

Secondary Education

BSED Secondary Chemistry Education

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	CHEM122 General Chemistry 2	4
CHEM121 General Chemistry 1 (Natural World)	4	MATH170 Calculus 2	4
MATH160 Calculus 1	4	PHYS211 General Physics 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 & Learning (Technologies)	3
CHEM281 Organic Chemistry 1	4	CHEM282 Organic Chemistry 2	4
PHYS212 General Physics 2	4	Gen Ed (Oral Communication)	3
Gen Ed (History)	3	ENGLxxx (Literature)	3
Semester Total	17	Semester Total	16

Third Year

Fall Courses	Credits	Spring Courses	Credits
SPEC330 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
CHEM371 Physical Chemistry 1	4	CHEM351 Biochemistry	4
CHEM341 Analytical Chemistry (Quantitative)	4	CHEM261 Inorganic Chemistry	4
Semester Total	14	Semester Total	17

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
EGGS105 Environmental Issues & Choices (Global Perspectives)	3		
Semester Total	12	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 (28 credits)

- ___ CHEM122 General Chemistry 2
- ___ CHEM281 Organic Chemistry 1
- ___ CHEM282 Organic Chemistry 2
- ___ CHEM371 Physical Chemistry*
- ___ CHEM261 Inorganic Chemistry
- ___ CHEM351 Biochemistry 1*
- ___ PHYS212 General Physics 2

*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, an 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
 - STAT141 Intro to Statistics (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 1 (Natural World)
 - CHEM121 General Chemistry 1 (Natural World)
- Creativity & Expression (6 credits)
 - ENGLxxx (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.