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**
Total Junior Hours: 31

Senior Year

**FALL SEMESTER**
- STEM Electives (3 hours) - 3
- Any elective - 3
- SEM 422 - STEM ED METHODS II - 3
- PHY 460G - HANDS-ON PHYSICS FOR MIDDLE SCHOOL AND HIGH SCHOOL TEACHERS - 2
- STEM Electives (3 hours) - 3

**TOTAL HOURS: 14**

**SPRING SEMESTER**
- SEM 423 - ASSESSMENT IN STEM EDUCATION - 2
- SEM 435 - STEM STUD TEACHING IN SEC SCHOOL - 10

**TOTAL HOURS: 12**

Total Senior Hours: 26

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