

Metropolitan Community 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>Metropolitan Community College</u>			<u>Semester</u>	<u>Missouri S&T</u>		
ENGL 101	Composition and Reading I	3		ENGLISH 1120	Exposition and Argumentation	3
ENGL 102 or COMM 100	Composition and Reading II or Fundamentals of Speech	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
PHIL 100 or PHIL 200	Introduction to Philosophy or Logic	3		PHILOS 1105 or PHILOS 1115*	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction *PHILOS 1115 will be substituted for PHILOS 1105.	3
POLS 136 or HIST 134	Intro to U.S. National Politics or Modern Western Civilization	3		POL SCI 1200 or HISTORY 1200	American Government or Modern Western Civilization	3
EDUC 100	Introduction to Education	2		EDUC 1074	Education in a Diverse Society	3
EDUC 201	Teaching Profession with Field Experience	3		EDUC 1104	Teacher Field Experience I	1
EDUC 270	Educational Psychology	3		EDUC 2102 or PSYCH 2300	Educational Psychology	3
PSYC 241	Human Development	3		PSYCH 3310	Developmental Psychology	3
EDUC 285	Education of Exceptional Learners	3		EDUC 2310 or PSYCH 4310	Education of the Exceptional Child or Psychology of the Exceptional Child	3
			Total Hours	26		
					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

Metropolitan Community 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.						
BIOL 101* or BIOL 123* or CHEM 111* or PHYS 130* or PHYS 220* or PHYS 106L* or GEOL 101 or GEOL 102*	General Biology* (5) or General Biology for Majors I* (4) or General College Chemistry I* (5) or College Physics I* (5) or Engineering Physics I* (5) or General Astronomy and Lab* (5) or Physical Geology (5) or Historical Geology* (4)) or higher science lecture *Lab satisfies science lab requirement below.	4	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, 1509* or GEOLOGY 1110 or GEOLOGY 1120, 1129*	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) and Lab* (1) or Physical and Environmental Geology (3) or Evolution of the Earth (3) and Lab* (1) 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
MATH 119 or MATH 120 or MATH 115	Mathematical Reasoning and Modeling 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 or higher math or statistics	3
GEOG 105	World Geography	3		HISTORY 2110	World Regional Geography	3
HIST 133 or HIST 134 or HIST 120 or HIST 121	Foundations of Western Civilization or Modern Western Civilization or United States History to 1865 or United States History since 1865	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
EDUC 215	Children's Literature for Elementary Teachers	3		EDUC 3430	Diverse Literature for Children	3
Literature	Literature Elective	3		Literature	Literature Elective	3
PSYC 140	General Psychology	3		PSYCH 1101	General Psychology	3
ART 108 or MUSI 108	Survey of Art 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.						
ECED 101	Fundamentals of Early Care and Education	3	EDUC 1055	Intro to Early Childhood Education	3	
ECED 110	Child Health, Safety, and Nutrition	3	EDUC 1221	Health, Nutrition, and Safety in Early Childhood Education	3	
ECED 220	Child Care Management	3	EDUC 1820	Early Childhood Program Management	3	
ECED 149	Observation and Assessment	3	EDUC 2440	Observation and Assessment of Young Children	3	
ECED 262	Working with Families and the Community	3	EDUC 2401	School, Family, and Community Partnerships	3	
ECED 113	Child Growth and Development	3	EDUC 2211	Child Development	3	
	Group 2 Emphasis/Focus Area Requirements	35		Group 2 Emphasis/Focus Area Requirements	36	
	Group 1 Core Requirements	26		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

Metropolitan Community College		Semester	Missouri S&T	
BIOL 101* or BIOL 123* or CHEM 111* or PHYS 130* or PHYS 220* or PHYS 106L* or GEOL 101 or GEOL 102*	General Biology* (5) or General Biology for Majors I* (4) or General College Chemistry I* (5) or College Physics I* (5) or Engineering Physics I* (5) or General Astronomy and Lab* (5) or Physical Geology (5) or Historical Geology* (4)) or higher science lecture *Lab satisfies science lab requirement below.	4	BIO SCI 1113, 1219* or BIO SCI 1213, 1219* CHEM 1310, 1319* or PHYSICS 1145* or PHYSICS 1135* or PHYSICS 1505, 1509* or GEOLOGY 1110 or GEOLOGY 1120, 1129*	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) and Lab* (1) or Physical and Environmental Geology (3) or Evolution of the Earth (3) and Lab* (1) 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.
MATH 119 or MATH 120 or MATH 115	Mathematical Reasoning and Modeling 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 or higher math or statistics
GEOG 105	World Geography	3	HISTORY 2110	World Regional Geography
HIST 133	Foundations of Western Civilization	3	HISTORY 1100	Early Western Civilization
HIST 134	Modern Western Civilization	3	HISTORY 1200	Modern Western Civilization
HIST 120 or HIST 121	United States History to 1865 or United States History since 1865	3	HISTORY 1300 or HISTORY 1310	American History to 1877 or American History since 1877
ECON 211 or ECON 210	Microeconomics or Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics
EDUC 215	Children's Literature for Elementary Teachers	3	EDUC 3430	Diverse Literature for Children
PSYC 140	General Psychology	3	PSYCH 1101	General Psychology
ART 108 or MUSI 108	Survey of Art or Music Appreciation	3	ART 1180 or MUSIC 1150	Art Appreciation or Music Appreciation
	Group 2 Emphasis/Focus Area Requirements	32		Group 2 Emphasis/Focus Area Requirements
	Group 1 Core Requirements	26		Group 1 Core Requirements
	Total Hours	58		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

<u>Metropolitan Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
MATH 119 or MATH 120 or MATH 115	Mathematical Reasoning and Modeling 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 or higher math or statistics
BIOL 101* or BIOL 123* or CHEM 111* or PHYS 130* or PHYS 220* or PHYS 106L* or GEOL 101 or GEOL 102*	General Biology* (5) or General Biology for Majors I* (4) or General College Chemistry I* (5) or College Physics I* (5) or Engineering Physics I* (5) or General Astronomy and Lab* (5) or Physical Geology (5) or Historical Geology* (4)) *Lab satisfies science lab requirement below.	4	BIO SCI 1113, 1219* or BIO SCI 1213, 1219* CHEM 1310, 1319* or PHYSICS 1145* or PHYSICS 1135* or PHYSICS 1505, 1509* or GEOLOGY 1110 or GEOLOGY 1120, 1129*	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) and Lab* (1) or Physical and Environmental Geology (3) or Evolution of the Earth (3) and Lab* (1) 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.
CSIS 123 or CSIS 223 or ENGR 204	Programming Fundamentals or Object-Oriented Programming with C++ or Programming for Engineers	3	COMP SCI 1500 or COMP SCI 1971/1981* or COMP SCI 1972/1982*	Computational Problem Solving or Intro to Programming Methodology and Lab* or Intro to MATLAB Programming and Lab* *Department will substitute for this requirement.
ART 108 or MUSI 108 or SPDR 106	Survey of Art or Music Appreciation or Theater Appreciation	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video
HIST 133 or HIST 134 or HIST 120 or HIST 121	Foundations of Western Civilization or Modern Western Civilization or United States History to 1865 or United States History since 1865	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
ECON 211 or ECON 210	Microeconomics or Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics
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.
UL Literature	Upper Level Literature Elective	3	UL Literature	Upper Level Literature Elective
Humanities	Any philosophy, fine art, literature, foreign language	3	Humanities	Any philosophy, fine art, literature, foreign language
	Group 2 Emphasis/Focus Area Requirements	26		Group 2 Emphasis/Focus Area Requirements
	Group 1 Core Requirements	26		Group 1 Core Requirements
	Total Hours	52		Total Hours*

*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

Metropolitan Community College		Semester	Missouri S&T	
BIOL 101* or BIOL 123* or CHEM 111* or PHYS 130* or PHYS 220* or PHYS 106L* or GEOL 101 or GEOL 102*	General Biology* (5) or General Biology for Majors I* (4) or General College Chemistry I* (5) or College Physics I* (5) or Engineering Physics I* (5) or General Astronomy and Lab* (5) or Physical Geology (5) or Historical Geology* (4)) *Lab satisfies science lab requirement below.	4	BIO SCI 1113, 1219* or BIO SCI 1213, 1219* CHEM 1310, 1319* or PHYSICS 1145* or PHYSICS 1135* or PHYSICS 1505, 1509* or GEOLOGY 1110 or GEOLOGY 1120, 1129*	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) and Lab* (1) or Physical and Environmental Geology (3) or Evolution of the Earth (3) and Lab* (1) 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.
MATH 120	College Algebra	3	MATH 1140	College Algebra
MATH 180	Analytic Geometry and Calculus I	5	MATH 1214	Calculus I
MATH 190 or MATH 175	Analytic Geometry and Calculus II (5) or Calculus for Business and Social Science (3)	3	MATH 1215 or MATH 1212	Calculus II (4) or Survey of Calculus (4)
CSIS 123 or CSIS 223 or ENGR 204	Programming Fundamentals or Object-Oriented Programming with C++ or Programming for Engineers	3	CS 1500 or CS 1971/1981* or CS 1972/1982*	Computational Problem Solving or Intro to Programming Methodology and Lab* or Intro to MATLAB Programming and Lab* *Department will substitute for this requirement.
MATH 115 or ENGR 215	Statistics or Engineering Statistics and Computation	3	STAT 1115 or STAT 3115	Statistics for the Social Sciences I or Engineering Statistics
ART 108 or MUSI 108 or SPDR 106	Survey of Art or Music Appreciation or Theater Appreciation	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video
HIST 133 or HIST 134 or HIST 120 or HIST 121	Foundations of Western Civilization or Modern Western Civilization or United States History to 1865 or United States History since 1865	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
ECON 211 or ECON 210	Microeconomics or 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	34		Group 2 Emphasis/Focus Area Requirements
	Group 1 Core Requirements	26		Group 1 Core Requirements
	Total Hours	60		Total Hours*
				61
*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

Metropolitan Community College			Semester	Missouri S&T		
BIOL 101 or BIOL 123	General Biology (5) or General Biology for Majors * (4)	4		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
BIOL 102	Environmental Science	5		BIO SCI 1173	Intro to Environmental Sciences	3
BIOL 204	Genetics	3		BIO SCI 2223	General Genetics	3
GEOL 101	Physical Geology	5		GEOLOGY 1110	Physical and Environmental Geology	3
GEOL 102	Historical Geology	4		GEOLOGY 1120, 1129*	Evolution of the Earth (3) and Lab* (1) *GEOLOGY 1129 is not a degree requirement; transfers as general elective credit.	3
PHYS 106 or PHYS 130	General Astronomy (4) or General Physics I (5)	4		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
CHEM 111	General College Chemistry	5		CHEM 1310, 1319	General Chemistry I and Lab	5
MATH 119 or MATH 120 or MATH 115	Mathematical Reasoning and Modeling 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 or higher math or statistics	3
MATH 115 or ENGR 215	Statistics or Engineering Statistics and Computation	3		STAT 1115 or STAT 3115*	Statistics for the Social Sciences I or Engineering Statistics* *STAT 3115 will be substituted for this requirement.	3
ART 108 or MUSI 108 or SPDR 106	Survey of Art or Music Appreciation or Theater Appreciation	3		ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video	3
HIST 133 or HIST 134 or HIST 120 or HIST 121	Foundations of Western Civilization or Modern Western Civilization or United States History to 1865 or United States History since 1865	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
ECON 211 or ECON 210	Microeconomics or 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	48			Group 2 Emphasis/Focus Area Requirements	42
	Group 1 Core Requirements	26			Group 1 Core Requirements	25
	Total Hours	74			Total Hours*	67

*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

<u>Metropolitan Community College</u>			<u>Semester</u>	<u>Missouri S&T</u>		
MATH 119 or MATH 120 or MATH 115	Mathematical Reasoning and Modeling or College Algebra or Statistics or higher math or statistics	3	Select 6 hours from at least 2 disciplines.	MATH 1110 or MATH 1140 or STAT 1115	Mathematical Reasoning and Modeling or College Algebra or Statistics for the Social Sciences or higher math or statistics	3
BIOL 101* or BIOL 123* or CHEM 111* or PHYS 130* or PHYS 220* or PHYS 106L* or GEOL 101 or GEOL 102*	General Biology* (5) or General Biology for Majors I* (4) or General College Chemistry I* (5) or College Physics I* (5) or Engineering Physics I* (5) or General Astronomy and Lab* (5) or Physical Geology (5) or Historical Geology* (4)) or higher science lecture *Lab satisfies science lab requirement below.	4		BIO SCI 1113, 1219* or BIO SCI 1213, 1219* CHEM 1310, 1319* or PHYSICS 1145* or PHYSICS 1135* or PHYSICS 1505, 1509* or GEOLOGY 1110 or GEOLOGY 1120, 1129*	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) and Lab* (1) or Physical and Environmental Geology (3) or Evolution of the Earth (3) and Lab* (1) 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
CSIS 123 or CSIS 223 or ENGR 204	Programming Fundamentals or Object-Oriented Programming with C++ or Programming for Engineers	3		CS 1500 or CS 1971/1981* or CS 1972/1982*	Computational Problem Solving or Intro to Programming Methodology and Lab* or Intro to MATLAB Programming and Lab* *Department will substitute for this requirement.	3
GEOG 105	World Geography	3		HISTORY 2110	World Regional Geography	3
HIST 133 or HIST 134	Foundations of Western Civilization or Modern Western Civilization	3		HISTORY 1100 or HISTORY 1200	Early Western Civilization or Modern Western Civilization	3
HIST 120 or HIST 121	United States History to 1865 or United States History since 1865	3		HISTORY 1300 or HISTORY 1310	American History to 1877 or American History since 1877	3
ART 108 or MUSI 108 or SPDR 106	Survey of Art or Music Appreciation or Theater Appreciation	3		ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video	3
ECON 211 or ECON 210	Microeconomics or 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	26		Group 2 Emphasis/Focus Area Requirements	28	
	Group 1 Core Requirements	26		Group 1 Core Requirements	25	
	Total Hours	52		Total Hours*	53	
*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

Metropolitan Community College			Semester	Missouri S&T		
ART 110	Drawing I	3		ART 1120	Drawing I	3
ART 220	Painting I	3		ART 1140	Painting I	3
ART 108 or ART 150	Survey of Art or History of Art I	3		ART 1180	Art Appreciation	3
BIOL 101* or BIOL 123* or CHEM 111* or PHYS 130* or PHYS 220* or PHYS 106L* or GEOL 101 or GEOL 102*	General Biology* (5) or General Biology for Majors I* (4) or General College Chemistry I* (5) or College Physics I* (5) or Engineering Physics I* (5) or General Astronomy and Lab* (5) or Physical Geology (5) or Historical Geology* (4)) or higher science lecture *Lab satisfies science lab requirement below.	4	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, 1509* or GEOLOGY 1110 or GEOLOGY 1120, 1129*	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) and Lab* (1) or Physical and Environmental Geology (3) or Evolution of the Earth (3) and Lab* (1) 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
MATH 119 or MATH 120 or MATH 115	Mathematical Reasoning and Modeling 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 or higher math or statistics	3
ENGL 220 or ENGL 221 or ENGL 222 or ENGL 223 or ENGL 254 or HIST 120* or HIST 121* or MUSI 108 or SPDR 106 or Literature	British Literature to 1750 or British Literature 1750-Present or American Literature to 1860 or American Literature 1860-Present or World Literature I or United States History to 1865* or United States History since 1865* 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	14		Group 2 Emphasis/Focus Area Requirements	16	
	Group 1 Core Requirements	26		Group 1 Core Requirements	25	
	Total Hours	40		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

Metropolitan Community College			Semester	Missouri S&T		
BUSN 200	Business Management	3		BUS 1110	Intro to Management and Entrepreneurship	3
BUSN 270	Legal Environment of Business	3		BUS 2910	Business Law	3
BIOL 101* or BIOL 123* or CHEM 111* or PHYS 130* or PHYS 220* or PHYS 106L* or GEOL 101 or GEOL 102*	General Biology* (5) or General Biology for Majors I* (4) or General College Chemistry I* (5) or College Physics I* (5) or Engineering Physics I* (5) or General Astronomy and Lab* (5) or Physical Geology (5) or Historical Geology* (4)) or higher science lecture *Lab satisfies science lab requirement below.	4	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, 1509* or GEOLOGY 1110 or GEOLOGY 1120, 1129*	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) and Lab* (1) or Physical and Environmental Geology (3) or Evolution of the Earth (3) and Lab* (1) 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
ENGL 220 or ENGL 221 or ENGL 222 or ENGL 223 or ENGL 254 or HIST 120* or HIST 121* or ART 108 or MUSI 108 or SPDR 106 or Literature	British Literature to 1750 or British Literature 1750-Present or American Literature to 1860 or American Literature 1860-Present or World Literature I or United States History to 1865* or United States History since 1865* or Survey of Art 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
MATH 119 or MATH 120 or MATH 115	Mathematical Reasoning and Modeling 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 or higher math or statistics	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	23		Group 2 Emphasis/Focus Area Requirements	25	
	Group 1 Core Requirements	26		Group 1 Core Requirements	25	
	Total Hours	49		Total Hours*	50	
*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

Metropolitan Community College			Semester	Missouri S&T		
BIOL 101 or BIOL 123	General Biology (5) or General Biology for Majors I (4) or	4		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
BIOL 124	General Biology for Majors II	4		BIO SCI 1223, 1229	Biodiversity and Lab	4
BIOL 102	Environmental Science	5		BIO SCI 1173	Intro to Environmental Sciences	3
BIOL 204	Genetics	3		BIO SCI 2223	General Genetics	3
CHEM 111	General College Chemistry I	5		CHEM 1310, 1319	General Chemistry I and Lab	5
GEOLOG 101	Physical Geology	5		GEOLOGY 1110	Physical and Environmental Geology	3
GEOLOG 102	Historical Geology	4		GEOLOGY 1120, 1129*	Evolution of the Earth (3) and Lab* (1) *GEOLOGY 1129 is not a degree requirement; transfers as general elective credit.	3
PHYS 106	General Astronomy	4		PHYSICS 1505	Introductory Astronomy	3
PHYS 130	General Physics I	5		PHYSICS 1145	College Physics I	4
MATH 119 or MATH 120 or MATH 115	Mathematical Reasoning and Modeling 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 or higher math or statistics	3
ENGL 220 or ENGL 221 or ENGL 222 or ENGL 223 or ENGL 254 or HIST 120* or HIST 121* or ART 108 or MUSI 108 or SPDR 106 or Literature	British Literature to 1750 or British Literature 1750-Present or American Literature to 1860 or American Literature 1860-Present or World Literature I or United States History to 1865* or United States History since 1865* or Survey of Art 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		48		Group 2 Emphasis/Focus Area Requirements		41
Group 1 Core Requirements		26		Group 1 Core Requirements		25
Total Hours		74		Total Hours*		66
*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

Metropolitan Community College			Semester	Missouri S&T		
SPAN 101	Elementary Spanish I	5	Select 6 hours from at least 2 disciplines.	SPANISH 1101	Elementary Spanish I	3
SPAN 102	Elementary Spanish II	5		SPANISH 1102	Elementary Spanish II	3
SPAN 204	Intermediate Spanish II	3		SPANISH 1180	Intermediate Spanish	3
MATH 119 or MATH 120 or MATH 115	Mathematical Reasoning and Modeling 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 or higher math or statistics	3
BIOL 101* or BIOL 123* or CHEM 111* or PHYS 130* or PHYS 220* or PHYS 106L* or GEOL 101 or GEOL 102*	General Biology* (5) or General Biology for Majors I* (4) or General College Chemistry I* (5) or College Physics I* (5) or Engineering Physics I* (5) or General Astronomy and Lab* (5) or Physical Geology (5) or Historical Geology* (4)) or higher science lecture *Lab satisfies science lab requirement below.	4	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, 1509* or GEOLOGY 1110 or GEOLOGY 1120, 1129*	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) and Lab* (1) or Physical and Environmental Geology (3) or Evolution of the Earth (3) and Lab* (1) 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
ENGL 220 or ENGL 221 or ENGL 222 or ENGL 223 or ENGL 254 or HIST 120* or HIST 121* or ART 108 or MUSI 108 or SPDR 106 or Literature	British Literature to 1750 or British Literature 1750-Present or American Literature to 1860 or American Literature 1860-Present or World Literature I or United States History to 1865* or United States History since 1865* or Survey of Art 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		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		26		Group 1 Core Requirements		25
Total Hours		26	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/ .						