MIDDLE GRADES STEM
Bachelor of Education (B.Ed.)
2024-2025

Required Courses Inside Department: - 46 credit hours, including:

Professional Education Courses (Pre-admission): – 6 credit hours, including:

	ED 155- Teaching, Learning, and Leadership (3)
	ED 285- Educational Psychology (3)

CORE Education Courses (Post-admission): – 30 credit hours, including:

	ED 165- Ed 1. Examining Teaching as a Profession (3)
	ED 275- Ed 2. Exploring Teaching as a Profession (3)
	ED 295- Ed 3. Experiencing Teaching as a Profession (3)
	ED 395- Ed 4. Extending Teaching as a Profession (3)
	ED 302- Teaching Exceptional Learners (3)
	ED 354- Curriculum and Assessment (3)
	ED 415 5th-8th Grade Student Teaching (12)

Middle Grades STEM Courses – 10 credit hours, including:

	ED 217- Instruction to STEM Education (3)
	ED 314- Chemistry Methods for STEM Education (3)
	ED 318- Earth/Space Science for STEM Education (3)
	ED 319- STEM Practicum I (1)

Required Courses Outside Department: – 57 credit hours, including:

	AS 104 Life in the Universe (3)
	BI 100 Human Biology (3)*
	BI 101 Human Biology Laboratory (3)*
	BI 319 Biology for STEM Educators (3)
	CH 317 Chemistry for STEM Educators I (3)
	CN 150 Public Speaking (3)*
	MA 116 College Algebra (3)*
	MA 117 Trigonometry (3)
	MA 140 Statistics (3)*
	MA 200 Numbers and Operations for Elementary Teachers (3)
	MA 201 Geometry, Proportion, and Data Analysis for Elementary Teachers (3)
	MA 204 Number Theory and Discrete Math for Middle School Teachers (3)
	MA 281 History of Early Mathematics (1)
	MA 320 Mathematics for Middle School Teachers (3)
	PS 108 Physical Science (3)
	PS XXX Physical Science Elective (3)
	Physics or Engineering Elective (3)
	PY 100 Basic Concepts in Psychology (3)*
	SO 101 Social Problems (3)*

*Course is used as general education requirement in table below

General education requirements for bachelor's degrees: 34-35 credits including:		
Systemwide General Education (SGE)	*Course*	*Planned/Completed Semester*
English (6 hrs)		
Communications (3 hrs)	*CN 150*	
Mathematics (3 hrs)	*MA 116*	
Natural & Physical Sciences (4-5 hrs)	*BI 100 & BI 101*	
Arts & Humanities (6 hrs)**		
Social & Behavioral Sciences (6 hrs)**	*SO 101*	
Inclusion & Belonging (3 hrs)	*PY 100*	
Scientific Reasoning (3 hrs)	*MA 140*	

***Must be from different subjects (can't both be History, etc.)*

Middle Grades STEM—BEd

First Year					
Fall			**Spring**		
Number	Title	Hours	Number	Title	Hours
EN 101	Introductory College Writing (SGE)[010]	3	————	Arts & Humanities (SGE)[060]	3
————	Social & Behavioral Science (SGE)[050]	3	————	Communications (SGE)[020]	3
MA 116	College Algebra (SGE)[030]	3	MA 117	Trigonometry [d]	3
AS 104	Life in the Universe [d]	3	PS 108	Physical Science [d]	3
PY 100	Basic Concepts in Psychology [d]	3	CN 150	Public Speaking [d]	3
ED 155	Teaching, Learning, & Leadership	3	ED 285	Educational Psychology	3
Total Hours		**18**	**Total Hours**		**18**

Second Year					
Fall			**Spring**		
Number	Title	Hours	Number	Title	Hours
EN 200	Intermediate College Writing (SGE)[010]	3	BI 106	Everyday Biology [d]	5
MA 140	Statistics [d]	3	MA 201	Geometry, Proportions, & Data	3
MA 200	Number & Operation for Elem. Teachers	3	ED 217	Intro to STEM Education	3
ED 165	Examining Teaching as a Profession	3	ED 295	Experiencing Teaching as a Profession	3
ED 275	Exploring Teaching as a Profession	3	ED 395	Extending Teaching as a Profession	3
Total Hours		**15**	**Total Hours**		**17**

Third Year					
Fall			**Spring**		
Number	Title	Hours	Number	Title	Hours
————	Social & Behavioral Science (SGE)[050]	3	————	Natural & Physical Science (SGE)[040]	4-5
————	Arts & Humanities (SGE)[060]	3	BI 319	Biology for STEM Educators	3
PY 211	Adolescent Psychology [d]	3	MA 204	Number Theory & Discrete Math [c]	3
PS XXX	Physical Science Elective	3	MA 281	History of Early Mathematics [c]	1
ED 318	Earth/Space Science for STEM Educators	3	CH 317	Chemistry for STEM Educators I	3
ED 302	Teaching Exceptional Learners	3	ED 314	Chemistry Methods for STEM Educators	3
Total Hours		**18**	**Total Hours**		**17-18**

Fourth Year					
Fall			**Spring**		
Number	Title	Hours	Number	Title	Hours
————	Inclusion & Belonging (SGE)[070]	3	————	Scientific Reasoning (SGE)[070]	3
SO 101	Social Problems [d]	3	ED 415	5th—8th Grade Student Teaching	12
PS/EG XXX	Physics or Engineering Elective	3			
MA 320	Mathematics for Middle School Teachers [b]	3			
ED 319	STEM Practicum I	1			
ED 354	Curriculum and Assessment	3			
Total Hours		**16**	**Total Hours**		**15**

[a] Must be taken concurrently [b] Offered in Fall only [c] Offered in Spring only

[d] Course can satisfy general education requirement; see advisor

Systemwide General Education (SGE) Key

010 English
020 Communications
030 Math & Statistics
040 Natural & Physical Sciences
050 Social & Behavioral Sciences
060 Arts & Humanities
070 Institutionally Designated