The Secondary STEM Education program emphasizes the content knowledge needed for secondary STEM teachers to be successful. Earn a double major in STEM Education and content major (i.e., mathematics, physics, chemistry, earth science, physical science, computer science) with secondary teaching certification (grades 8-12) in one or more state-certifiable STEM subjects in just 4 years (120 credit hours).

### Freshman Year

#### FALL SEMESTER
- **UK Core - Comp. & Comm. I** - 3
- **MA 113 - CALCULUS I** - 4
- **PSY 100 - INTRODUCTION TO PSYCHOLOGY** - 4
- **PHY 231 - GENERAL UNIVERSITY PHYSICS** - 4
- **PHY 241 - GENERAL UNIVERSITY PHYSICS LABORATORY** - 1

**TOTAL HOURS: 16**

#### SPRING SEMESTER
- **MA 114 - CALCULUS II** - 4
- **UK Core - Comp. & Comm. II** - 3
- **PHY 228 - OPTICS, RELATIVITY AND THERMAL PHYSICS** - 3
- **CHE 105 - GENERAL COLLEGE CHEMISTRY I** - 4
- **SEM 110 - INTRODUCTION TO STEM EDUCATION** - 2

**TOTAL HOURS: 16**

Total Freshman Hours: 32

### Sophomore Year

#### FALL SEMESTER
- **MA 213 - CALCULUS III** - 4
- **PHY 232 - GENERAL UNIVERSITY PHYSICS** - 4
- **PHY 335 - DATA ANALYSIS FOR PHYSICISTS** - 2
- **CHE 107 - GENERAL COLLEGE CHEMISTRY II** - 3
- **EDP 202 - HUMAN DEVELOPMENT AND LEARNING** - 3

**TOTAL HOURS: 16**

#### SPRING SEMESTER
- **PHY 306 - THEORETICAL METHODS OF PHYSICS** - 3
- **PHY 361 - PRINCIPLES OF MODERN PHYSICS** - 3
- **STA 296 - STATISTICAL METHODS AND MOTIVATIONS** - 3
- **UK Core - Global Dynamics** - 3
- **EPE 301 - EDUCATION IN AMERICAN CULTURE** - 3

**TOTAL HOURS: 15**

Total Sophomore Hours: 31

### Junior Year

#### FALL SEMESTER
- **STEM Electives (3 hours)** - 3
- **EGR Requirement (3 hours)** - 3
- **EDS 516 - PRINCIPLES OF BEHAVIOR MANAGEMENT AND INSTRUCTION** - 3
- **AST 310 - TOPICS IN ASTRONOMY AND ASTROPHYSICS (SUBTITLE REQUIRED)** - 3
- **UK Core - Arts and Creativity** - 3

**TOTAL HOURS: 15**

#### SPRING SEMESTER
- **UK Core - Humanities** - 3
- **SEM 421 - SURVEY OF SECONDARY MATHEMATICS CURRICULUM** - 3
- **PHY 401G - SPECIAL TOPICS IN PHYSICS AND ASTRONOMY FOR** - 1
- **PHY 460G - HANDS-ON PHYSICS FOR MIDDLE SCHOOL AND HIGH SCHOOL TEACHERS** - 2
- **EDC 533 - TEACHING LITERACY ACROSS THE DISCIPLINES** - 3
- **STEM Electives (2 hours)** - 2

**TOTAL HOURS: 16**
### Senior Year

#### FALL SEMESTER

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEM Electives (3 hours)</td>
<td>3</td>
</tr>
<tr>
<td>Any elective</td>
<td>3</td>
</tr>
<tr>
<td>SEM 422 - STEM ED METHODS II</td>
<td>3</td>
</tr>
<tr>
<td>PHY 460G - HANDS-ON PHYSICS FOR MIDDLE SCHOOL AND HIGH SCHOOL TEACHERS</td>
<td>2</td>
</tr>
</tbody>
</table>

#### SPRING SEMESTER

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEM 423 - ASSESSMENT IN STEM EDUCATION</td>
<td>2</td>
</tr>
<tr>
<td>SEM 435 - STEM STUD TEACHING IN SEC SCHOOL</td>
<td>10</td>
</tr>
</tbody>
</table>

**Total Hours: 14**

**Total Senior Hours: 26**

**Total Minimum hours Required for Degree: 120 hours**

---

University of Kentucky is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate, baccalaureate, masters, and doctorate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, call 404-679-4500, or online at [www.sacscoc.org](http://www.sacscoc.org) for questions about the accreditation of University of Kentucky.

Current UK students: Please login to [http://myUK.uky.edu](http://myUK.uky.edu) to access your personalized major template and degree audit via the Graduation Planning System (GPS). This major template is the curriculum requirements for completion of the degree program only and is not a personalized audit based on your completed coursework. This major template does not reflect entrance requirements for selective majors. Please consult with the college to learn more about admission to this major.