Institutions 3
Law and Procedure 3
Institutions 3

CRJU 321. Criminalistics
JUST 327. Criminal Law
CRJU 328. Criminal Procedure
CRJU 329. Criminal Investigation and Evidence

JUST 330. Corrections
CRJU 335. Law Enforcement
CRJU 337. Courts and the Judiciary
CRJU 340. Administration in Criminal Justice

Choose two additional courses from those listed above or from the following:
CRJU 361. Special Topics in Criminal Justice
CRJU 401. Internship in Criminal Justice

Environmental Information Systems
Dr. Steven P. Frysinger, Coordinator
Phone: (540) 568-2710 Email: frysinsp@jmu.edu
Website: http://www.jmu.edu/EnvironmentalInfoSys

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 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 16
CS 139. Algorithm Development 1
ISAT 340. Software Development 1
ISAT 329. Fundamentals of Environmental Science and Technology I
ISAT 321. Fundamentals of Environmental Science and Technology II
GEOG 215. Geospatial Tools I – Cartography and GIS 1
Elective Courses 8
ISAT 252. Decision Support Systems 2
CIS 239. Advanced Computer Programming 1
CS 474. Database Design and Application 1
GEOG 216. Geospatial Tools II – Remote Sensing and GIS
GEOG 386. Introduction to Geographic Information Science
GEOG 389. 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

1 Or equivalent by permission of director.
Note: ISAT 252 or ISAT 221 substitute for CS 139; CS 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.

Environmental Management
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The cross disciplinary 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.

The environmental management minor strives to develop graduates who can apply science and technology to a broad range of practical environmental problems in professional settings. Students 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:
ISAT 251. Topics in Statistics for ISAT
MATH 220. Elementary Statistics
MATH 285. Data Analysis
MATH 318. Introduction to Probability and Statistics

Required Courses
Credit Hours