

BSEd in Middle School Education with Emphasis in Mathematics

Degree Program Description

The Bachelor of Science in Education in Middle School Education prepares students to work with children from fifth through ninth grade in public, private, and alternative school systems. You may consider a degree in education if you enjoy working with children and/or adolescents, want to strengthen the future through education, and want to make a difference in the lives of others. MU Students work closely with mentors, practicing teachers, administrators, and university faculty to develop the knowledge and skills to enhance learning outcomes for children and youth. The coursework through the College of Education & Human Development focuses on teachers' roles in facilitating learning at all levels of development and considers the influences of cultural, political, historical, and economic factors on students, teachers, and schools. Upon successfully completing the initial teacher certification process, the state grants you certification in middle school mathematics. Practical and rewarding clinical training in schools and agencies begins sophomore year and continues each semester culminating in a senior-level teaching internship, enhancing teaching skills and confidence. Coursework within Middle School Mathematics will teach you ways to support the development and mathematical learning of middle school students by learning research-based instructional practices.

Major Program Requirements

Students must complete all university (<https://catalog.missouri.edu/academicdegreerequirements/universityrequirements/>), general education (<https://catalog.missouri.edu/academicdegreerequirements/generaleducationrequirements/>), and content requirements, in addition to degree requirements. Please meet with an Academic Advisor to discuss degree requirements and to create a semester plan.

Teacher Education programs in the College of Education & Human Development are accredited by the Missouri Department of Elementary and Secondary Education (DESE (<https://dese.mo.gov/>)). Curriculum changes mandated to earn teacher certification may become effective at any point during your academic program. Therefore, it is extremely important that you DO NOT SELF ADVISE.

Degree Requirements Sample Program

Early Experiences

LTC 1100 or SPC_ED 1100	Orientation (Recommended) Orientation: Special Education	1
ESC_PS 2010 or H_D_FS 3430	Inquiry Into Learning I Adolescence and Young Adulthood	3
LTC 2040 or LTC 2040H	Inquiring into Schools, Community and Society I Inquiring into Schools, Community and Society I - Honors	3
LTC 2044	Early Field Experience for Teacher Education	2
Educational Technology (minimum 2 credit hours)		2

IS_LT 2467	Inquiry into Empowering Learners with Technology (IS_LT 2467 3 credit hours, IS_LT 2300 1 credit hour)	1-3
or IS_LT 2300	Inquiry into Transforming Learning with Technology	
Choose one course		
IS_LT 2305	Blended Learning in the K12 Classroom	1
IS_LT 2310	Technologies for Game-Inspired Teaching and Learning	1
IS_LT 2315	Advancing Equity in K12 Classrooms Through Artificial Intelligence	1
IS_LT 4099	Making and Education	2
IS_LT 4310	Seminar in Information Science and Learning Technologies (Topic: Accessible Learning and Information Environments)	2
IS_LT 4355	Web Design and Development	3
IS_LT 4361	Introduction to Digital Media	3
IS_LT 4373	Exploring Moodle	1
IS_LT 4374	Exploring Canvas	1
IS_LT 4386	Microlearning	1
Mid-Level Experiences		
LTC 4360	Intro. Teaching Mathematics in Middle and Secondary Schools	3
LTC 4364	Intro. Teaching Math in Middle and Secondary School Field Experience	1
LTC 4410	Teaching, Engaging and Assessing Middle-Level Students	3
LTC 4560	Reading and Writing in the Content Areas	3
LTC 4050 or SPC_ED 4310	Classroom Communities: Managing Collaboration for Learning Behavioral and Classroom Management	3
LTC 4581	Teaching Mathematics in Middle and Secondary Schools: Focus on Algebra and Technology	3
LTC 4584	Teaching Math in Middle and Secondary Schools: Algebra and Technology Field	1
LTC 4565	Reading and Writing in the Content Areas II	3
SPC_ED 4020	Teaching the Exceptional Learner	3
Advanced-Level Experiences		
LTC 4971 LTC 4971H	Internship and Capstone Seminar Internship and Capstone Seminar - Honors (Honors students can choose to enroll in 6 credit hours of LTC 4971H and 6 credit hours of LTC 4971 to fulfill 12 credit hour requirement for Internship and Capstone Seminar.)	12
LTC 4370	Teaching and Modeling Middle School Mathematics	3
LTC 4374	Teaching and Modeling Middle School Mathematics Field Experience	1
LTC 4460 or LTC 4460H	Teaching English to Speakers of Other Languages Teaching English to Speakers of Other Languages - Honors	3
LTC 4060	Teachers as Leaders: Policy, Ethics, and Advocacy	1
Content Area		

STAT 1200	Introductory Statistical Reasoning (Recommended)	3
Or one of the following:		
STAT 1300 or STAT 1300H	Elementary Statistics (Transfer only) Elementary Statistics - Honors	
STAT 1400	Elementary Statistics for Life Sciences (Transfer Only)	
STAT 2500 or STAT 2500H	Introduction to Probability and Statistics I (Also Accepted) Introduction to Probability and Statistics I - Honors	
MATH 1160 or MATH 1100 & MATH 1140	Precalculus Mathematics (requirement waived if credit already earned for Math 1500) College Algebra and Trigonometry	5
MATH 1300	Finite Mathematics	3
MATH 1360	Geometric Concepts	3
MATH 4060	Connecting Geometry to Middle and Secondary Schools	3
MATH 4070	Connecting Algebra to Middle and Secondary Schools	3
MATH 1400 or MATH 1500	Calculus for Social and Life Sciences I Analytic Geometry and Calculus I	3
MATH 2320	Discrete Mathematical Structures	3
STAT 4050	Connecting Statistics to Middle and Secondary Schools	3

MATH 4070	3	STAT 4050	3
SPC_ED 4020	3	MATH 4060	3
16		16	

Fourth Year			
Fall	CR	Spring	CR
LTC 4971	12	LTC 4370W	3
		LTC 4374	1
		LTC 4460	3
		LTC 4060	1
		MATH 2320	3
		Elective	1
		Elective	3
12		15	

Total Credits: 120

Semester Plan

Below is a sample plan of study, semester by semester. A student's actual plan may vary based on course choices and where options are available.

First Year			
Fall	CR	Spring	CR
LTC 1100		1 Educational Technology Course	1
MATH 1160 or 1100 <i>and</i> 1140	5	ENGLISH 1000	3
Humanities		3 American History or Government	3
Elective		3 STAT 1200	3
Elective		3 Humanities	3
		Elective	3
15		16	

Second Year			
Fall	CR	Spring	CR
ESC_PS 2010 or H_D_FS 3430 (Fall or Spring)		3 LTC 2040 (Fall or Spring)	3
Educational Technology Course		1 LTC 2044 (Fall or Spring)	2
Lab Science		3 Social or Behavioral Science	3
Humanities		3 MATH 1400 or 1500	3
Writing Intensive		3 MATH 1360	3
MATH 1300		3	
16		14	

Third Year			
Fall	CR	Spring	CR
LTC 4360		3 LTC 4581	3
LTC 4364		1 LTC 4584	1
LTC 4410W		3 LTC 4565	3
LTC 4560		3 LTC 4050	3