

East Central College — Missouri S&T

Education BS

Transfer Guide Effective as of Fall 2026

Complete Group 1 - Core Requirements and Group 2 - Major Requirements for major of choice.

Students are not required to complete all courses on this guide before transferring to Missouri S&T.

Group 1 - Core Requirements: All Emphasis/Focus Areas Take All Courses

Education students take all Group 1 - Core Requirements and Group 2 - Emphasis Area Requirements for major of choice.

<u>East Central College</u>			<u>Semester</u>	<u>Missouri S&T</u>		
ENG 101	English Composition I	3		ENGLISH 1120	Exposition and Argumentation	3
ENG 102 or COM 110 or ENG 104	English Composition II or Public Speaking or Technical Writing	3		ENGLISH 1160 or SPMS 1185 or ENGLISH 1600	Writing and Research or Principles of Speech or Intro to Technical Communication	3
PHL 101 or PHL 111	Intro to Philosophy or Intro to Logic	3		PHILOS 1105 or PHILOS 1115	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction	3
PSC 102 or CIV 202	US Government I: National and State or European Civilization II	3		POL SCI 1200 or HISTORY 1200	American Government or Modern Western Civilization	3
EDU 201 or EDU 214	Foundations of Education or Multicultural Education	3		EDUC 1074	Education in a Diverse Society	3
EDU 190 or EDU 212	CDA Capstone-Childcare Practicum or Teaching Professional/Field Experience	3		EDUC 1104	Teacher Field Experience I	1
EDU 241	Educational Psychology	3		EDUC 2102 or PSYCH 2300	Educational Psychology	3
PSY 250	Human Development	3		PSYCH 3310	Developmental Psychology	3
EDU 244	Education of the Exceptional Learner	3		EDUC 2310 or PSYCH 4310	Education of the Exceptional Child or Psychology of the Exceptional Child	3
		Total Hours	27			Total Hours 25

Group 2 - Emphasis/Focus Area Requirements: Take All Courses for Emphasis/Focus of Choice

Middle School Teacher Education students take all Group 1 - Core Requirements (above) and Group 2 - Emphasis Area Requirements for chosen emphasis area from list below. See course requirements on following pages.

Early Childhood
Elementary Education STEM Focus
Middle School English Emphasis
Middle School Mathematics Emphasis
Middle School Science Emphasis
Middle School Social Sciences Emphasis
Secondary Teaching Art Emphasis
Secondary Teaching Computer Science Emphasis
Secondary Teaching General Science Emphasis
Secondary Teaching Spanish Emphasis

Emphasis Area Requirements are detailed on the following pages.

Early Childhood							
East Central College		Semester		Missouri S&T			
Degree Requirements							
It is recommended that AAT-track students prioritize coursework in this section and the Group 1 - Core Requirements section before completing any courses from the Additional Degree Requirements section. Students should consult closely with their community college/transfer school advisor to select coursework to total no more than the maximum of 61 transferable credits.							
BIO 111* or BIO 121* or CHM 111* or PHY 111* or PHY 211, 212 or PHY 102 or GEO 101	General Biology and Lab* (5) or Principles of Biology and Lab* (5) or General Chemistry I and Lab* (5) or College Physics I* (5) or General Physics I and Lab* (5) or Intro to Astronomy (3) or Intro to Physical Geology (3) or higher science lecture *Lab satisfies science lab requirement below.	6	Select 6 hours from at least 2 disciplines.	BIO SCI 1113, 1219* or BIO SCI 1213, 1219* CHEM 1310, 1319* or PHYSICS 1145* or PHYSICS 1135* or PHYSICS 1505 or GEOLOGY 1110	General Biology (3) and Lab* (1) or Principles of Biology (3) and Lab* (1) General Chemistry I (4) and Lab* (1) or College Physics I* (4) or Engineering Physics*(4) or Introductory Astronomy (3) or Physical and Environmental Geology (3) or higher science lecture *Lab satisfies science lab requirement below.	6	
Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1		Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1	
MTH 102 or MTH 108 or MTH 134 or MTH 170 or MTH 150	Business Mathematics or Technical Mathematics or Math for Fine and Performing Arts or College Algebra or Statistics or higher math or statistics	3		MATH 1110 or MATH 1140 or STAT 1115	Mathematical Reasoning and Modeling or College Algebra or Statistics for the Social Sciences I or higher math or statistics	3	
GRY 101	World Geography	3		HISTORY 2110	World Regional Geography	3	
CIV 201 or CIV 202 or HST 101 or HST 102	European Civilization I or European Civilization II or US History to 1877 or US History Since 1877	3		HISTORY 1300 or HISTORY 1310 or HISTORY 1100* or HISTORY 1200* or	American History to 1877 or American History since 1877 or Early Western Civilization or Modern Western Civilization or *Department will substitute HISTORY 1100 or 1200 for this requirement.	3	
EDU 213	Literature for Children	3		EDUC 3430 or ENGLISH 2240	Diverse Literature for Children or Children's Literature	3	
Literature	Literature Elective	3		Literature	Literature Elective	3	
PSY 101	General Psychology	3		PSYCH 1101	General Psychology	3	
ART 101 or MUS 101	Art Appreciation or Music Appreciation	3		ART 1180 or MUSIC 1150	Art Appreciation or Music Appreciation	3	
Additional Degree Requirements							
It is recommended that AAS or Certificate Program students who have completed the coursework below work closely with their community college/transfer school advisor to complete selected courses from the Recommended Transfer Coursework section and the Group 1 - Core Requirements section to total no more than the maximum of 61 transferable credits.							
			EDUC 1055	Intro to Early Childhood Education		3	
			EDUC 1221	Health, Nutrition, and Safety in Early Childhood Education		3	
			EDUC 1820	Early Childhood Program Management		3	
			EDUC 2440	Observation and Assessment of Young Children		3	
			EDUC 2401	School, Family, and Community Partnerships		3	
			EDUC 2211	Child Development		3	
	Group 2 Emphasis/Focus Area Requirements	34		Group 2 Emphasis/Focus Area Requirements		36	
	Group 1 Core Requirements	27		Group 1 Core Requirements		25	
	Total Hours	61			Total Hours*	61	
*S&T advisor permission is required to transfer more than 61 credits toward the S&T degree for Early Childhood Emphasis Area.							
Professional Requirements for Teacher Education Program:							
Please view all program requirements at https://teachereducation.mst.edu/secondaryeducation/ .							

Elementary Education Focus

East Central College		Semester	Missouri S&T			
BIO 111* or BIO 121* or CHM 111* or PHY 111* or PHY 211, 212 or PHY 102 or GEO 101	General Biology and Lab* (5) or Principles of Biology and Lab* (5) or General Chemistry I and Lab* (5) or College Physics I* (5) or General Physics I and Lab* (5) or Intro to Astronomy (3) or Intro to Physical Geology (3) or higher science lecture *Lab satisfies science lab requirement below.	6	Select 6 hours from at least 2 disciplines.	BIO SCI 1113, 1219* or BIO SCI 1213, 1219* CHEM 1310, 1319* or PHYSICS 1145* or PHYSICS 1135* or PHYSICS 1505 or GEOLOGY 1110	General Biology (3) and Lab* (1) or Principles of Biology (3) and Lab* (1) General Chemistry I (4) and Lab* (1) or College Physics I* (4) or Engineering Physics*(4) or Introductory Astronomy (3) or Physical and Environmental Geology (3) or higher science lecture *Lab satisfies science lab requirement below.	6
Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1		Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1
MTH 102 or MTH 108 or MTH 134 or MTH 170 or MTH 150	Business Mathematics or Technical Mathematics or Math for Fine and Performing Arts or College Algebra or Statistics or higher math or statistics	3		MATH 1110 or MATH 1140 or STAT 1115	Mathematical Reasoning and Modeling or College Algebra or Statistics for the Social Sciences I or higher math or statistics	3
GRY 101	World Geography	3		HISTORY 2110	World Regional Geography	3
CIV 201	European Civilization I	3		HISTORY 1100	Early Western Civilization	3
CIV 202	European Civilization II	3		HISTORY 1200	Modern Western Civilization	3
HST 101 or HST 102	US History to 1877 or US History Since 1877	3		HISTORY 1300 or HISTORY 1310	American History to 1877 or American History since 1877	3
ECO 102 or ECO 101	Principles of Microeconomics or Principles of Macroeconomics	3		ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
EDU 213	Literature for Children	3		EDUC 3430 or ENGLISH 2240	Diverse Literature for Children or Children's Literature	3
PSY 101	General Psychology	3		PSYCH 1101	General Psychology	3
ART 101 or MUS 101	Art Appreciation or Music Appreciation	3		ART 1180 or MUSIC 1150	Art Appreciation or Music Appreciation	3
	Group 2 Emphasis/Focus Area Requirements	34			Group 2 Emphasis/Focus Area Requirements	34
	Group 1 Core Requirements	27			Group 1 Core Requirements	25
	Total Hours	61			Total Hours*	59
*S&T advisor permission is required to transfer more than 63 credits toward the S&T degree for the Elementary Emphasis Area.						
Professional Requirements for Teacher Education Program: Please view all program requirements at https://teachereducation.mst.edu/secondaryeducation/ .						

Middle School Language Arts Emphasis

East Central College		Semester	Missouri S&T		
MTH 102 or MTH 108 or MTH 134 or MTH 170 or MTH 150	Business Mathematics or Technical Mathematics or Math for Fine and Performing Arts or College Algebra or Statistics or higher math or statistics	3	MATH 1110 or MATH 1140 or STAT 1115	Mathematical Reasoning and Modeling or College Algebra or Statistics for the Social Sciences I or higher math or statistics	3
BIO 111* or BIO 121* or CHM 111* or PHY 111* or PHY 211, 212 or PHY 102 or GEO 101	General Biology and Lab* (5) or Principles of Biology and Lab* (5) or General Chemistry I and Lab* (5) or College Physics I* (5) or General Physics I and Lab* (5) or Intro to Astronomy (3) or Intro to Physical Geology (3) or higher science lecture *Lab satisfies science lab requirement below.	6	BIO SCI 1113, 1219* or BIO SCI 1213, 1219* CHEM 1310, 1319* or PHYSICS 1145* or PHYSICS 1135* or PHYSICS 1505 or GEOLOGY 1110	General Biology (3) and Lab* (1) or Principles of Biology (3) and Lab* (1) General Chemistry I (4) and Lab* (1) or College Physics I* (4) or Engineering Physics*(4) or Introductory Astronomy (3) or Physical and Environmental Geology (3) or higher science lecture *Lab satisfies science lab requirement below.	6
Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1	Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1
CIS 143 or EGR 221, 222 or EGR 251	Implementing Information Systems-User Perspective or C++ Program Engineers and Lab or Data Structures	3	IST 1551 or CS 1500 or CS 1971/1981*	Implementing Info Systems: User Perspective or Computational Problem Solving or Intro to Programming Methodology and Lab* *Department will substitute for this requirement.	3
ART 101 or MUS 101 or THE 101	Art Appreciation or Music Appreciation or Theatre Appreciation	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video	3
CIV 201 or CIV 202 or HST 101 or HST 102	European Civilization I or European Civilization II or US History to 1877 or US History Since 1877	3	HISTORY 1100 or HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Early Western Civilization or Modern Western Civilization or American History to 1877 or American History since 1877	3
ECO 102 or ECO 101	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Literature	Literature Elective Any literature with prerequisite of no more than English Composition I.	3	Literature	Literature Elective Any literature with prerequisite of no more than ENGLISH 1120.	3
UL Literature	Upper Level Literature Elective	3	UL Literature	Upper Level Literature Elective	3
Humanities	Any philosophy, fine art, literature, foreign language	3	Humanities	Any philosophy, fine art, literature, foreign language	3
	Group 2 Emphasis/Focus Area Requirements	31		Group 2 Emphasis/Focus Area Requirements	31
	Group 1 Core Requirements	27		Group 1 Core Requirements	25
	Total Hours	58		Total Hours*	56
*S&T advisor permission is required to transfer more than 62 credits toward the S&T degree for Middle School English Emphasis Area.					
Professional Requirements for Teacher Education Program: Please view all program requirements at https://teachereducation.mst.edu/secondaryeducation/.					

Middle School Mathematics Emphasis

East Central College		Semester	Missouri S&T	
BIO 111* or BIO 121* or CHM 111* or PHY 111* or PHY 211, 212 or PHY 102 or GEO 101	General Biology and Lab* (5) or Principles of Biology and Lab* (5) or General Chemistry I and Lab* (5) or College Physics I* (5) or General Physics I and Lab* (5) or Intro to Astronomy (3) or Intro to Physical Geology (3) or higher science lecture *Lab satisfies science lab requirement below.	6	BIO SCI 1113, 1219* or BIO SCI 1213, 1219* CHEM 1310, 1319* or PHYSICS 1145* or PHYSICS 1135* or PHYSICS 1505 or GEOLOGY 1110	General Biology (3) and Lab* (1) or Principles of Biology (3) and Lab* (1) General Chemistry I (4) and Lab* (1) or College Physics I* (4) or Engineering Physics*(4) or Introductory Astronomy (3) or Physical and Environmental Geology (3) or higher science lecture *Lab satisfies science lab requirement below.
Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1	Science Lab	One lab course from any physical or biological science if not taken with lecture course above.
MTH 110	Intermediate Algebra	3	MATH 1103	Fundamentals of Algebra
MTH 170	College Algebra	3	MATH 1140	College Algebra
MTH 190	Analytic Geometry & Calculus I	5	MATH 1208 or MATH 1214	Calculus with Analytic Geometry I (5) or Calculus I (4)
MTH 210 or MTH 180	Analytic Geometry & Calculus II (5) or Survey Calculus (3)	3	MATH 1221 or MATH 1215 or MATH 1212	Calculus with Analytic Geometry II (5) or Calculus II (4) or Survey of Calculus (4)
CIS 143 or EGR 221, 222 or EGR 251	Implementing Information Systems-User Perspective or C++ Program Engineers and Lab or Data Structures	3	IST 1551 or CS 1500 or CS 1971/1981*	Implementing Info Systems: User Perspective or Computational Problem Solving or Intro to Programming Methodology and Lab* *Department will substitute for this requirement.
BUS 210 or MTH 150 or MTH 242	Basic Business Statistics or Statistics or Engineering Statistics	3	STAT 1115 or STAT 3115	Statistics for the Social Sciences I or Engineering Statistics
ART 101 or MUS 101 or THE 101	Art Appreciation or Music Appreciation or Theatre Appreciation	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video
CIV 201 or CIV 202 or HST 101 or HST 102	European Civilization I or European Civilization II or US History to 1877 or US History Since 1877	3	HISTORY 1100 or HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Early Western Civilization or Modern Western Civilization or American History to 1877 or American History since 1877
ECO 102 or ECO 101	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics
Humanities	Any philosophy, fine art, literature, foreign language	3	Humanities	Any philosophy, fine art, literature, foreign language
	Group 2 Emphasis/Focus Area Requirements	39		Group 2 Emphasis/Focus Area Requirements
	Group 1 Core Requirements	27		Group 1 Core Requirements
	Total Hours	66		Total Hours*
				64
*S&T advisor permission is required to transfer more than 60 credits toward the S&T degree for Middle School Math Emphasis Area.				
Professional Requirements for Teacher Education Program: Please view all program requirements at https://teachereducation.mst.edu/secondaryeducation/ .				

Middle School Science Emphasis

<u>East Central College</u>			<u>Semester</u>	<u>Missouri S&T</u>		
BIO 111 or BIO 121	General Biology and Lab or Principles of Biology and Lab	5		BIO SCI 1113, 1219 or BIO SCI 1213*, 1219	General Biology and Lab or Principles of Biology and Lab *BIO SCI 1213 will be substituted for 1113.	4
EVR 103	Intro to Environmental Science	3		BIO SCI 1173	Intro to Environmental Sciences	3
GEO 101	Intro to Physical Geology	3		GEOLOGY 1110	Physical and Environmental Geology	3
PHY 102 or PHY 111	Intro to Astronomy or College Physics I	3		PHYSICS 1505 or PHYSICS 1145	Introductory Astronomy (3) or College Physics I (4) Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit.	3
CHM 111	General Chemistry I and Lab	5		CHEM 1310, 1319	General Chemistry I and Lab	5
MTH 102 or MTH 108 or MTH 134 or MTH 170 or MTH 150	Business Mathematics or Technical Mathematics or Math for Fine and Performing Arts or College Algebra or Statistics or higher math or statistics	3		MATH 1110 or MATH 1140 or STAT 1115	Mathematical Reasoning and Modeling or College Algebra or Statistics for the Social Sciences I or higher math or statistics	3
BUS 210 or MTH 150 or MTH 242	Basic Business Statistics or Statistics or Engineering Statistics	3		STAT 1115 or STAT 3115	Statistics for the Social Sciences I or Engineering Statistics	3
ART 101 or MUS 101 or THE 101	Art Appreciation or Music Appreciation or Theatre Appreciation	3		ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video	3
CIV 201 or CIV 202 or HST 101 or HST 102	European Civilization I or European Civilization II or US History to 1877 or US History Since 1877	3		HISTORY 1100 or HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Early Western Civilization or Modern Western Civilization or American History to 1877 or American History since 1877	3
ECO 102 or ECO 101	Principles of Microeconomics or Principles of Macroeconomics	3		ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Humanities	Any philosophy, fine art, literature, foreign language	3		Humanities	Any philosophy, fine art, literature, foreign language	3
	Group 2 Emphasis/Focus Area Requirements	37			Group 2 Emphasis/Focus Area Requirements	36
	Group 1 Core Requirements	27			Group 1 Core Requirements	25
	Total Hours	64			Total Hours*	61
*S&T advisor permission is required to transfer more than 61 credits toward the S&T degree for Middle School Science Emphasis Area.						
Professional Requirements for Teacher Education Program: Please view all program requirements at https://teachereducation.mst.edu/secondaryeducation/ .						

Middle School Social Sciences Emphasis

East Central College		Semester	Missouri S&T	
BIO 111* or BIO 121* or CHM 111* or PHY 111* or PHY 211, 212 or PHY 102 or GEO 101	General Biology and Lab* (5) or Principles of Biology and Lab* (5) or General Chemistry I and Lab* (5) or College Physics I* (5) or General Physics I and Lab* (5) or Intro to Astronomy (3) or Intro to Physical Geology (3) or higher science lecture *Lab satisfies science lab requirement below.	6	BIO SCI 1113, 1219* or BIO SCI 1213, 1219* CHEM 1310, 1319* or PHYSICS 1145* or PHYSICS 1135* or PHYSICS 1505 or GEOLOGY 1110	General Biology (3) and Lab* (1) or Principles of Biology (3) and Lab* (1) General Chemistry I (4) and Lab* (1) or College Physics I* (4) or Engineering Physics*(4) or Introductory Astronomy (3) or Physical and Environmental Geology (3) or higher science lecture *Lab satisfies science lab requirement below.
Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1	Science Lab	One lab course from any physical or biological science if not taken with lecture course above.
MTH 102 or MTH 108 or MTH 134 or MTH 170 or MTH 150	Business Mathematics or Technical Mathematics or Math for Fine and Performing Arts or College Algebra or Statistics or higher math or statistics	3	MATH 1110 or MATH 1140 or STAT 1115	Mathematical Reasoning and Modeling or College Algebra or Statistics for the Social Sciences I or higher math or statistics
CIS 143 or EGR 221, 222 or EGR 251	Implementing Information Systems-User Perspective or C++ Program Engineers and Lab or Data Structures	3	IST 1551 or CS 1500 or CS 1971/1981*	Implementing Info Systems: User Perspective or Computational Problem Solving or Intro to Programming Methodology and Lab* *Department will substitute for this requirement.
GRY 101	World Geography	3	HISTORY 2110	World Regional Geography
CIV 201 or CIV 202	European Civilization I or European Civilization II	3	HISTORY 1100 or HISTORY 1200	Early Western Civilization or Modern Western Civilization
HST 101 or HST 102	US History to 1877 or US History Since 1877	3	HISTORY 1300 or HISTORY 1310	American History to 1877 or American History since 1877
ART 101 or MUS 101 or THE 101	Art Appreciation or Music Appreciation or Theatre Appreciation	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video
ECO 102 or ECO 101	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics
Humanities	Any philosophy, fine art, literature, foreign language	3	Humanities	Any philosophy, fine art, literature, foreign language
	Group 2 Emphasis/Focus Area Requirements	31		Group 2 Emphasis/Focus Area Requirements
	Group 1 Core Requirements	27		Group 1 Core Requirements
	Total Hours	58		Total Hours*
				56
*S&T advisor permission is required to transfer more than 62 credits toward the S&T degree for Middle School Social Sciences Emphasis Area.				
Professional Requirements for Teacher Education Program: Please view all program requirements at https://teachereducation.mst.edu/secondaryeducation/ .				

Secondary Teaching Art Emphasis

East Central College			Semester	Missouri S&T		
ART 128	Drawing I	3	Select 6 hours from at least 2 disciplines.	ART 1120	Drawing I	3
ART 101	Art Appreciation	3		ART 1180	Art Appreciation	3
BIO 111* or BIO 121* or CHM 111* or PHY 111* or PHY 211, 212 or PHY 102 or GEO 101	General Biology and Lab* (5) or Principles of Biology and Lab* (5) or General Chemistry I and Lab* (5) or College Physics I* (5) or General Physics I and Lab* (5) or Intro to Astronomy (3) or Intro to Physical Geology (3) or higher science lecture *Lab satisfies science lab requirement below.	6		BIO SCI 1113, 1219* or BIO SCI 1213, 1219* CHEM 1310, 1319* or PHYSICS 1145* or PHYSICS 1135* or PHYSICS 1505 or GEOLOGY 1110	General Biology (3) and Lab* (1) or Principles of Biology (3) and Lab* (1) General Chemistry I (4) and Lab* (1) or College Physics I* (4) or Engineering Physics*(4) or Introductory Astronomy (3) or Physical and Environmental Geology (3) or higher science lecture *Lab satisfies science lab requirement below.	6
Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1		Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1
MTH 102 or MTH 108 or MTH 134 or MTH 170 or MTH 150	Business Mathematics or Technical Mathematics or Math for Fine and Performing Arts or College Algebra or Statistics or higher math or statistics	3		MATH 1110 or MATH 1140 or STAT 1115	Mathematical Reasoning and Modeling or College Algebra or Statistics for the Social Sciences I or higher math or statistics	3
ENG 210 or ENG 211 or ENG 221 or ENG 222 or ENG 124 or HST 101* or HST 102* or MUS 101 or THE 101 or Literature	Survey British Lit: Beginnings - 1784 or Survey British Lit: Romantic-Present or Survey American Lit: Beginnings - 1865 or Survey American Lit: 1865-Present or World Literature I or US History to 1877* or US History Since 1877* or Music Appreciation or Theatre Appreciation or Any literature with prerequisite of no more than English Composition I. *Satisfies the State of Missouri government requirement.	3		ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or MUSIC 1150 or THEATRE 1190 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Music Appreciation or Theatre via Video or Any literature with prerequisite of no more than ENGLISH 1120. *Satisfies the State of Missouri government requirement.	3
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3		HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	Group 2 Emphasis/Focus Area Requirements	16			Group 2 Emphasis/Focus Area Requirements	16
	Group 1 Core Requirements	27			Group 1 Core Requirements	25
	Total Hours	43			Total Hours*	41
*S&T advisor permission is required to transfer more than 61 credits toward the S&T degree for Middle School Science Emphasis Area.						
Professional Requirements for Teacher Education Program: Please view all program requirements at https://teachereducation.mst.edu/secondaryeducation/ .						

Secondary Teaching Computer Science Emphasis

East Central College			Semester	Missouri S&T		
BUS 110	Intro to Business	3		BUS 1110	Intro to Management and Entrepreneurship	3
BUS 234	Legal Environment of Business	3		BUS 2910	Business Law	3
CIS 143	Implementing Info Systems-User Perspective	3		IST 1551	Implement Info Systems: User Perspective	3
CIS 173	Implementing Info Systems-Data Perspective	3		IST 1552	Implement Info Systems: Data Perspective	3
CIS 101	Microcomputer Application	3		IST 1750	Intro to Management Information Systems	3
MTH 102 or MTH 108 or MTH 134 or MTH 170 or MTH 150	Business Mathematics or Technical Mathematics or Math for Fine and Performing Arts or College Algebra or Statistics or higher math or statistics	3		MATH 1110 or MATH 1140 or STAT 1115	Mathematical Reasoning and Modeling or College Algebra or Statistics for the Social Sciences I or higher math or statistics	3
BIO 111* or BIO 121* or CHM 111* or PHY 111* or PHY 211, 212 or PHY 102 or GEO 101	General Biology and Lab* (5) or Principles of Biology and Lab* (5) or General Chemistry I and Lab* (5) or College Physics I* (5) or General Physics I and Lab* (5) or Intro to Astronomy (3) or Intro to Physical Geology (3) or higher science lecture *Lab satisfies science lab requirement below.	6	Select 6 hours from at least 2 disciplines.	BIO SCI 1113, 1219* or BIO SCI 1213, 1219* CHEM 1310, 1319* or PHYSICS 1145* or PHYSICS 1135* or PHYSICS 1505 or GEOLOGY 1110	General Biology (3) and Lab* (1) or Principles of Biology (3) and Lab* (1) General Chemistry I (4) and Lab* (1) or College Physics I* (4) or Engineering Physics*(4) or Introductory Astronomy (3) or Physical and Environmental Geology (3) or higher science lecture *Lab satisfies science lab requirement below.	6
Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1		Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1
ENG 210 or ENG 211 or ENG 221 or ENG 222 or ENG 124 or HST 101* or HST 102* or ART 101 or MUS 101 or THE 101 or Literature	Survey British Lit: Beginnings - 1784 or Survey British Lit: Romantic-Present or Survey American Lit: Beginnings - 1865 or Survey American Lit: 1865-Present or World Literature I or US History to 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Theatre Appreciation or Any literature with prerequisite of no more than English Composition I. *Satisfies the State of Missouri government requirement.	6	Select 6 hours from at least 2 disciplines.	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1190 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Appreciation or Theatre via Video or Any literature with prerequisite of no more than ENGLISH 1120. *Satisfies the State of Missouri government requirement.	6
HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3		HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
	Group 2 Emphasis/Focus Area Requirements	34		Group 2 Emphasis/Focus Area Requirements		34
	Group 1 Core Requirements	27		Group 1 Core Requirements		25
	Total Hours	61			Total Hours*	59
*S&T advisor permission is required to transfer more than 61 credits toward the S&T degree for Middle School Science Emphasis Area.						
Professional Requirements for Teacher Education Program: Please view all program requirements at https://teachereducation.mst.edu/secondaryeducation/.						

Secondary Teaching General Science Emphasis

East Central College			Semester	Missouri S&T		
BIO 111 or BIO 121	General Biology and Lab or Principles of Biology and Lab	5		BIO SCI 1113, 1219 or BIO SCI 1213*, 1219	General Biology and Lab or Principles of Biology and Lab *BIO SCI 1213 will be substituted for 1113.	4
BIO 122	Principles of Biology II and Lab	5		BIO SCI 1223, 1229	Biodiversity and Lab	4
EVR 103	Intro to Environmental Sciences	3		BIO SCI 1173	Intro to Environmental Sciences	3
CHM 111	General Chemistry I and Lab	5		CHEM 1310, 1319	General Chemistry I and Lab	5
GEO 101	Intro to Physical Geology	3		GEOLOGY 1110	Physical and Environmental Geology	3
PHY 102	Intro to Astronomy	3		PHYSICS 1505	Introductory Astronomy	3
PHY 111, 112	College Physics I and Lab	5		PHYSICS 1145	College Physics I	4
MTH 102 or MTH 108 or MTH 134 or MTH 170 or MTH 150	Business Mathematics or Technical Mathematics or Math for Fine and Performing Arts or College Algebra or Statistics or higher math or statistics	3		MATH 1110 or MATH 1140 or STAT 1115	Mathematical Reasoning and Modeling or College Algebra or Statistics for the Social Sciences I or higher math or statistics	3
ENG 210 or ENG 211 or ENG 221 or ENG 222 or ENG 124 or HST 101* or HST 102* or ART 101 or MUS 101 or THE 101 or Literature	Survey British Lit: Beginnings - 1784 or Survey British Lit: Romantic-Present or Survey American Lit: Beginnings - 1865 or Survey American Lit: 1865-Present or World Literature I or US History to 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Theatre Appreciation or Any literature with prerequisite of no more than English Composition I. *Satisfies the State of Missouri government requirement.	6	Select 6 hours from at least 2 disciplines.	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1190 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Appreciation or Theatre via Video or Any literature with prerequisite of no more than ENGLISH 1120. *Satisfies the State of Missouri government requirement.	6
	Group 2 Emphasis/Focus Area Requirements	38			Group 2 Emphasis/Focus Area Requirements	35
	Group 1 Core Requirements	27			Group 1 Core Requirements	25
	Total Hours	65			Total Hours*	60
*S&T advisor permission is required to transfer more than 61 credits toward the S&T degree for Middle School Science Emphasis Area.						
Professional Requirements for Teacher Education Program: Please view all program requirements at https://teachereducation.mst.edu/secondaryeducation/ .						

Secondary Teaching Spanish Emphasis

East Central College			Semester	Missouri S&T		
SPN 101	Elementary Spanish I	4		SPANISH 1101	Elementary Spanish I	3
SPN 102	Elementary Spanish II	4		SPANISH 1102	Elementary Spanish II	3
SPN 201	Intermediate Spanish I	4		SPANISH 1180	Intermediate Spanish	3
MTH 102 or MTH 108 or MTH 134 or MTH 170 or MTH 150	Business Mathematics or Technical Mathematics or Math for Fine and Performing Arts or College Algebra or Statistics or higher math or statistics	3		MATH 1110 or MATH 1140 or STAT 1115	Mathematical Reasoning and Modeling or College Algebra or Statistics for the Social Sciences I or higher math or statistics	3
BIO 111* or BIO 121* or CHM 111* or PHY 111* or PHY 211, 212 or PHY 102 or GEO 101	General Biology and Lab* (5) or Principles of Biology and Lab* (5) or General Chemistry I and Lab* (5) or College Physics I* (5) or General Physics I and Lab* (5) or Intro to Astronomy (3) or Intro to Physical Geology (3) or higher science lecture *Lab satisfies science lab requirement below.	6	Select 6 hours from at least 2 disciplines.	BIO SCI 1113, 1219* or BIO SCI 1213, 1219* CHEM 1310, 1319* or PHYSICS 1145* or PHYSICS 1135* or PHYSICS 1505 or GEOLOGY 1110	General Biology (3) and Lab* (1) or Principles of Biology (3) and Lab* (1) General Chemistry I (4) and Lab* (1) or College Physics I* (4) or Engineering Physics*(4) or Introductory Astronomy (3) or Physical and Environmental Geology (3) or higher science lecture *Lab satisfies science lab requirement below.	6
Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1		Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1
ENG 210 or ENG 211 or ENG 221 or ENG 222 or ENG 124 or HST 101* or HST 102* or ART 101 or MUS 101 or THE 101 or Literature	Survey British Lit: Beginnings - 1784 or Survey British Lit: Romantic-Present or Survey American Lit: Beginnings - 1865 or Survey American Lit: 1865-Present or World Literature I or US History to 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Theatre Appreciation or Any literature with prerequisite of no more than English Composition I. *Satisfies the State of Missouri government requirement.	6	Select 6 hours from at least 2 disciplines.	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1190 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Appreciation or Theatre via Video or Any literature with prerequisite of no more than ENGLISH 1120. *Satisfies the State of Missouri government requirement.	6
Group 1 Core Requirements		27		Group 1 Core Requirements		25
Total Hours		27			Total Hours*	25
*S&T advisor permission is required to transfer more than 61 credits toward the S&T degree for Middle School Science Emphasis Area.						
Professional Requirements for Teacher Education Program: Please view all program requirements at https://teachereducation.mst.edu/secondaryeducation/ .						