

St. Louis 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.

St. Louis Community College			Semester	Missouri S&T		
ENG 101	College Composition I	3		ENGLISH 1120	Exposition and Argumentation	3
ENG 102 or COM 107	College Composition II or Public Speaking	3		ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
PHL 101 or PHL 102	Intro to Philosophy or Intro to Logic			PHILOS 1105 or PHILOS 1115	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction	3
PSC 101 or HST 128	Intro to American Politics or Western Civilization 1500 to Present	3		POL SCI 1200 or HISTORY 1200	American Government or Modern Western Civilization	3
EDU 211	Foundations of Education in a Diverse Society	3		EDUC 1074	Education in a Diverse Society	3
EDU 210	Teaching Profession with Field Experience	3		EDUC 1104	Teacher Field Experience I	1
EDU 227	Educational Psychology	3		EDUC 2102 or PSYCH 2300	Educational Psychology	3
PSY 205	Human Growth and Development	3		PSYCH 3310	Developmental Psychology	3
EDU 219	Education of Exceptional Learners	3		EDUC 2310 or PSYCH 4310	Education of the Exceptional Child or Psychology of the Exceptional Child	3
		Total Hours	24			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

St. Louis 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.

BIO 111* or BIO 140* or CHM 105* or PHY 111* or PHY 122* or PSI 111, 115* or GEO 111	Intro to Biology I* (4) or Principles of Biology I* (5) or General Chemistry I* (5) or College Physics I* (4) or Engineering Physics I* (5) or Intro to Astronomy and Observ Astronomy* (4) or Physical Geology (5) 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, 1509* 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) and Lab* (1) 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 161 or MTH 177 or MTH 160 or BUS 201 or MTH 180	Quantitative Reasoning (3) or Finite Mathematics (3) or Precalculus Algebra (3) or Elementary Business Statistics (3) or Introductory Statistics (4) 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
GEG 101	Regional Geography	3		HISTORY 2110	World Regional Geography	3
HST 101 or HST 102 or HST 115 or HST 128	US History to 1865 or US History 1865 to Present or Ancient and Medieval History to 1500 or Western Civilization 1500 to Present	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
ENG 226	Children's Literature	3		EDUC 3430	Diverse Literature for Children	3
Literature	Literature Elective	3		Literature	Literature Elective	3
PSY 200	General Psychology I	3		PSYCH 1101	General Psychology	3
ART 100 or MUS 114	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.

CFD 101	Foundations of Child and Family Development	3	EDUC 1055	Intro to Early Childhood Education	3
CFD 103	Child Nutrition, Health, and Safety	3	EDUC 1221	Health, Nutrition, and Safety in Early Childhood Education	3
CFD 209	Management of Early Childhood Settings	3	EDUC 1820	Early Childhood Program Management	3
CFD 107	Family/Community Support and Engagement	3	EDUC 2401	School, Family, and Community Partnerships	3
CFD 102	Child Growth and Development	3	EDUC 2211	Child Development	3
	Group 2 Emphasis/Focus Area Requirements	37		Group 2 Emphasis/Focus Area Requirements	36
	Group 1 Core Requirements	24		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

<u>St. Louis Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
BIO 111* or BIO 140* or CHM 105* or PHY 111* or PHY 122* or PSI 111, 115* or GEO 111	Intro to Biology I* (4) or Principles of Biology I* (5) or General Chemistry I* (5) or College Physics I* (4) or Engineering Physics I* (5) or Intro to Astronomy and Observ Astronomy* (4) or Physical Geology (5) 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, 1509* 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) and Lab* (1) 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 161 or MTH 177 or MTH 160 or BUS 201 or MTH 180	Quantitative Reasoning (3) or Finite Mathematics (3) or Precalculus Algebra (3) or Elementary Business Statistics (3) or Introductory Statistics (4) or higher math or statistics		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
GEG 101	Regional Geography	3	HISTORY 2110	World Regional Geography
HST 115	Ancient and Medieval History to 1500	3	HISTORY 1100	Early Western Civilization
HST 128	Western Civilization 1500 to Present	3	HISTORY 1200	Modern Western Civilization
HST 101 or HST 102	US History to 1865 or US History 1865 to Present	3	HISTORY 1300 or HISTORY 1310	American History to 1877 or American History since 1877
ECO 152 or ECO 151	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics
ENG 226	Children's Literature	3	EDUC 3430	Diverse Literature for Children
PSY 200	General Psychology I	3	PSYCH 1101	General Psychology
ART 100 or MUS 114	Art Appreciation or Music Appreciation	3	ART 1180 or MUSIC 1150	Art Appreciation or Music Appreciation
	Group 2 Emphasis/Focus Area Requirements	31		Group 2 Emphasis/Focus Area Requirements
	Group 1 Core Requirements	24		Group 1 Core Requirements
	Total Hours	55		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>St. Louis Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>
MTH 161 or MTH 177 or MTH 160 or BUS 201 or MTH 180	Quantitative Reasoning (3) or Finite Mathematics (3) or Precalculus Algebra (3) or Elementary Business Statistics (3) or Introductory Statistics (4) or higher math or statistics		MATH 1110 or MATH 1140 or STAT 1115
BIO 111* or BIO 140* or CHM 105* or PHY 111* or PHY 122* or PSI 111, 115* or GEO 111	Intro to Biology I* (4) or Principles of Biology I* (5) or General Chemistry I* (5) or College Physics I* (4) or Engineering Physics I* (5) or Intro to Astronomy and Observ Astronomy* (4) or Physical Geology (5) 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, 1509* or GEOLOGY 1110*
Science Lab	One lab course from any physical or biological science if not taken with lecture course above.	1	Science Lab
IS 153 or IS 187 or ESC 101 or IS 167 or IS 267	C# Programming (4) or Java Programming I (4) or Scientific Computer Programming (3) or C++ Programming I (4) or C++ Programming II (4)	3-4	IST 1551 or COMP SCI 1500 or COMP SCI 1971, 1981* or COMP SCI 1971, 1981* or COMP SCI 1971, 1981*
ART 100 or MUS 114 or THY 101	Art Appreciation or Music Appreciation or Intro to Theatre	3	ART 1180 or MUSIC 1150 or THEATRE 1190
HST 115 or HST 128 or HST 101 or HST 102	Ancient and Medieval History to 1500 or Western Civilization 1500 to Present or US History to 1865 or US History 1865 to Present	3	HISTORY 1100 or HISTORY 1200 or HISTORY 1300 or HISTORY 1310
ECO 152 or ECO 151	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200
Literature	Literature Elective Any literature with prerequisite of no more than English Composition I.	3	Literature
UL Literature	Upper Level Literature Elective	3	UL Literature
Humanities	Any philosophy, fine art, literature, foreign language	3	Humanities
	Group 2 Emphasis/Focus Area Requirements	25	Group 2 Emphasis/Focus Area Requirements
	Group 1 Core Requirements	24	Group 1 Core Requirements
	Total Hours	49	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

<u>St. Louis Community College</u>		<u>Semester</u>	<u>Missouri S&T</u>	
BIO 111* or BIO 140* or CHM 105* or PHY 111* or PHY 122* or PSI 111, 115* or GEO 111	Intro to Biology I* (4) or Principles of Biology I* (5) or General Chemistry I* (5) or College Physics I* (4) or Engineering Physics I* (5) or Intro to Astronomy and Observ Astronomy* (4) or Physical Geology (5) 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, 1509* 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) and Lab* (1) 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 140	Intermediate Algebra	3	MATH 1103	Fundamentals of Algebra
MTH 160	Precalculus Algebra	3	MATH 1140	College Algebra
MTH 210	Analytic Geometry and Calculus I	5	MATH 1214	Calculus I (4)
MTH 220 or MTH 186	Analytic Geometry and Calculus II (5) or Survey Calculus (4)	4	MATH 1215 or MATH 1212	Calculus II (4) or Survey of Calculus (4)
IS 153 or IS 187 or ESC 101 or IS 167 or IS 267	C# Programming (4) or Java Programming I (4) or Scientific Computer Programming (3) or C++ Programming I (4) or C++ Programming II (4)	3-4	IST 1551 or COMP SCI 1500 or COMP SCI 1971, 1981* or COMP SCI 1971, 1981* or COMP SCI 1971, 1981*	Implementing Info Systems: User Perspective or Computational Problem Solving or Intro to Programming (C++) and Lab or Intro to Programming (C++) and Lab or Intro to Programming (C++) and Lab *Department will substitute for this requirement.
BUS 201 or MTH 180	Elementary Business Statistics (3) or Introductory Statistics (4)	3	STAT 1115	Statistics for the Social Sciences I
ART 100 or MUS 114 or THT 101	Art Appreciation or Music Appreciation or Intro to Theatre	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video
HST 115 or HST 128 or HST 101 or HST 102	Ancient and Medieval History to 1500 or Western Civilization 1500 to Present or US History to 1865 or US History 1865 to Present	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 152 or ECO 151	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	37		Group 2 Emphasis/Focus Area Requirements
	Group 1 Core Requirements	24		Group 1 Core Requirements
	Total Hours	61		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

St. Louis Community College		Semester	Missouri S&T		
BIO 111 or BIO 140	Intro to Biology I (4) or Principles of Biology I (5)	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
BIO 225	Genetics	5	BIO SCI 2223	General Genetics	3
GEO 111	Physical Geology	5	GEOLOGY 1110	Physical and Environmental Geology	3
PSI 111 or PHY 111	Intro to Astronomy or College Physics I	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
CHM 105	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
MTH 161 or MTH 177 or MTH 160 or BUS 201 or MTH 180	Quantitative Reasoning (3) or Finite Mathematics (3) or Precalculus Algebra (3) or Elementary Business Statistics (3) or Introductory Statistics (4) or higher math or statistics		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 201 or MTH 180	Elementary Business Statistics (3) or Introductory Statistics (4)	3	STAT 1115	Statistics for the Social Sciences I	3
ART 100 or MUS 114 or THT 101	Art Appreciation or Music Appreciation or Intro to Theatre	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video	3
HST 115 or HST 128 or HST 101 or HST 102	Ancient and Medieval History to 1500 or Western Civilization 1500 to Present or US History to 1865 or US History 1865 to Present	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 152 or ECO 151	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	38		Group 2 Emphasis/Focus Area Requirements	36
	Group 1 Core Requirements	24		Group 1 Core Requirements	25
	Total Hours	62		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

	<u>St. Louis Community College</u>	<u>Semester</u>	<u>Missouri S&T</u>
MTH 161 or MTH 177 or MTH 160 or BUS 201 or MTH 180	Quantitative Reasoning (3) or Finite Mathematics (3) or Precalculus Algebra (3) or Elementary Business Statistics (3) or Introductory Statistics (4) or higher math or statistics	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
BIO 111* or BIO 140* or CHM 105* or PHY 111* or PHY 122* or PSI 111, 115* or GEO 111	Intro to Biology I* (4) or Principles of Biology I* (5) or General Chemistry I* (5) or College Physics I* (4) or Engineering Physics I* (5) or Intro to Astronomy and Observ Astronomy* (4) or Physical Geology (5) or higher science lecture *Lab satisfies science lab requirement below.	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*	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 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.	Science Lab	One lab course from any physical or biological science if not taken with lecture course above.
IS 153 or IS 187 or ESC 101 or IS 167 or IS 267	C# Programming (4) or Java Programming I (4) or Scientific Computer Programming (3) or C++ Programming I (4) or C++ Programming II (4)	IST 1551 or COMP SCI 1500 or COMP SCI 1971, 1981* or COMP SCI 1971, 1981* or COMP SCI 1971, 1981*	Implementing Info Systems: User Perspective or Computational Problem Solving or Intro to Programming (C++) and Lab or Intro to Programming (C++) and Lab or Intro to Programming (C++) and Lab *Department will substitute for this requirement.
GEG 101	Regional Geography	HISTORY 2110	World Regional Geography
HST 115 or HST 128	Ancient and Medieval History to 1500 or Western Civilization 1500 to Present	HISTORY 1100 or HISTORY 1200	Early Western Civilization or Modern Western Civilization
HST 101 or HST 102	US History to 1865 or US History 1865 to Present	HISTORY 1300 or HISTORY 1310	American History to 1877 or American History since 1877
ART 100 or MUS 114 or THT 101	Art Appreciation or Music Appreciation or Intro to Theatre	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video
ECO 152 or ECO 151	Principles of Microeconomics or Principles of Macroeconomics	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics
Humanities	Any philosophy, fine art, literature, foreign language	Humanities	Any philosophy, fine art, literature, foreign language
	Group 2 Emphasis/Focus Area Requirements		Group 2 Emphasis/Focus Area Requirements
	Group 1 Core Requirements		Group 1 Core Requirements
	Total Hours 49		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

St. Louis Community College			Semester	Missouri S&T		
ART 109	Drawing I	3	Select 6 hours from at least 2 disciplines.	ART 1120	Drawing I	3
ART 114	Painting I	3		ART 1140	Painting I	3
ART 116	Sculpture I	3		ART 1164	Sculpture	3
ART 100 or	Art Appreciation or	3		ART 1180	Art Appreciation	3
ART 103	History of Modern Art					
BIO 111* or	Intro to Biology I* (4) or	6		BIO SCI 1113, 1219* or	General Biology (3) and Lab* (1) or	6
BIO 140* or	Principles of Biology I* (5) or			BIO SCI 1213, 1219*	Principles of Biology (3) and Lab* (1)	
CHM 105* or	General Chemistry I* (5) or			CHEM 1310, 1319* or	General Chemistry I (4) and Lab* (1) or	
PHY 111* or	College Physics I* (4) or			PHYSICS 1145* or	College Physics I* (4) or	
PHY 122* or	Engineering Physics I* (5) or			PHYSICS 1135* or	Engineering Physics*(4) or	
PSI 111, 115* or	Intro to Astronomy and Observ Astronomy* (4) or		PHYSICS 1505, 1509* or	Introductory Astronomy (3) and Lab* (1) or		
GEO 111	Physical Geology (5) or higher science lecture *Lab satisfies science lab requirement below.		GEOLOGY 1110*	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.	1	
ENG 211 or ENG 204 or ENG 205 or ENG 231 or HST 101* or HST 102* or MUS 114 or THT 101 or Literature	British Literature II or American Literature I or American Literature II or World Literature or US History to 1865* or US History 1865 to Present* or Music Appreciation or Intro to Theatre or Any literature with prerequisite of no more than English Composition I. *Satisfies the State of Missouri government requirement.	3	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 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	
MTH 161 or MTH 177 or MTH 160 or BUS 201 or MTH 180	Quantitative Reasoning (3) or Finite Mathematics (3) or Precalculus Algebra (3) or Elementary Business Statistics (3) or Introductory Statistics (4) or higher math or statistics		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	
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	13		Group 2 Emphasis/Focus Area Requirements	16	
	Group 1 Core Requirements	24		Group 1 Core Requirements	25	
	Total Hours	37		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

St. Louis Community College			Semester	Missouri S&T		
MGT 204	Business Organization & Management	3		BUS 1110	Intro to Management and Entrepreneurship	3
BLW 101	Business Law I	3		BUS 2910	Business Law	3
IS 153	C # Programming I	4		IST 1551	Implement Info Systems: User Perspective	3
IS 253	C # Programming II	4		IST 1552	Implement Info Systems: Data Perspective	3
BIO 111* or BIO 140* or CHM 105* or PHY 111* or PHY 122* or PSI 111, 115* or GEO 111	Intro to Biology I* (4) or Principles of Biology I* (5) or General Chemistry I* (5) or College Physics I* (4) or Engineering Physics I* (5) or Intro to Astronomy and Observ Astronomy* (4) or Physical Geology (5) 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, 1509* 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) and Lab* (1) 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 211 or ENG 204 or ENG 205 or ENG 231 or HST 101* or HST 102* or ART 100 or MUS 114 or THT 101 or Literature	British Literature II or American Literature I or American Literature II or World Literature or US History to 1865* or US History 1865 to Present* or Art Appreciation or Music Appreciation or Intro to Theatre 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 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 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
MTH 161 or MTH 177 or MTH 160 or BUS 201 or MTH 180	Quantitative Reasoning (3) or Finite Mathematics (3) or Precalculus Algebra (3) or Elementary Business Statistics (3) or Introductory Statistics (4) or higher math or statistics			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
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	30		Group 2 Emphasis/Focus Area Requirements	31	
	Group 1 Core Requirements	24		Group 1 Core Requirements	25	
	Total Hours	54		Total Hours*	56	
*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

St. Louis Community College			Semester	Missouri S&T		
BIO 111 or BIO 140	Intro to Biology I (4) or Principles of Biology I (5)	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
BIO 141	Principles of Biology II	4		BIO SCI 1223, 1229	Biodiversity and Lab	4
BIO 225	Genetics	5		BIO SCI 2223	General Genetics	3
CHM 106	General Chemistry II	5		CHEM 1310, 1319	General Chemistry I and Lab	5
GEO 111	Physical Geology	5		GEOLOGY 1110	Physical and Environmental Geology	3
PSI 111	Intro to Astronomy	3		PHYSICS 1505	Introductory Astronomy	3
PHY 111	College Physics I	4		PHYSICS 1145	College Physics I	4
MTH 161 or MTH 177 or MTH 160 or BUS 201 or MTH 180	Quantitative Reasoning (3) or Finite Mathematics (3) or Precalculus Algebra (3) or Elementary Business Statistics (3) or Introductory Statistics (4) or higher math or statistics			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 211 or ENG 204 or ENG 205 or ENG 231 or HST 101* or HST 102* or ART 100 or MUS 114 or THT 101 or Literature	British Literature II or American Literature I or American Literature II or World Literature or US History to 1865* or US History 1865 to Present* or Art Appreciation or Music Appreciation or Intro to Theatre 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 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 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	36			Group 2 Emphasis/Focus Area Requirements	35
	Group 1 Core Requirements	24			Group 1 Core Requirements	25
	Total Hours	60			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

St. Louis Community College			Semester	Missouri S&T		
SPA 101	Elementary Spanish I	4		SPANISH 1101	Elementary Spanish I	3
SPA 102	Elementary Spanish II	4		SPANISH 1102	Elementary Spanish II	3
SPA 201	Intermediate Spanish I	4		SPANISH 1180	Intermediate Spanish	3
MTH 161 or MTH 177 or MTH 160 or BUS 201 or MTH 180	Quantitative Reasoning (3) or Finite Mathematics (3) or Precalculus Algebra (3) or Elementary Business Statistics (3) or Introductory Statistics (4) or higher math or statistics			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 140* or CHM 105* or PHY 111* or PHY 122* or PSI 111, 115* or GEO 111	Intro to Biology I* (4) or Principles of Biology I* (5) or General Chemistry I* (5) or College Physics I* (4) or Engineering Physics I* (5) or Intro to Astronomy and Observ Astronomy* (4) or Physical Geology (5) 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, 1509* 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) and Lab* (1) 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 211 or ENG 204 or ENG 205 or ENG 231 or HST 101* or HST 102* or ART 100 or MUS 114 or THT 101 or Literature	British Literature II or American Literature I or American Literature II or World Literature or US History to 1865* or US History 1865 to Present* or Art Appreciation or Music Appreciation or Intro to Theatre 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 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 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		24		Group 1 Core Requirements		25
Total Hours		24		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/ .						