MS in Earth, Environmental and Physical Sciences

Admission

Applicants for admission to the EEPS master's program should have a bachelor's degree in any field of natural sciences. However, applicants with a bachelor's degree outside the field of natural sciences are also encouraged to apply for conditional admission. Motivated candidates can make up background deficiencies early in their EEPS study before gaining full-standing status in the program.

All applicants also need to meet the general admission requirements of the Graduate School, which can be found in the Admission to Graduate Study section of this catalog or at the Graduate School website (http://wichita.edu/gradschool/)¹.

Upon admission, applicants need to consult with the graduate coordinator of EEPS to evaluate background deficiencies, if any, and to establish a plan of study that best suits the applicant's goals. A master's degree in EEPS requires satisfactory completion of coursework and/ or research, which will ensure that students take advantage of the multidisciplinary/interdisciplinary nature of the program.

¹ Link opens new window.

Program Requirements

Coursework must include at least 18 credit hours of 700–899 courses, among which at least 8 credit hours must be EEPS required courses (including 2 credit hours of EEPS 700). The required courses focus on methodologies, critical and creative thinking in scientific research, and issues common to geology, physics, environmental science and related disciplines. To further benefit from the interdisciplinary nature of the program, students are encouraged to take courses in different disciplines and other supporting courses.

To meet the requirements of differing career goals, students may choose a thesis, internship or nonthesis option for degree completion. The thesis and internship topic may be in geology, environmental science or physics; such activity may be interdisciplinary, involving two or more fields.

Thesis Option

Thesis research is recommended for students who will pursue PhD study or seek professional employment after graduation. Students choosing thesis research must present a research proposal to the EEPS faculty to ensure that the research has merit and can be completed in a reasonable period of time. After completing the written thesis, the student must give it a public oral defense.

Course	Title	Hours
Required Courses		
Take the following course twice:		2
EEPS 700	Technical Sessions	
EEPS 701	Computer Methods in Science	3
EEPS 702	Research Methods	1
EEPS 721	Current Issues in Global Environmental Science	3
Additional Courses		
Select 15 credit hours in additional courses 700 or above		
Thesis		
Select a maximum of 6 thesis credit hour	6	
Total Credit Hours		30

Internship Option

Students wishing to gain interdisciplinary and/or professional skills in the fields covered by the EEPS program can participate in applied and/or basic research internship projects with industry or government agencies. Enrollment in internship projects requires an approved proposal. Completion of an internship for graduation requires a formal oral presentation of the internship activity and a written report.

Course	Title	Hours
Required Courses		
Take the following course twice	::	2
EEPS 700	Technical Sessions	
EEPS 701	Computer Methods in Science	3
EEPS 702	Research Methods	1
EEPS 721	Current Issues in Global Environmental Science	3
Additional Courses		
Select 18 credit hours in additional courses 700 or above		18
Internship		
Select a maximum of 6 internship credit hours		6
Total Credit Hours		33

Nonthesis Option

This option is an alternative to thesis research or internship for degree requirements. Two plans of study are available under this option:

PlanA

Students are not required to take research courses, and a total of 36 credit hours is required. This plan is recommended for students who do not desire a career in industry or postsecondary education.

Course	Title	Hours
Required Courses		
Take the following course twice:		2
EEPS 700	Technical Sessions	
EEPS 701	Computer Methods in Science	3
EEPS 702	Research Methods	1
EEPS 721	Current Issues in Global Environmental Science	3
Additional Courses		
Select 27 credit hours in additional courses 700 or above		27
Total Credit Hours		36

Plan B

Students are required to take research courses and conduct research under the supervision of an EEPS faculty member. A faculty-reviewed, final report is required.

Course	Title	Hours
Required Courses		
Take the following course twice	2:	2
EEPS 700	Technical Sessions	
EEPS 701	Computer Methods in Science	3
EEPS 702	Research Methods	1
EEPS 721	Current Issues in Global Environmental Science	3
Additional Courses		
Select 21 credit hours in additional courses 700 or above		
Research		
Select a maximum of 3 research credit hours		
Total Credit Hours		33

Applied Learning

Students in the MS in Earth, environmental and physical sciences program are required to complete an applied learning or research experience to graduate from this program. The requirement can be met by taking EEPS 700. Successful completion of this course serves as fulfillment of the university's applied learning/research experience requirement.