

# Secondary Education and Administrative Leadership

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## M.A.T. in Teacher Certification: Physics Education 7-12

### Program Description

The Physics Education 7-12 concentration of the Master of Arts in Teaching (M.A.T.) in Teacher Certification program prepares individuals with a background in physics to apply for initial teacher certification in that area. Students may apply for Pennsylvania teacher certification at the completion of student teaching. During the program, they may apply for a Pennsylvania intern certificate if they have a school district willing to hire them full time.

### Program Description

Dr. Connie Monroe

### Delivery Mode

Online with two-day on-campus residency component (during the summer semester only)

Field observations/experiences and student teaching are conducted in public school settings.

### Program Accreditation

Council for the Accreditation of Educator Preparation (CAEP, formerly NCATE)

Approved by the Pennsylvania Department of Education

### Curriculum

Course	Credits
<b>Required Courses</b>	
<b>MSE 641</b> Orientation to 7-12 Education	3
<b>MSE 642</b> Standards-Based Instruction in 7-12 Education	3
<b>MSE 643</b> Content Area Literacy	3
<b>MSE 644</b> Instructional Strategies in 7-12	3
<b>MSE 645</b> Technology Integration in 7-12 Education	3
<b>MSE 646</b> Assessments and Interventions	3
<b>MSE 647</b> Classroom Management in 7-12 Education	3
<b>MSE 653</b> Methods of Science Teaching 7-12	3
<b>MSE 661</b> Student Teaching	9
<b>Total Credits</b>	<b>33</b>

### Undergraduate Content Course Requirements

Certification requirements for the Pennsylvania Department of Education include appropriate certification testing. A minimum of 30 credits of content area coursework is required. These courses may be taken at the undergraduate level. Students must demonstrate college coursework with a grade of C or higher in:

- Calculus 1
- Calculus 2
- College physics 1 with lab
- College physics 2 with lab

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- College physics 3
- Electricity and magnetism
- Mechanics
- Atomic and nuclear structure
- Chemistry 1 with lab

Note: Pennsylvania Department of Education requirements are subject to change.

## Chapter 49-2

Chapter 49-2 requirements (12 credits) mandated by the Pennsylvania Department of Education must be met in order to receive certification. Courses may be satisfied with previously taken undergraduate or graduate courses, subject to approval of the program coordinator. Undergraduate 49-2 courses cannot be accepted for the graduate special education add-on certification program for students who later complete that program. If not already completed, the following courses are needed in addition to the requirements above:

- **ESP 610** Special Education Foundations and Collaboration
- **ESP 701** Introduction to Behavior Analysis
- **ESP 613** Evidence-based Practices in Secondary Inclusion
- **EDU 650** Supporting the English Language Learner

## Student Teaching

Applications for spring student teaching are due October 1. Applications for fall student teaching are due April 1.

Student teaching requirements include:

- A GPA of 3.0 or higher for all courses, including undergraduate content course requirements
- A grade of C or higher for all required courses
- Completion of all required courses prior to student teaching
- Required clearances
- No incomplete (I) grades
- Passing of required Praxis tests
- TB tests
- Liability insurance
- Education requirements, such as seminars and portfolios

## Program Notes

- The summer courses require a two-day residency in July.
- Clearances are required at all times throughout the program and must be updated every July.
- LiveText Watermark software is required for this program.

## Teaching Certification

Upon successful completion of this master's degree, students are eligible to be "endorsed" for one Pennsylvania Department of Education Instructional I teaching certificate. This master's degree also meets the educational requirements of the Pennsylvania Instructional II certificate when a student has completed the necessary years of teaching. Note that the Pennsylvania Department of Education may change the requirements for instructional certificates at any time.

## Program Webpage

<https://www.calu.edu/academics/graduate/masters/education-campus/secondary-education/physics.aspx>