Overview

Your educational background and the pursuit of coursework beyond an undergraduate degree is important to school districts when they consider which teachers to retain, promote, and offer a pay increase. A master’s degree is also a useful way to enhance your professional expertise by building on your prior teaching experience. Earn your education masters degree within a program created specifically for current and aspiring natural science teachers.

During this master’s in science education program, you will:

- Expand your natural science knowledge in the areas of biology, chemistry, physics, and environmental science for use in middle and high school classrooms
- Immerse yourself in coursework related to curriculum development, instructional theory, and pedagogy
- Advance your instructional skills with coursework that explores classroom management, presentation skills, communication, and discipline
- Discover hands-on teaching tools and lesson enhancements that can be brought into the classroom immediately
- Use Science Lab Kits created specifically for individual courses within the program, then implement the experiments within your own classroom.
- Earn a master’s in science education while living—and working—anywhere in the world
- Depending on the degree option you choose, enhance your research skills and understanding of the methodology scientists use or immerse yourself in the literature of your chosen natural sciences discipline.

Courses within the Master of Natural Sciences Education (M.N.S.E.) apply toward certification, licensure, and/or endorsements necessary to teach within every state in the United States. Review the certification requirements to teach secondary sciences within your state. Courses are also applicable to teach internationally in those countries that require certification.

Colorado State University graduates more individuals in STEM disciplines (science, technology, engineering, and mathematics) than any other Colorado campus, and prepares more STEM teachers than any other university in the state.

Contact our Student Success Team to get started! (970) 492-4898 online.colostate.edu/contact

I've enjoyed the MNSE program because it gave me a chance to continue my education while teaching. The labs and lecture material are practical and useable in class. I felt comfortable teaching [the labs] since I had already tried [them] as a student. Ideas presented in the program are specifically catered toward high school curricula; they are a supplement to what teachers are already doing.

Lindsay Martin
Graduate
Minimum Admission Requirements

- A bachelor’s degree in a science or science-related discipline from a regionally accredited institution
- A 3.0 GPA in undergraduate coursework (Exceptions may be made for students who are applying through Track II Admission)
- Be a practicing instructor and/or licensed educator; applicants with strong science backgrounds and a desire to become educators are considered for admission on a provisional basis.
- GRE test scores are not required

Completion Requirements

- A minimum of 30 credits for the research option and 31 credits for the coursework option
- 24 graduate level credits, 500-level or above, must be earned at Colorado State University; 21 of which must be earned after formal admission

Curriculum

The Coursework Option requires you complete an additional natural science course and independent study in lieu of a research project, which is a requirement of the Research Option.

All science-related coursework is tailored for teachers and focuses on how you can incorporate lessons into your own classroom.

Education Courses (9 credits)

- EDRM 602 – Action Research (3 cr.)
- EDUC 619 – Curriculum Development (3 cr.)
- EDUC 660 – Advanced Methods – Science and Math Instruction (3 cr.)

Natural science courses (15-18 credits)

- NSCI 580A1 – Myth Busters: Science/Controversy/Evaluation (3 cr.)
- NSCI 619 – Physics for Science Educators (3 cr.)
- NSCI 620 – Chemistry for Science Educators (3 cr.)
- NSCI 630 – Spectroscopy for Science Educators (3 cr.)
- NSCI 640 – Energetics for Science Educators (3 cr.)
- NSCI 650 – Pollution and Environmental Biology for Educators (3 cr.)
- NSCI 660 – Evolutionary Biology for Educators (3 cr.)
- STAT 511 – Design and Data Analysis for Researchers I (4 cr.)

Coursework Option:

Independent study (3 credits)

Focus on an advanced area of interest.
- NSCI 695 – Independent Study for MNSE (3 cr.)

Research Option:

Research (6 credits)

Develop and complete research in your preferred science discipline
- NSCI 698 – Research Experience in Natural Sciences