K-12 STEM EDUCATION EMPHASIS

The science and mathematics education master’s level graduate program at OSU helps educators deepen their content and pedagogical knowledge of best practices in the teaching of science and mathematics. The mission of the program is to develop exemplary educators who have both broad and deep content knowledge, research experience and leadership capabilities in the fields of science and mathematics education. The emphasis on K-12 STEM education is designed for classroom teachers who want to further develop their understanding of STEM pedagogy, teacher-leaders interested in school STEM reform and teachers who want to develop school STEM programs.

PROGRAM HIGHLIGHTS

▶ Dynamic online format
▶ Customized pacing, including two-four year formats
▶ Personalized interactions with faculty and course colleagues
▶ Curriculum designed to prepare educators to balance theory, research and practice of STEM education
▶ Focus on critical thinking related to current issues, trends and policy in the field

IN THIS PROGRAM, YOU WILL LEARN TO:

▶ Strengthen STEM education in your classroom
▶ Develop informal and/or formal STEM education programs
▶ Learn innovative technologies and pedagogies for teaching STEM
▶ Become a STEM education leader in the classroom, on a team or in a district
ADMISSION REQUIREMENTS
To be considered for unqualified admission to the program, applicants must have:
• Bachelor’s degree with at least 3.0 GPA (on a 4.0 scale)
• Evidence of efficiency in written communication
• Career goals and objectives that are consistent with the mission of the program

APPLICATION PROCESS
Applications are accepted on a rolling basis. Applicants are strongly encouraged to submit application materials at least six weeks prior to the start of the semester.

An applicant’s file will be reviewed when all materials have been received by the OSU Graduate College. Students will be notified of admission decision within four to six weeks.

To apply for the program, applicants must complete and submit the following:
1. Graduate College Application
   ▶ Visit gradcollege.okstate.edu/apply to complete the online application
   ▶ Submit the non-refundable application fee
   ▶ Submit official transcripts from all previously attended institutions
2. Program Application
   ▶ Current resume/vita
   ▶ 500-word goal statement that articulates why the applicant is pursuing this degree

FINANCIAL SUPPORT
Students in this program are eligible to apply for the Teacher Education Assistance for College and Higher Education (TEACH) Grant, which provides up to $4,000 a year to graduate students who are completing a teacher preparation program and who agree to teach full time for at least four years as a highly qualified teacher at a school serving low-income students in a high-need field. For more information about the TEACH Grant, please visit studentaid.ed.gov.

Currently enrolled graduate students who are pursuing degrees through the OSU College of Education, Health and Aviation are also eligible for EHA scholarships. For more information, please visit education.okstate.edu/scholarships.

COURSEWORK

Semester 1: Fall
• Seminar in Integrated Mathematics & Science Applications*
• Curriculum Issues

Semester 2: Spring
• Inquiry & Problem-Based Learning in Science Education or Problem-Centered Learning in Mathematics
• Statistical Methods in Education

Semester 3: Summer
• Education Advocacy & Leadership
• Social Justice by Numbers

Semester 4: Fall
• Introduction to K-12 Engineering Education*
• Pedagogical Research

Semester 5: Spring
• Technology for the K-12 STEM Educator*
• SMED Elective

Semester 6: Summer
• Developing Informal & Formal STEM Programs in Schools*
• SMED Elective

*These courses are part of the K-12 STEM education sequence.
**This reflects the suggested 2-year course sequence, but may be individualized as needed.

MORE INFORMATION
Toni Ivey, Ph.D.
Graduate Coordinator, Science Education
405.744.8019
toni.ivey@okstate.edu

Juliana Utley, Ph.D.
Graduate Coordinator, Mathematics Education
405.744.8111
juliana.utley@okstate.edu