# **ONLINE STEM ENDORSEMENT GRADUATE PROGRAM**



Explore your passion for integrating science, technology, engineering and math across the curriculum with Millersville's STEM Endorsement program!

The STEM endorsement program is intended to enhance the expertise of certified K-12 teachers across all disciplines, emphasizing the development of critical thinking, problem-solving and technological integration in classroom settings. It is especially beneficial for educators in science, technology, engineering and mathematics. Additionally, the program welcomes teachers from non-STEM fields who are keen to integrate STEM education principles into their teaching.

While the STEM endorsement does not result in state licensure, it can be appended to an existing Level I or II Certificate. Millersville's STEM endorsement courses can also be applied to the Assessment, Curriculum and Teaching Master's in Education program with the addition of only five more courses.

Students of this 12-credit, four-course program can complete their coursework entirely online on a full- or part-time basis. The credits achieved through this program meet ACT 48 requirements.

### WHAT WILL YOU LEARN?

Millersville University's graduate-level STEM endorsement program equips educators to utilize an integrated approach in their teaching, merging science, technology, engineering and mathematics. This program prepares educators to implement innovative teaching strategies that enhance learning outcomes and foster a deeper understanding of STEM disciplines among K-12 students.

The 12-credit endorsement program builds upon existing high-quality science, technology, engineering and math education courses taught by Millersville University's faculty experts. The four courses of the STEM Endorsement program explore science curriculum and reform, mathematics in the school, instructional technology, design and assessment, and engineering principles and concepts for the nonengineer.

### WHO IS THIS PROGRAM FOR?

- Teachers who hold an initial teaching certification in any K-12 discipline. \*This program will NOT lead to an initial teaching certification.
- Teachers in STEM subjects: science, technology, engineering and mathematics.
- Teachers in non-STEM disciplines who are interested in embracing the ideas associated with STEM education.

This program builds upon our existing high-quality science, technology, engineering and math education courses taught by Millersville University's faculty experts.

Department of Educational Foundations • 717-871-7353 www.millersville.edu/edfoundations



### **PROGRAM HIGHLIGHTS**

- 12-credit, four-course Endorsement program.
- Adds a STEM endorsement to an existing PA teaching license.
- Can be completed 100% online.
- All 12 credits count towards Millersville's M.Ed. program in Assessment, Curriculum and Teaching.
- Affordable tuition rates.
- Credits meet ACT 48 requirements.
- Interdisciplinary faculty from three departments.

### CAREERS

- Math Teacher
- Science Teacher
- Engineering Teacher
- Computer Science Teacher
- K-12 STEM Teacher



### **CURRICULUM**

### 4 Courses (12 credits)

- SCIENCE
- ACTE 651: Science Curriculum and Reform
- TECHNOLOGY
- ACTE 625: Technology and Assessment for Learning
- ENGINEERING (choose 1)
- ACTE 655: Integrative STEM Education
- EDTE 604: Engineering Principles and Concepts for the Nonengineer
- MATH (choose 1)
- EDUC 651: Mathematics in the School Program
- MATH 610: Problem-Solving

### CONTACT

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## Millersville University