

Student ID: \_\_\_\_\_ Student Name: \_\_\_\_\_

Adviser Name: \_\_\_\_\_

Catalog: 2015-16 Northeastern State University Graduate  
Catalog Program: Science Education M.Ed. **with Endeavor  
STEM Certificate Option**- Major Code 7720 Minimum  
Credits Required: \_\_\_\_\_

## Science Education M.Ed. **with Endeavor STEM Certificate Option** - Major Code 7720

### SCIENCE EDUCATION

(Online Program)

(36 Semester Hours)

#### Purpose

The purpose of the M.Ed. in Science Education program is to enable K-12 teachers to become highly qualified teachers of science. The program requirements meet the needs of teachers who hold bachelor degrees in secondary science education, a science discipline, mathematics, elementary education, early childhood education, or special education and teachers who hold alternative certification. The program consists of 12 hours of Professional Education Core, 6 hours of Science Content Core, 12 hours of Endeavor STEM coursework and 6 hours of Capstone, 3 of which are provided by Endeavor. The Master of Education in Science Education is administered through the College of Science and Health Professions and is offered completely online.

#### Admission to the Program

The minimum requirements for regular admission to the Graduate College are:

An earned bachelor's degree from an accredited college or university.

Scores no more than five years old on either the Miller Analogies Test (MAT) or the Graduate Record Exam (GRE).

A grade point average of at least 2.5 based on a 4.0 scale on all undergraduate course work attempted.

Proof of citizenship for a U.S. citizen born outside of the United States and for a resident alien. An international applicant for whom English was their first language and is the spoken language in the home must sign a statement to that effect.

The following additional prerequisites must be met before admission to the program:

Have an earned grade point average of at least 3.0 based on a 4.0 system for the last 60 hours of course work attempted at either the undergraduate or graduate level; or attained a scale score of 383 or more on the Miller Analogies Test; or attained a score of 288 (verbal plus quantitative) or more on the Graduate Record Examination.

Hold or be eligible for a standard teaching certificate or teaching license, or be accepted by the state for the alternative certification program. Submit an application form that includes an essay addressing the individual's teaching philosophy, personal goals, and career goals.

File a Degree Plan and sign a Statement of Understanding for this program.

Admission decisions are based upon the evaluation of all application materials submitted by the individual.

#### Admission to Candidacy

Students are eligible to be admitted to candidacy if they have:

Completed all requirements for admission to the Graduate College.

Been formally admitted to the Masters of Education Degree in Science Education.

Completed a minimum of 12 semester hours, or a maximum of 18 hours of the degrees as described by the plans of study. Satisfactorily completed EDUC 5103, Educational Research.

Maintained a grade point average of at least 3.0 in all graduate course work taken prior to candidacy. Completed academic requirements for a standard teaching certificate.

Filed a plan of study (degree plan) approved by the advisor and the Dean of the Graduate College. Filed a Statement of Understanding, signed by the student and advisor, with the Graduate College.

Students are advised to meet candidacy requirements within the first 16 semester hours of their program. These requirements must be met within the first 24 semester hours. In any event, 16 semester hours toward the Master of Education degrees must be completed after being admitted to candidacy.

#### Advisement

Upon admittance to the Graduate College an advisor is assigned to the student. It is the responsibility of the student to contact the faculty member and make an appointment for advisement and to develop a degree plan. The advisor develops the plan of study and a Statement of Understanding in conference with the student, assists in the selection of classes each semester, and counsels the student as needed.

#### Transfer Credit

A maximum of nine semester hours of approved transfer credit may be applied toward the master's degree. Students who wish to transfer credit applicable to a degree program at Northeastern State University must have maintained a "B" average in all graduate course work attempted at the transferring institution. No credit will be given for a transfer course in which the grade is lower than a "B."

#### Retention

All plans of study are valid for only six years. All graduate course work must be completed within six years in order to be counted toward the degree.

#### Graduation Requirements

Complete an approved program in Science Education.

Possess a grade point average of at least 3.0 in all graduate work on the plan of study. Request a degree check prior to the semester of graduation.

Apply for the degree at the beginning of the semester of expected graduation.

Satisfactorily complete an approved capstone experience 60 days before conferral of the degree.

## Capstone Experience

A capstone experience is an academic activity that encourages the use of skills learned and knowledge gained in one or more areas of field of study. It is a culminating experience that goes beyond the course work required of the Master of Education degree and should be completed near the end of the student's program (after at least 26 hours of coursework.) Capstone experiences for the Science Education program will have a significant writing component and may include satisfactorily completing one of the following:

A teaching portfolio that is submitted for National Board Certification in a science certification area.

An applied research project, or action research project, on the student's own science teaching and a research paper discussing the project and its findings.

A science curriculum project that requires students to apply skills and knowledge acquired in the program.

## Structure of the Program

The Professional Education Core is required for all graduates and provides a strong core of knowledge and skills that are necessary for professional teachers of science. The Science Content Core consists of science content courses that incorporate inquiry-based instruction. Inquiry-based instruction is the cornerstone of the program. Students select 6 hours from the program's offered science content courses. Students take Endeavor's Methods of STEM Education course (3 hours); three Endeavor electives (9 hours); and 6 hours of Capstone, 3 of which are provided by Endeavor. The Capstone Experience is completed near the Program's end and is coordinated with Endeavor.

The credit requirements of the program are summarized below.

	Number of Graduate Hours
Total Number of Graduate Hours Required for the Degree	36
Professional Education Core	12
Science Content Core (with advisor approval)	6
Endeavor coursework including Methods of STEM Education	12
Capstone Experiences (two courses with one from Endeavor)	6

## Plan of Study for M.Ed. in Science Education with Endeavor STEM Certificate Option

### Professional Education Core 15 hours

Course Name	Term Taken	Grade
EDUC 5103 - Educational Research		
EDUC 5403 - Fundamentals of Curriculum Development I (Endeavor STEM's Methods of STEM Education)		
EDUC 5753 - Advanced Educational Psychology		
SCI 5443 - Trends and Issues in Science Education		
SCI 5513 - Inquiry in Science		

### Science Content Core 6 hours

Course Name	Term Taken	Grade
SCI 5213 - Investigative Biology		
SCI 5253 - Environmental Science		
SCI 5313 - Nature of Matter		
SCI 5323 - Science of Motion		
SCI 5123 - Earth Science		
SCI 5413 - Space Science		
SCI 5533 - Research		

### Endeavor STEM Courses 9 hours

Course Name	Term Taken	Grade
Elective Course I		
Elective Course II		
Elective Course III		

### Capstone Experience

Course Name	Term Taken	Grade
SCI 5983 - Capstone I		
Capstone II: Endeavor's STEM Leadership Seminar OR Action Research in the STEM Classroom		

Notes: