MASTER OF SCIENCE IN TECHNOLOGY & INNOVATION



The Master of Science in Technology & Innovation is a unique program designed to complement and enhance your undergraduate degree with new ways of thinking about the world. Discovering and mastering the use of valuable thinking skills such as creativity, problem solving, critical thinking, decision making, design and innovation are focuses of this exciting program. The program is built upon four core courses: EDTE 603: Fostering Creativity by Design; EDTE 604: Engineering Principles and Concepts for the Non-Engineer; EDTE 605: Applying Critical Thinking and Decision Making; and EDTE 646: Writing the Professional Paper.

PROGRAM OBJECTIVES

This program is ideal for:

- **Teachers** with a range of backgrounds in education, content areas and grade levels who are interested in further developing and strengthening their teaching abilities.
- Entrepreneurs, scientists, engineers and other professionals seeking career advancement and psychological insight as to how people think and grow.
- **Graduate students** who are looking to start or complete a master's degree program.

A flexible program built with you in mind:

- **Customizable** build a program of study to fit your schedule and professional development needs with a range of elective courses, class times and three degree-completion options.
- Convenient with a blended format of online and face-to-face courses, aided by technology, to enhance course delivery to locations in the greater eastern Pennsylvania and Mid-Atlantic regions.
- **Transfer-friendly** keeping within Millersville's guidelines on residency requirements, students may transfer qualified graduate-level credits from other universities.







OUR GRADUATES



"I did not know what to expect when I started this program, but it turned out to be an amazing, meaningful experience. I got so much more out of it than I could have ever imagined. The courses on creativity and engineering taught me new ways to think and problem solve."

Amy Jones '21
 Enterprise Concentration



"The course on critical thinking and decision making was the start of a change in my thinking processes. Learning how to think and not what to think was at the heart of that change. That shift has helped me as both an educator and as a learner."

Justin Egresitz '20
 Education Concentration







PROGRAM OVERVIEW

In consultation with your academic advisor, you will be able to build your program of study to best suit your professional development needs. The core courses in Technology & Innovation provide everyone in the program with a common body of knowledge. From there, you can select the degree-completion option and electives that will work best for you.

| Technology | Credits | |
|------------|--|---|
| EDTE 603 | Fostering Creativity by Design | 3 |
| EDTE 604 | Engineering Principles and Concepts for the Non-Engineer | 3 |
| EDTE 605 | Applying Critical Thinking and Decision Making | 3 |
| EDTE 646 | Writing the Professional Paper | 3 |

SELECT ONE OF THE FOLLOWING PROGRAM-COMPLETION CONCENTRATIONS

EDUCATION CONCENTRATION

| Education Core | | | | |
|---------------------------------------|-----------------------------------|-----------|--|--|
| Research Area: | | 3 credits | | |
| EDFN 601 | Methods of Research | | | |
| Social Foundations Area: (select one) | | 3 credits | | |
| EDFN 511 | Comparative Education | | | |
| EDFN 590 | Social Foundations of Education | | | |
| EDFN 603 | Philosophy of Education | | | |
| EDFN 604 | Education and Public Policy | | | |
| Psychology Area: (select one) | | 3 credits | | |
| PSYC 525 | Advanced Developmental Psychology | | | |
| PSYC 526 | Advanced Adolescent Psychology | | | |
| PSYC 625 | Human Growth and Development | | | |
| EDFN 545 | Advanced Educational Psychology | | | |

(Select One Degree-Completion Option)

| Degree-Completi | Total 30 s.h. | |
|----------------------|---------------------------------|-----------|
| EDTE 699 | Thesis | 6 credits |
| Elective (3 credits) | – Select ONE course | 3 credits |
| Degree-Completi | Total 33 s.h. | |
| EDTE 698 | Research and Development Report | 6 credits |
| Electives (6 credits | 6 credits | |
| Degree-Completi | Total 36 s.h. | |
| Flectives (15 credit | 15 credits | |

It is possible to also earn Pennsylvania Department of Education Endorsements in such areas as STEM Education, Gifted Education and Online Teaching by taking prescribed sequences of electives in Degree-Completion Option 3.

ENTERPRISE CONCENTRATION

| Enterprise Cor | re | |
|-----------------|---|------------|
| Business Cours | ses: (both required) | Credits |
| BUAD 670 | Strategy and Policy | 3 |
| BUAD 653 | Operations Management | 3 |
| | d online business courses from Shippensburg uted to fulfill this requirement. | University |
| Analytics/Stati | stics Courses: (select one) | Credits |
| MATH 503 | Prob. and Stats. for Teachers | 4 |
| MATH 535 | Statistical Methods 1 | 3 |
| MATH 610 | Problem-Solving Seminar | 3 |
| (Select One D | Degree-Completion Option) | |
| | | T : 100 1 |

| Degree-Completion | Total 30 s.h. | |
|-----------------------|---|------------------------|
| EDTE 699 | Thesis - Select ONE course | 6 credits |
| Degree-Completic | Total 33 s.h. | |
| EDTE 698 | Research and Development Report – Select TWO courses | 6 credits 6 credits |
| Degree-Completion | Total 36 s.h. | |
| Electives (15 credits | 15 credits | |

A graduate-level certificate on entrepreneurship can also be earned by taking a prescribed sequence of electives in Degree-Completion Option 3.

FOR INFORMATION, CONTACT:

Department of Applied Engineering, Safety & Technology

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