

# Secondary Education

## BSED Secondary Education - Physics

This degree map is based on the current Academic Catalog and is subject to change. Please note that the degree map is designed to give you a sense of roughly how courses might be distributed over a 4-year degree. Your exact schedule will differ depending on a range of factors though we recommend taking a minimum of 15 credits each fall and spring semester. Regular consultation with your academic advisor is the best way to make sure that you are taking the courses you need in the right order to ensure efficient progress through your degree program.

### Sample 4-Year Plan

#### First Year

Fall Courses	Credits	Spring Courses	Credits
FYS100 First Year Seminar (Foundations)	3	SPE110 Intro to Indiv w/ Exceptionalities (Citizenship)	3
MSED110 Intro to Middle & Secondary Education	3	PHYS212 General Physics 2	4
PHYS211 General Physics 1 (Natural World)	4	MATH170 Calculus II	4
MATH160 Calculus 1	4	CHEM121 General Chemistry 1 (Natural World)	4
WRIT103 Composition (Writing)	3		
Semester Total	17	Semester Total	15

#### Second Year

Fall Courses	Credits	Spring Courses	Credits
ELL320 Cultural Awareness and Sensitivity GE (Diversity)	3	EDUC222 Principles & Structures in PK12 Education	3
SPEC220 Data Driven Interventions for Indiv w/ Exceptionalities	3	EDTC200 Technology for Teaching and Learning (Technologies)	3
ENGT101 Intro to Engineering Tech	3	PHYS302 Mechanics: Dynamics	3
PHYS301 Mechanics: Statics	3	MATH370 Differential Equations	3
MATH270 Calculus 3	4	ENGL151 Intro to Literature (Literature)	3
Semester Total	16	Semester Total	15

#### Third Year

Fall Courses	Credits	Spring Courses	Credits
SPE330 Methods of Instruction for Indiv w/ Exceptionalities	3	EDUC358 Assessment & Differentiation for Inclusive Classrooms	3
EDUC334 Connecting Research and Classroom Practice	3	EDUC346 Teaching in Diverse Contexts (Diversity)	3
ENGT141 Electric Circuit Analysis	4	Gen Ed (History)	3
EGGS105 Environmental Issues and Choices (Global Perspectives)	3	Gen Ed (Critical Reasoning)	3
Elective	3	PHYS310 Modern Physics	3
Semester Total	15	Semester Total	15

#### Fourth Year

Fall Courses	Credits	Spring Courses	Credits
MSED453 Teaching Science in Secondary Schools	3	MSED491 Student Teaching 1	6
EDUC474 Classroom Management and Effective Discipline	3	MSED492 Student Teaching 2	6
PHYS442 Thermodynamics	3		
Gen Ed (Arts)	3		
Gen Ed (Oral Communications)	3		
Semester Total	15	Semester Total	12

#### Winter/Summer College - Optional

While not required, Winter and Summer sessions are offered each year and may help you stay on track or get ahead. You may take up to seven (7) credits during Winter College and up to 14 credits during Summer College.

## Curriculum Checklist

### Required Education Courses (36 credits)

- \_\_\_ EDUC222 Principles & Structures of PK12 Education
- \_\_\_ EDUC334 Connecting Research and Classroom Practice\*
- \_\_\_ EDUC358 Assessment and Differentiation for Inclusive Classroom\*
- \_\_\_ EDUC474 Classroom Management and Effective Discipline\*
- \_\_\_ MSED110 Intro to Middle and Secondary Education
- \_\_\_ MSED453 Teaching Science in Secondary Schools\*
- \_\_\_ MSED491 Student Teaching 1\*
- \_\_\_ MSED492 Student Teaching 2\*
- \_\_\_ SPEC220 Data Driven Interventions for Indiv with Exceptionalities
- \_\_\_ SPEC330 Methods of Instruction for Indiv with Exceptionalities\*

### Required Content Area Courses (34 credits)

- \_\_\_ PHYS212 General Physics 2
- \_\_\_ ENGT101 Intro to Engineering Tech
- \_\_\_ ENGT141 Electric Circuit Analysis
- \_\_\_ PHYS310 Modern Physics\*
- \_\_\_ PHYS301 Mechanics: Statics\*
- \_\_\_ PHYS302 Mechanics: Dynamics\*
- \_\_\_ PHYS442 Thermodynamics\*
- \_\_\_ MATH170 Calculus 2\*
- \_\_\_ MATH270 Calculus 3\*
- \_\_\_ MATH370 Differential Equations\*

### Electives (2 credits)

- \_\_\_ Elective

\*Denotes advanced coursework

Students must take a minimum of 42 credits of advanced coursework. Advanced coursework can be met in major courses, minor courses, free elective courses, and general education courses. Courses that meet this requirement are designated in Banner.

## General Education Requirements (45 credits)

*Note: Some requirements may be fulfilled by coursework in your major program including directed Gen Ed courses noted below*

- Foundations (15 credits)
  - FYS100 First Year Seminar
  - MATH160 Calculus 1 (Quantitative)
  - WRIT103 Composition (Writing)
  - History
  - Oral Communication
- Interconnections (9 credits)
  - EDUC346 Teaching in Diverse Contexts (Diversity)\*
  - ELL320 Cultural Awareness and Sensitivity (Diversity)\*
  - EGGS105 Environmental Issues and Choices (Global Perspectives)
- Citizenship & Responsibility  
(6 credits from at least two goals)
  - SPEC110 Intro to Individuals with Exceptionalities (Citizenship)
  - Critical Reasoning
- Natural World & Technologies (9 credits)
  - EDTC200 Technology for Teaching & Learning (Technology)
  - PHYS211 General Physics I (Natural World)
  - CHEM121 General Chemistry 1 (Natural World)
- Creativity & Expression (6 credits)
  - Literature
  - Arts or Creativity

## Degree Requirements

All students must obtain a minimum of 120 credits, complete all General Education requirements, and all requirements for the selected major. Meet with your advisor and consult Degree Works to monitor your progress and for all graduation requirements. There is a PDE GPA minimum requirement for certification (not graduation).

*A minimum GPA of 2.0 in the major and overall are required. A 2.8 GPA is required for teacher certification.*