School of Natural Sciences and Mathematics

Master of Arts in Teaching in Science Education

UTD

Program Description

The Master of Arts in Teaching in Science Education degree program equips students with the content knowledge and pedagogical expertise needed to teach science in elementary, middle, and high school classrooms. Developed by top-tier faculty at the University of Texas at Dallas, the program's courses are hands-on and inquiry-based and designed with science, technology, engineering, and mathematics (STEM) teachers in mind, providing students with fundamental skills in cognition, education research and assessment. A thesis option exists for those who wish to pursue doctoral level research.

The Science Education program is designed for those with significant ability in a science discipline and a serious commitment to teaching. The program's curriculum teaches effective pedagogical practices, trains students in the skillful evaluation of educational strategies and provides forward-looking opportunities for professional development for both new and experienced teachers alike. The program may be completed in conjunction with the UTeach Dallas secondary STEM teacher preparation program and/or with other STEM content graduate programs at the university.

Benefits

The Teaching in Science Education master's program ensures that students gain a broad understanding of their discipline, apply their knowledge and analytical skills to create effective and novel solutions to practical problems, and communicate and work effectively in collaborative environments.

Other benefits include:

- *Experienced, Relevant, and Passionate Faculty*: The program is led by a mix of faculty in the School of Natural Sciences and Mathematics with expertise and experience in STEM content and STEM teaching in their respective fields. Faculty include award-winning STEM PhDs and Master Teachers with extensive leadership backgrounds in public schools.
- *Comprehensive Curriculum*: Courses in the Teaching in Science Education master's program will introduce students to new ideas and competencies while also teaching them the skills they'll need to thrive in both public and private educational settings.
- *Location*: Situated in the greater Dallas region—recently rated by *Forbes* magazine as the #1 "Best City for Jobs"—UT Dallas provides students with easy access to employers and internship opportunities, not to mention a large and supportive alumni population.

Career Opportunities

Graduates of the program have gone on to successful careers in a variety of science education positions including:

- Elementary, middle, and high school teachers
- Departmental heads and school administrators
- Science coordinators, instructional specialists, and directors
- Curriculum developers
- Faculty and leaders at institutions of higher education
- Informal educators

Contact Information

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Marketable Skills

The Master of Arts in Teaching in Science Education program is a science content-rich, practitioner-focused program that interweaves research-based STEM education with classroom-focused practicality. Designed with the experienced educator seeking to enhance their practice and leadership skills in mind, the MAT also works closely with the UTeach Dallas STEM teacher preparation program. Novice teachers and STEM degree holders seeking certification increase diversity of perspectives in a collaborative, supportive, hands-on, and dialog-rich environment. Current and future educators at all levels work together to gain and/or enhance a variety of skills including abilities to:

- Conduct oral and written communication in the context of science instruction utilizing traditional and technology-based modalities.
- Apply science content knowledge, pedagogical content knowledge, education theory, and critical thinking to instructional design and delivery.
- Integrate science and mathematics in a teaching context including appreciation of the dynamic nature of both disciplines.
- Hone critical thinking skills in evaluating and applying science research and education research utilizing the methodologies therein.
- Develop a collaborative/shared learning culture and leadership with student, peers, and professional communities of practice.

Application Deadlines and Requirements

Please take note of all application deadlines and visit the Apply Now webpage to begin the application process. See the Department of Science/Mathematics Education website for additional information.

Applicants to the Teaching in Science Education master's degree program should have:

- A bachelor's degree or its equivalent and a significant background or interest in science. A background of 24 semester credit hours in science at the undergraduate level or higher is preferred. However, elementary educators and others applying without a significant science background may be admitted on a probationary basis. An interview with a Science/Mathematics Education faculty member may also be required.
- A grade point average (GPA) of at least 3.0 on a 4.0 scale.
- International applicants must submit a TOEFL score of at least 80 on the internet-based test. Scores must be less than two years old. See the Graduate Catalog for additional information regarding English proficiency requirements for international applicants.

Opportunities may arise for students to work directly in local schools. Public schools and many private schools in the state of Texas require criminal background checks of all volunteers or individuals working within the schools regardless of the potential for direct contact with students.