

# Education

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## B.S.Ed. in Physics: Secondary Education

### Program Description

The Bachelor of Science in Education (B.S.Ed.) in Physics: Secondary Education degree is designed for students seeking to teach middle and high school (grades 7-12) physics. Through this program, students build competencies and knowledge in teaching, science and math. This undergraduate degree program meets all education requirements for teaching certification in Pennsylvania.

### Delivery Mode

Traditional (on campus)

### Accreditation

This undergraduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

### Curriculum

The following eight-semester schedule of courses provides a recommended framework for completing this program of study in four years.

Course	Credits
<b>Freshman Year</b>	
<b>First Semester</b>	<b>13</b>
<b>CHE 101</b> General Chemistry I	4
<b>ENG 101</b> English Composition I	3
<b>MAT 281</b> Calculus I	3
General Education Course	3
<b>UNI 100</b> First-Year Seminar	1
<b>Second Semester</b>	<b>16</b>
<b>ENG 102</b> English Composition II	3
<b>ESP 210</b> Special Education Foundations and Collaboration	3
<b>MAT 282</b> Calculus II	3
<b>PHY 101</b> College Physics I	4
<b>PSY 100</b> General Psychology	3
<b>Sophomore Year</b>	
<b>Third Semester</b>	<b>16</b>
<b>HSC 315</b> First Aid and Personal Safety	3

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Course	Credits
<b>MAT 381</b> Calculus III	3
<b>PHY 202</b> College Physics II	4
<b>SEC 210</b> Introduction to Secondary Education	3
<b>SEC 220</b> Standards-based Education in Secondary Education	3
<b>Fourth Semester</b>	<b>17</b>
<b>EDU 333</b> Technology in Teaching and Learning	3
<b>ESP 311</b> Assessment and Positive Behavior Interventions	3
<b>MAT 382</b> Calculus IV	3
<b>PHY 203</b> College Physics III	4
<b>PHY 301</b> Intermediate Electricity and Magnetism	4
<b>Junior Year</b>	
<b>Fifth Semester</b>	<b>15</b>
<b>MAT 406</b> Differential Equations	3
<b>PHY 331</b> Modern Physics I	3
<b>PSY 206</b> Adolescent Psychology	3
<b>SEC 400</b> Classroom Management	3
<b>SEC 420</b> Assessments and Interventions in Secondary Education	3
<b>Sixth Semester</b>	<b>13</b>
<b>ESP 413</b> Evidence-based Practices for Secondary Inclusion	3
<b>PHY 495</b> Physics Seminar	1
<b>SEC 310</b> Instructional Strategies in Secondary Education	3
<b>SEC 350</b> Content Area Literacy	3
<b>SEC 360</b> Technology Integration in Secondary Education	3

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Course	Credits
<b>Senior Year</b>	
<b>Seventh Semester</b>	<b>15</b>
<b>EDU 350</b> Supporting English Language Learners	3
<b>SEC 400</b> Classroom Management	3
<b>SEC 420</b> Assessments and Interventions in Secondary Education	3
<b>SEC 395</b> Teaching of Science	3
Science Elective	3
<b>Eighth Semester</b>	<b>15</b>
<b>SEC 460</b> Professional Practices in Secondary Education	3
<b>SEC 461</b> Student Teaching Practicum	12
<b>Total</b>	<b>120</b>

## Additional Requirements

Undergraduate secondary education majors are required to:

- Maintain a GPA of 2.80.
- Pass the required PAPA exams.
- Have Act 34, 151 and 114 clearances for formal Admission to Teacher Education.

A GPA of 3.00 and passing scores for Praxis II are needed to apply for a Recommendation for Student Teaching.

## Program Webpage

<https://www.calu.edu/academics/undergraduate/bachelors/secondary-education/physics.aspx>