

Required Courses	Credit Hours
Select four or five courses from the offerings of at least two departments:	12-15
ENG 391. Introduction to Creative Writing – Nonfiction	
ENG 392. Introduction to Creative Writing – Poetry	
ENG 393. Introduction to Creative Writing – Fiction	
ENG 412. Special Topics Seminar (when topic is appropriate)	
ENG 493. Creative Nonfiction	
ENG 494. Advanced Poetry Writing	
ENG 495. Advanced Fiction Writing	
SMAD 250. Scriptwriting (subject to availability)	
SMAD 251. Screenplay Writing	
SMAD 311. Feature Writing	
SMAD 340. Advanced Screenplay Writing	
SMAD 498. Senior Seminar (when topic is appropriate)	
THEA 347. Playwriting (may be taken as ENG 347)	
THEA 440. Seminar in Theatre (when topic is appropriate)	
Select one or two courses from the following:	3-6
ENG 302. Special Topics (when topic is appropriate)	
ENG 412. Special Topic Seminar: Image and Text in Art and Poetry	
ENG 483. Narrative Form	
ENG 484. Poetic Craft and Creativity	
ENG 496. Advanced Topics in Creative Writing	
SMAD 373. Media Analysis and Criticism	
SMAD 463. Film Adaptations	
THEA 481. Theory and Performance Studies	

Criminal Justice

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The interdisciplinary minor in criminal justice is designed for students who are preparing for careers in law enforcement, corrections, judicial administration or other areas related to the study or management of crime, either directly upon graduation or after further graduate training. The requirement for a minor in criminal justice is 21 credit hours including:

Required Courses	Credit Hours
Choose two of the following:	6
CRJU 215. Introduction to Criminal Justice	
SOCI/JUST 325. Criminology	
PSYC 250. Introduction to Abnormal Psychology (Non PSYC majors only) or PSYC 335. Abnormal Psychology (PSYC majors)	
Choose five from the following: (Courses must be in at least two different academic disciplines)	15
PHIL 325. Crime, Punishment and Justice	
POSC 326. Civil Rights	
PSYC 250. Introduction to Abnormal Psychology (Non PSYC majors) or PSYC 335. Abnormal Psychology (PSYC majors)	
PSYC 312. Forensic Psychology	
CRJU 215. Introduction to Criminal Justice	
CRJU 328. Criminal Procedure	
CRJU 329. Criminal Investigation and Evidence	
JUST 327. Criminal Law	
JUST 323. Comparative Criminal Justice	
SCOM 231. Introduction to Alternative Dispute Resolution	
SCOM 331. Communication and Conflict	
SOCI 214. Social Deviance	
SOCI/JUST 325. Criminology	
SOCI 327. Juvenile Delinquency	
SOCI 330. Corrections	

Any one of the following may be taken as an elective¹:

POSC 495. Internship in Political Science
 PSYC 495. Field Placement in Psychology
 PPA 496. Internship in Public Management
 SOCI 485. Internship in Sociology

Any one of the following may be taken as an elective²:

PSYC 402. Independent Research in Psychology
 SOCI 490. Special Studies in Sociology

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1 Internships must be in a criminal justice-related field in order to receive credit for the criminal justice minor. Credit for only one internship will be given toward the minor.
 2 Readings and research courses must be specifically related to the field of criminal justice. Students may register for only one readings and research class for credit toward the minor.

Transfer Credit

A maximum of three courses may be transferred into the criminal justice minor from other institutions. No transfer credit will be given for any course offered in the minor at the 300 or 400 level.

Environmental Information Systems

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The interdisciplinary 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 24 credit hours. 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	
CS 139. Algorithm Development1	4
CS 274. Introduction to Databases1	3
ISAT 320. Fundamentals of Environmental Science and Technology I	3
ISAT 321. Fundamentals of Environmental Science and Technology II	3
GEOG 215. Geospatial Tools I—Cartography and GIS1	3
Elective Courses	
CIS/MS 364. Decision Support Systems	3
CS 239. Advanced Computer Programming ¹	4
CS 474. Database Design and Application ¹	3
GEOG 216. Geospatial Tools II—Remote Sensing and GPS	3
GEOG 366. Introduction to Geographic Information Science	3
GEOG 385. Principles of Remote Sensing	4
GEOG 466. GIS and Geographic Databases	3
ISAT 341. Modeling and Simulation	3

ISAT 420. Environmental Analysis and Modeling	3
ISAT 426. Environmental Information Systems	3
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¹ Or equivalent by permission of director.

Note: ISAT 242 and CIS 221 substitute for CS 139; CIS 331 substitutes for CS 239; ISAT 340 and COB 204 substitute for CS 274; CIS 330 substitutes for CS 474.

Environmental Management

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The interdisciplinary environmental management minor prepares students to apply the principles of environmental science and engineering to contemporary environmental problems in natural resource, industrial and public policy contexts. The minor is particularly suitable for students interested in professional careers in industrial environmental management, natural resources management, and environmental policy and planning. After fulfilling prerequisite requirements in biology and statistics, students pursue the minor by completing core courses and electives.

The environmental management minor strives to develop graduates who can apply science and technology to a broad range of practical environmental problems in a variety of professional settings. Students completing the minor are expected to be literate and competent in the sciences and mathematics underlying environmental problem-solving.

The environmental management minor requires a total of 29 credits, including prerequisite courses. The prerequisites must have been completed successfully before the student may be enrolled in the environmental management minor. Prerequisite courses may be fulfilled as part of the student's major. At least one elective course must be outside of the student's major.

Prerequisites	Credit Hours
BIO 124. Ecology and Evolution	4
Three hours from one of the following:	3
MATH 220. Elementary Statistics	
GISAT 251. Topics in Statistics for ISAT	
MATH 285. Data Analysis	
MATH 318. Introduction to Probability and Statistics	
MATH 307. Principles of Probability and Statistics	

Required Courses	Credit Hours
ISAT 320-321. Fundamentals of Environmental Science and Technology I-II	6
CHEM 221. Concepts of Organic Chemistry ¹	3
ISAT 302. Instrumentation and Measurement of the Environment	1
ENVT 400. Capstone Seminar	3
Concentration	
See descriptions below	9
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¹ May also be fulfilled by CHEM 341-342 sequence

Concentrations

Students completing the environmental management minor must concentrate in one of the three areas described below: natural resources, industrial systems or environmental policy. Students should be aware that some of the listed courses may have additional prerequisites.

Natural Resources

ISAT 424. Natural Resource Management

Choose two of the following courses:

- BIO 456. Landscape Ecology
- BIO 457. Biological Applications of Geographic Information Systems
- BIO 459. Freshwater Ecology
- BIO 465. Environmental Toxicology
- CHEM 354. Environmental Chemistry Field Camp
- CHEM/GEOL 355. Geochemistry of Natural Waters
- GEOG 340. Biogeography
- GEOG 341. Wilderness Techniques
- GEOG 342. Management and Protection of Natural Resources
- GEOG 343. Wildlife Management
- GEOL 340. Soils and Land Use
- ISAT 420. Environmental Analysis and Modeling
- ISAT 425. Environmental Hydrology
- ISAT 429. Sustainability: An Ecological Process

Industrial Systems

ISAT 422. Environmental Management

Choose two of following courses:

- HTH 352. Environmental Health
- HTH 450. Epidemiology
- ISAT 423. Environmental Remediation
- ISAT 427. Industrial Hygiene
- ISAT 428. Industrial Ecology

Environmental Policy

ISAT 422. Environmental Management or

ISAT 424. Natural Resource Management

ISAT 421. Environmental Policy and Regulation

One of the following courses:

- BIO 465. Environmental Toxicology
- ECON 305. Environmental Economics
- ECON 340. Economics of Natural Resources
- GEOG 325. Environmental Ethics
- GEOG/ISAT 429. Sustainability, An Ecological Process
- HIST 427. US Environmental History
- ISAT 420. Environmental Analysis and Modeling
- ISAT 423. Environmental Remediation
- ISAT 471. Transportation: Energy, Environment, and Society
- ISAT 472. Transportation: Air Quality Monitoring and Regulation
- SCOM 354. Communication, Environment, and Environmentalism
- SOCI 311. Sociology of the Environment

Other courses may apply to the concentration by permission of the coordinator.

Environmental Science

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The environmental science minor is a multidisciplinary program that can be elected by any student. For example, students pursuing programs ranging from the physical, natural or social sciences, to education, journalism, or business, all benefit from this broadly based environmental curriculum. The program draws from courses that focus on the application of scientific concepts and principles to the understanding of environmental problems and their solutions. The minor draws upon the expertise of faculty in the areas of biology, chemistry, geography, physics, and integrated science and technology.