

ENVIRONMENTAL SCIENCE (MS)

The graduate program in Environmental Science (ENS) is an extension and builds off of the college's current A.S. and B.S. programs. The program description for the B.S. program states that it:

... is designed to provide students with a background sufficient to make them competitive in the workplace for careers in environmental science, natural resource management, wildlife management, and other science-related disciplines. The program will prepare students to conduct scientific research using methodology necessary to attain results that will be used for science-related, managerial decisions.

The graduate program will build upon the objectives of the B.S. program by allowing students to gain greater skills in specific areas.

Admissions Requirements

Potential students must submit an application package by the application deadline April 30th. Interested individuals will be encouraged to visit SBC and the ENS (Environmental Science) faculty before applying to the graduate program.

Requirements of Application Package

1. Complete an application for enrollment at SBC
2. Official transcripts from all previous colleges and universities
3. Three (3) Letters of Recommendation
4. Curriculum Vitae
5. Letter of Intent – In this letter, the applicant should discuss research interests, academic goals, career goals, and reasons for wanting to attend graduate school. The applicant should discuss how previous work, academic, and personal experiences have prepared them for graduate education and have shaped their research interests.

Applications that are missing any of the above requirements will not be reviewed. All information can be sent to the

Office of the Registrar
9299 Highway 24
Fort Yates, ND 58538.

Criteria for Admissions

1. Completion of a Bachelor's degree in Environmental Science or related field by the spring semester in which applying.
2. Cumulative GPA of 3.0 or higher
3. Demonstration of readiness for graduate school and scientific research – should be revealed in Letter of Recommendations, CV, and Letter of Intent
4. Students with poor GPAs or GRE scores should still apply. Applicants should use the Letter of Intent and CV to highlight academic and career accomplishments. Students with a good record of research and work experience may still be accepted even though the cumulative GPA or GRE scores are lower than the admission standards.

Pre-Admission

Applicants that meet the admissions criteria will be asked to interview with ENS faculty before final acceptance into the ENS graduate program

is approved. In interviews with ENS faculty, both the applicant and the faculty will determine if the ENS graduate program is a good fit for the applicant. During the interviews, the applicant can ask questions about the program and research projects. Faculty can further determine if the student is truly prepared for graduate school at SBC.

Special Notes

SBC will be offering the Master's in ENS using a cohort model. Therefore, admission will be on a competitive basis. The first cohort will focus on water quality for field research, so it is highly suggested that applicants have an interest in working in this area.

The program will be offering courses during the day and evening and the program will require an extensive amount of research/field time. It is anticipated that the program will take between two to three years to complete. Therefore, it is highly encouraged that selected participants not hold full-time employment during this period. If the participant does have full-time employment it is highly encouraged that a commitment is received from their employer understanding that the participant will be required to take course(s) and do research/field time during working hours. Half time assistantships may be available for participants in the program, depending on grant funds.

The student will show competency and mastery in the following skill sets associated with environmental sciences:

1. The student will develop scientific critical thinking skills.
2. The student will demonstrate the ability to articulate knowledge of environmental science, methodologies, and policy both in writing and orally.
3. The student will synthesize a cogent research thesis inclusive of appropriate statistical analysis.
4. The student will demonstrate an understanding of Native Science as it relates to the Lakota/Dakota culture, while maintaining the balance with and the integrity of Western Science.

Code	Title	Hours
Core Requirements		
ENS 500	Graduate Research Seminar	2
ENS 511	Advanced Experimental Design	3
ENS 515	Advanced Statistics	3
ENS 520	Advanced Techniques in GIS	3
ENS 542	Environmental Policy & Resource Management	3
ENS 545	Applying Native American Culture to Natural Resource Management	3
ENS 550	Conservation Biology	3
ENS 600	Graduate Research & Thesis	6-9
Specialization/Emphasis Courses		
Select a minimum of 12 credits of the following:		12
ENS 522	Advanced Remote Sensing & Digital Image Processing	
ENS 530	Limnology	
ENS 532	Watershed Analysis	
ENS 552	Avian Ecology	
ENS 554	Grassland Ecology	
ENS 556	Ecology of Invasive Species	
ENS 558	Restoration Ecology	
ENS 560	Advanced Water & Soil Biogeochemistry	

ENS 562	Microbial Ecology
ENS 570	Climate Change
ENS 572	Environmental Water Quality
ENS 580	Advanced Water Sampling Techniques
ATSC 520	Atmospheric Chemistry
ATSC 528	Atmospheric Data Analysis
ATSC 535	Measurement Systems
ATSC 565	Air Quality
Total Hours	38-41