems to support and document environmental compliance.

The environmental information systems minor requires a minimum of 25 credit hours². Core courses are intended to ensure knowledge of the foundation disciplines. Electives should be chosen in consideration of the student's particular interests within the general field of environmental information systems. At least one elective course must be outside of the student's major. Students are advised to check prerequisites of listed courses.

Required Courses	Credit Hours
Core Courses	17
CS 139 . Algorithm Development ¹	
ISAT 340 . Software Development ¹	
ISAT 320 . Fundamentals of Environmental Science and Technology I ²	
ISAT 321 . Fundamentals of Environmental Science and Technology II	
GEOG 215 . Geospatial Tools I – Cartography and GIS ¹	
Elective Courses	8
CIS/BSAN 364 . Decision Support Systems	
CS 239 . Advanced Computer Programming ¹	

[CS 474](#). Database Design and Application¹
[GEOG 216](#). Geospatial Tools II – Remote Sensing and GPS
[GEOG 366](#). Introduction to Geographic Information Science
[GEOG 385](#). Principles of Remote Sensing
[GEOG 466](#). GIS and Geographic Databases
[ISAT 341](#). Modeling and Simulation
[ISAT 420](#). Environmental Analysis and Modeling
[ISAT 426](#). Environmental Information Systems

25²

1 Or equivalent by permission of director.

2 Students who have successfully completed [ISAT 320](#) prior to fall 2016 will receive 3 credits for [ISAT 320](#); if that is the case, the environmental information systems minor requires a minimum of 24 credit hours.

Note: [ISAT 252](#) or [CIS 221](#) substitute for [CS 139](#); [CIS 331](#) substitutes for [CS 239](#); [CS 474](#) substitutes for [ISAT 340](#); [ISAT 340](#) or [COB 204](#) substitute for [CS 274](#); [CIS 330](#) substitutes for [CS 474](#).