

MASTER OF NATURAL SCIENCES EDUCATION, PLAN C (M.N.S.E.)

The Master of Natural Sciences Education, Plan C (M.N.S.E.) is an online degree program designed for:

- Current science teachers with a desire to learn new pedagogical techniques that contribute to student learning and engagement;
- Current science teachers who want the flexibility to teach other natural science disciplines by enhancing their knowledge in biology, chemistry, physics, Earth science, and environmental science;
- Current non-science teachers with a natural science undergraduate degree who would like to pursue science teaching positions;
- Current non-science teachers with a related undergraduate degree (computer science, agriculture, engineering) and a strong science background who would like to pursue science teaching positions; and,
- Individuals with strong science backgrounds and past or current experience in educational settings who would like to earn a master's degree in science education and separately pursue a teaching certification.

Requirements Effective Fall 2021

Code	Title	Credits
OPTION 1:		
Education Courses		
EDRM 602	Action Research	3
EDUC 619 or NSCI 612	Curriculum Development Myth Busters – Science/Controversy/Evaluation	3
EDUC 660	Advanced Methods-Science and Math Instruction	3
Natural Science Courses		
Select at least 18 credits from the following:		18-19
NSCI 619A	Physics for Educators: Optics	
NSCI 619B	Physics for Educators: Mechanics	
NSCI 620	Chemistry for Science Educators	
NSCI 630	Spectroscopy for Science Educators	
NSCI 640	Energetics for Science Educators	
NSCI 650	Pollution and Environmental Biology for Educators	
NSCI 660	Evolutionary Biology for Educators	
NSCI 670	Earth Sciences for Educators	
STAR 511	Design and Data Analysis for Researchers I	
Independent Study		
NSCI 695	Independent Study for the MNSE ¹	3
Program Total Credits:		30-31

Code	Title	Credits
OPTION 2:		
Education Courses		
EDRM 602	Action Research	3

EDUC 619 or NSCI 612	Curriculum Development Myth Busters – Science/Controversy/Evaluation	3
EDUC 660	Advanced Methods-Science and Math Instruction	3
Natural Science Courses		
Select at least 15 credits from the following:		15-16
NSCI 619A	Physics for Educators: Optics	
NSCI 619B	Physics for Educators: Mechanics	
NSCI 620	Chemistry for Science Educators	
NSCI 630	Spectroscopy for Science Educators	
NSCI 640	Energetics for Science Educators	
NSCI 650	Pollution and Environmental Biology for Educators	
NSCI 660	Evolutionary Biology for Educators	
NSCI 670	Earth Sciences for Educators	
STAR 511	Design and Data Analysis for Researchers I	
Research		
NSCI 698	Research Experience in Natural Sciences ²	6
Program Total Credits:		30-31

¹ The independent study requires enrollment in the summer session after completing the program's course requirements. It involves weekly meetings of the student with her/his research advisor, but does not require full-time residency on campus.

² The research experience requires full time enrollment in the summer session after completing the program's course requirements. Instructors are graduate student advisors who hold regular faculty appointments in the Departments of Biology, Chemistry, or Physics.