Degree Benefits
For more than 150 years, Cal U education programs have enjoyed an excellent reputation, with graduates teaching in nearly every state. Secondary Education programs meet the standards of accrediting agencies. The University is accredited by the Middle States Association of Colleges and Universities, and the College of Education is accredited by the National Council for Accreditation of Teacher Education. This program is approved by the Pennsylvania Department of Education for teacher certification.

Job Options
The physics education program leads to Pennsylvania teacher certification to teach Physics in grades 7-12. Most of our graduates pursue careers in teaching. Some graduates have also pursued employment in other educational settings.

Program Objectives
Students acquire the knowledge, attitudes, skills and understanding necessary to becoming an effective educator in a specific content area. This balances the need to be an expert in a subject area and the need to have strong teaching skills. Students participate in early and continuous field experiences that approximate full-time employment appropriate to certification. This is a coherent program organized by educators to meet current standards and trends in education that is also enriched by extensive studies in the subject area (physics). The program includes a focus on technology integration, teaching and learning strategies, and standards-based education (including the Common Core Standards).

Certification Program
Admission to the certification program requires:
• 2.80 GPA
• Successful completion of the PAPA assessments
• Successful completion of a three-credit American/English literature course and a three-credit English composition course
• Successful completion of six credits of college level math
• Current Act 34 (criminal record) Act 114 (fingerprinting), and Act 151 (child abuse) clearances

The above requirements must be made by the time you earn 65 credits. Additional time is provided for transfer students.
### Freshman Year
#### First Semester .................................................................14 credits
- ENG 101 English Composition I ..............................................3 crs.
- UNI 100 First-Year Seminar ....................................................1 cr.
- MAT 281 Calculus I .................................................................3 crs.
- General Education fine arts course .........................................3 crs.
- CHE 101 General Chemistry I ..................................................4 crs.

### Second Semester ...............................................................16 credits
- Literature Course ..................................................................3 crs.
- ESP 210 Special Education Foundations ..................................3 crs.
- SEC 310 Intro to Secondary Education .......................................3 crs.
- SEC 220 Standards-Based Instruction .......................................3 crs.
- PSY 100 Psychology ..............................................................3 crs.
- MAT 381 Calculus III .............................................................3 crs.
- HPE 314 First Aid ..................................................................3 crs.
- PHY 101 College Physics I ......................................................4 crs.
- PSY 100 Psychology ..............................................................3 crs.

### sophomore Year
#### Third Semester ...............................................................16 credits
- PHY 202 College Physics II ....................................................4 crs.
- MAT 381 Calculus III .............................................................3 crs.
- HPE 314 First Aid ..................................................................3 crs.
- SEC 210 Intro to Secondary Education .......................................3 crs.
- SEC 220 Standards-Based Instruction .......................................3 crs.
- PHY 202 College Physics II ....................................................4 crs.
- MAT 381 Calculus III .............................................................3 crs.
- HPE 314 First Aid ..................................................................3 crs.
- SEC 210 Intro to Secondary Education .......................................3 crs.
- SEC 220 Standards-Based Instruction .......................................3 crs.

### Fourth Semester .............................................................17 credits
- PHY 221 Intermediate Electricity & Magnet. .........................4 crs.
- PHY 203 College Physics III ..................................................4 crs.
- EDU 333 Technology for Teaching .........................................3 crs.
- MAT 382 Calculus IV ............................................................3 crs.
- ESP 311 Assessment and Positive Behavior ............................3 crs.
- PHY 221 Intermediate Electricity & Magnet. .........................4 crs.
- PHY 203 College Physics III ..................................................4 crs.
- EDU 333 Technology for Teaching .........................................3 crs.
- MAT 382 Calculus IV ............................................................3 crs.
- ESP 311 Assessment and Positive Behavior ............................3 crs.

### Junior Year
#### Fifth Semester .................................................................16 credits
- PHY 331 Modern Physics .......................................................3 crs.
- EDU 310 Teaching in a Multicultural Society .........................3 crs.
- PSY 206 Adolescent Psychology ...........................................3 crs.
- MAT 406 Differential Equations .............................................3 crs.
- PHY 301 Intermediate Mechanics ..........................................4 crs.
- PHY 331 Modern Physics .......................................................3 crs.
- EDU 310 Teaching in a Multicultural Society .........................3 crs.
- PSY 206 Adolescent Psychology ...........................................3 crs.
- MAT 406 Differential Equations .............................................3 crs.
- PHY 301 Intermediate Mechanics ..........................................4 crs.

### Sixth Semester .................................................................13 credits
- ESP 413 Evidence-Based Practices .........................................3 crs.
- PHY 495 Physics Seminar ......................................................1 cr.
- SEC 310 Instructional Strategies .............................................3 crs.
- SEC 350 Content Area Literacy .............................................3 crs.
- SEC 360 Technology Integration .............................................3 crs.

### Seventh Semester ............................................................15 credits
- SEC 395 Teaching of Science ................................................3 crs.
- EDU 350 Supporting English Language Learners ..................3 crs.
- SEC 400 Classroom Management ..........................................3 crs.
- SEC 420 Assessment and Interventions ..................................3 crs.
- Science Elective ..................................................................3 crs.
- SEC 395 Teaching of Science ................................................3 crs.
- EDU 350 Supporting English Language Learners ..................3 crs.
- SEC 400 Classroom Management ..........................................3 crs.
- SEC 420 Assessment and Interventions ..................................3 crs.
- Science Elective ..................................................................3 crs.

### Eighth Semester ............................................................15 credits
- SEC 460 Professional Practices in Secondary Education ..........3 crs
- SEC 461 Student Teaching ....................................................12 crs.
- SEC 460 Professional Practices in Secondary Education ..........3 crs
- SEC 461 Student Teaching ....................................................12 crs.

### Program Contact Information
Contact the Secondary Education by phone at 724-938-4140.

### Department Website
[www.calu.edu/academics/programs/secondary-education](http://www.calu.edu/academics/programs/secondary-education)