

# Degree Requirements, Science, Technology, Engineering, and Mathematics Education

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Graduate handbook information is updated and maintained by each program. Graduate handbooks are available within each program's office and online at <https://utexas.box.com/v/UTAustinGraduateHandbooks>.

Please contact the program with concerns or questions.

## Master's Degrees

Prerequisites for admission to each master's degree program are a baccalaureate degree and prior coursework in education, science, technology, engineering, or mathematics.

**Master of Arts.** Students may select from the following tracks:

**Master of Arts in STEM Education, Regular Track (no thesis option):**

This track is intended for students who are already certified to teach in the K-12 system. The program requires completion of 33 hours of coursework, with the major field composed of 18 hours in science, technology, engineering, and mathematics (STEM) education, including 15 hours in the STEM education core course and advance topic sequence, and three hours of research methods classes in STEM education. The minor field consists of nine hours of content courses in science, technology, engineering, or mathematics. Six additional hours may be drawn from coursework chosen by the student in conjunction with the graduate advisor.

**Master of Arts in STEM Education, Regular Track (thesis option):**

This track is intended for students who are already certified to teach in the K-12 system. The program requires completion of 36 hours of coursework including a six-hour Master's Thesis (STM 698). The major field is composed of 18 hours in science, technology, engineering, and mathematics (STEM) education, including 15 hours in the STEM education core course and advance topic sequence, and three hours of research methods classes in STEM education. The minor field consists of nine hours of content courses in science, technology, engineering, or mathematics. Three additional hours may be drawn from coursework chosen by the student in conjunction with the graduate advisor.

**Master of Arts in STEM Education, Teaching Track (GradTeach):** This track is intended for students who are seeking certification to teach math or science in high school as part of their graduate education. This program requires completion of 36 hours of coursework, with the major field composed of 18 hours in science, technology, engineering, and mathematics (STEM) education. The minor field consists of nine to 12 hours of coursework in the Department of Curriculum and Instruction focused on teacher education. An additional six to nine hours of supporting coursework are taken in the College of Natural Science under advisement by the graduate advisor. A Master's Thesis is not required.

**Master of Education.** The program is the same as the program for the Master of Arts (Regular Track) described above, with one exception: in addition to the requirements for a Master of Arts, students must be certified to teach at the elementary or secondary level.

## Doctor of Philosophy

Students seeking the degree of Doctor of Philosophy must show evidence of related professional and academic experience. Sixty-three

hours of coursework (including a minimum of six credits of dissertation) are required for the degree.

## Program Requirements

**Core courses.** Students must complete the 12-semester-hour core course sequence in science, technology, engineering, and mathematics education.

**Content courses.** Students must complete 12 semester hours of coursework in science, technology, engineering, or mathematics. This requirement is waived for students who enter the program with a master's degree in mathematics, one of the sciences, or engineering.

**Research methodology.** Students must complete at least 12 hours of coursework in research methodology.

**Research practicum.** Students must complete at least nine hours of coursework of research practicum.

**Advanced topics courses.** Students must complete at least six hours of coursework on special areas of interest or on emerging areas of research.

**Related courses.** Students are expected to broaden and deepen their Program of Work by taking a minimum of 6 hours of related coursework consonant with their scholarly interests. This coursework must be chosen in consultation with the graduate advisor or faculty mentor.

A more detailed description of all required courses is available in the STEM Education graduate handbook.