

Secondary Education BSEd Science-Chemistry Emphasis

The Bachelor's of Science in Secondary Education degree prepares students to teach in secondary school settings, grades 9-12. This program requires the selection and completion of required coursework in a specific content area.

University General Education and Graduation Requirements

B.S.Ed. degree candidates must complete the following General Education requirements and Graduation requirements of the University as outlined in this Bulletin.

The courses listed below fulfill General Education requirements and best prepare students for advanced education coursework and licensure exams.

Core Areas:

First Year Writing

ENGL 1100	First-Year Writing (MOTR ENGL 200)	3
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Communication Proficiency

EDUC 2222	Interpretation: Connecting Audiences and Meaning	3
or COMM 1040	Introduction to Public Speaking (MOTR COMM 110)	

Math Proficiency

MATH 1020	Contemporary Mathematics (MOTR MATH 120)	3
or MATH 1030	College Algebra (MOTR MATH 130)	

Information Literacy

ED TECH 2230	Information Literacy	3
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American History or Government

POL SCI 1100	Introduction to American Politics (MOTR POSC 101)	3
or HIST 1001	American Civilization to 1865 (MOTR HIST 101)	

Humanities and Fine Arts

Choose any 9 hours from approved fields.		9
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Social Science

Choose any 9 hours. At least one course must meet the cultural diversity requirement		9
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Math and Life/Natural Sciences

Choose any 9 hours.		9
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Junior Level Writing

ENGL 3100	Junior-Level Writing	3
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Total Hours		45
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Program Requirements

All students in the B.S.Ed. in Secondary Education program are required to take the following Teacher Education courses. Each student must also

select a content area and complete the required courses and certification assessments for that area as specified by the Missouri Department of Elementary and Secondary Education.

Grade Requirement

Professional Education courses must be completed with a grade of C or better (courses completed with a grade of C- or below must be retaken).

GPA Requirement

Beginning with those students graduating in May 2017 who will also receive teaching certification, the Missouri Department of Elementary and Secondary Education requires a 3.0 GPA in professional education courses, a 3.0 GPA in the teaching content field, and a 2.75 overall GPA.

Assessment Requirement

Students must pass the required DESE certification assessments to receive the B.S.Ed. degree.

Preparing for the Teacher Education Program

The following courses must be completed prior to applying for admission to the teacher education program:

TCH ED 1000	Building Community, Culture, and Learning in Education	1
TCH ED 1001	Early Clinical Experience: Community Agency	1
TCH ED 2000	Becoming a Professional Educator	1
TCH ED 2001	Early Clinical Experience: Schools	1
TCH ED 2209	Foundations of Teaching in American Schools	2
ED PSY 2212	Child and Adolescent Development	3
Total Hours		9

Teacher Education Program

The following courses are completed after acceptance into the teacher education program:

TCH ED 3001	Mid-Level Clinical Experience: Diverse Learners	1
ED PSY 3312		
TCH ED 3310	Introduction to Methods of Teaching	3
SPEC ED 3318	Inclusive Classrooms	3
TCH ED 4391	Literacy for Adolescent Learners in Content Areas	3
SEC ED 4880	Writing for Teachers ¹	3
Total Hours		13

¹ SEC ED 4880 is not required for foreign language emphasis areas.

In addition to the above courses, students must complete 30-50 hours of required coursework in one specific content area (English, French K-12, Spanish K-12, mathematics, biology, chemistry, physics, or social studies), as well as the appropriate methods course:

SEC ED 4011	The Curriculum And Methods Of Teaching History And Social Studies	3
SEC ED 4240	Curriculum and Methods of Teaching Physical Sciences	3

SEC ED 4589	Curriculum and Methods of Teaching Foreign Languages	3
SEC ED 4646	The Curriculum And Methods Of Teaching Math	3
SEC ED 4885	The Curriculum And Methods Of Teaching English	3
SEC ED 4985	Curriculum and Methods of Teaching Life Sciences	3

The program will culminate in the following practicum courses:

SEC ED 4989	Practicum I: Site-Based Experience	3
SEC ED 4990	Practicum II: Site-Based Experience	12

Total Credit Hours: 120 Minimum

B.S. Ed. in Secondary Education with Emphasis in Chemistry

The B.S. Ed. is a professional education degree designed for students who wish to pursue a teaching career in secondary schools. Much of the discipline-specific coursework parallels the B.A. or B.S. degree in the discipline; however, the Missouri Department of Elementary and Secondary Education (DESE) requires specific coursework for teacher certification. Therefore, students interested in the B.S. Ed. should contact the advising office (OASIS) 314-516-5937 in the College of Education for discipline-specific requirements. *Note: To obtain teaching certification, DESE requires a 3.0 GPA in the discipline and professional education coursework, as well as a 2.75 GPA overall.*

B.A. or B.S. in Chemistry with Master's Level Coursework for Secondary Teacher Certification

In addition to the B.S. Ed., students may opt to complete a B.A. or B.S. degree in their discipline as an undergraduate, followed by admission to the Graduate School for Master's level teaching certification. The College of Education has a one-year accelerated program for post-graduate certification called Teach in 12, or students can choose a traditional path to certification. Graduate coursework for certification can apply towards a Master's Degree in Secondary Education, with additional coursework. Students interested in Master's Level teacher certification should contact the advising office (OASIS) 314-516-5937 in the College of Education. *Note: To obtain teaching certification, DESE requires a 3.0 GPA in the discipline and professional education coursework, as well as a 2.75 GPA overall.*

Learning Outcomes

Upon completion of the program, graduates will be able to:

- Demonstrate professionalism through (a) reflective practice for professional growth, (b) effective communication and collaboration, and (c) commitment to upholding ethical and professional standards.
- Evaluate, design, and implement curriculum, instruction, and assessment that apply advanced understanding of (a) content and pedagogical knowledge, (b) learning science principles, and (c) equitable frameworks and inclusive practices.
- Integrate technologies to create meaningful student learning in the context of (a) digital and (b) global society.

- Design and implement a supportive, inclusive, and culturally responsive classroom environment that nurtures the intellectual, social, and emotional development of all students.
- Partner with families and communities to develop relationships and build networks of support to enhance student learning and well-being.

Sample Four Year Plan

First Year

Fall	Hours	Spring	Hours
BIOL 1012		3 CHEM 1111	5
ENGL 1100		3 COMM 1040	3
HIST 1001 or 1002		3 MATH 1035	2
MATH 1030		3 TCH ED 1001	1
TCH ED 1000		1 TCH ED 2000	1
EXPLORE - Humanities and Fine Arts		3 EXPLORE - Humanities and Fine Arts	3
		16	15

Second Year

Fall	Hours	Spring	Hours	Summer	Hours
BIOL 1821		5 BIOL 1831		5 TCH ED 3001	1
ED TECH 2230		3 CHEM 1121		5 SPEC ED 3318	3
GEOL 1001		3 ED PSY 2212		3 EXPLORE - Social Sciences	3
TCH ED 2001		1 TCH ED 3310		3	
TCH ED 2209		2			
EXPLORE - Social Sciences		3			
		17	16		7

Third Year

Fall	Hours	Spring	Hours
ENGL 3100 or 3160		3 CHEM 2622	3
CHEM 2612		3 MATH 1100	3
PHYSICS 1011 & 1011L		4 PHIL 3380	3
EXPLORE - Humanities and Fine Arts		3 PHYSICS 1012	3
EXPLORE - Social Sciences		3 SEC ED 4985	3
		TCH ED 3312	3
		16	18

Fourth Year

Fall	Hours	Spring	Hours
CHEM 3302		3 SEC ED 4990	12
CHEM 4712		3	
SEC ED 4880		3	
TCH ED 4391		3	
SEC ED 4989		3	
		15	12

Total Hours: 132

¹ Course should also satisfy the Cultural Diversity Requirement

PLEASE NOTE: This plan is an example of what a four year plan could look like for a typical student. Placement exam scores in math as well as the completion of coursework may change the plan. It should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor. All requirements are subject to change.