

St. Louis Community College — Missouri S&T

Applied Math BS with Secondary Education Teacher Certification

Transfer Guide Effective as of Fall 2025

St. Louis Community College

Missouri S&T

Communication Skills

Take all courses.

Take all courses:					
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
		Total Hours	6		
				Total Hours	6

Mathematics and Science

Take all courses.

Take an elective:					
MTH 210	Analytic Geometry and Calculus I	5	MATH 1214	Calculus I	4
MTH 220	Analytic Geometry and Calculus II	5	MATH 1215	Calculus II	4
MTH 230	Analytic Geometry and Calculus III	5	MATH 2222	Calculus III	4
PHY 122	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
CHM 105 or BIO 111 or BIO 140 or GEO 111	General Chemistry I (5) or Intro to Biology I (4) or Principles of Biology I (5) or Physical Geology (5)	4	CHEM 1310, 1319* or BIO SCI 1113, 1219* or BIO SCI 1213*, 1219* or GEOLOGY 1110	General Chemistry I (4) and Lab* (1) or General Biology* (3) and Lab* (1) Principles of Biology (3) and Lab*(3) or Physical and Environmental Geology (3) Satisfies the 3-hour science requirement. Credit hours apply to degree totals as indicated for each course. *BIO SCI 1213 will be substituted for 1113. CHEM 1319 and BIO SCI 1219 are not degree requirements, will transfer as general elective credit.	3
Total Hours		24	Total Hours		19

Social Sciences

Take all courses.

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	3		
PSC 101	Intro to American Politics	3	POL SCI 1200	American Government	3		
PSY 200	General Psychology	3	PSYCH 1101	General Psychology	3		
		Total Hours	9			Total Hours	9

Humanities

Select one course.

Select one course					
ART 100	Art Appreciation	3	ART 1180	Art Appreciation	3
MUS 114	Music Appreciation	3	MUSIC 1150	Music Appreciation	3
THT 101	Intro to Theatre	3	THEATRE 1190	Theatre via Video	3
ENG 211 or	British Literature II or	3	ENGLISH 1211 or	British Literature I: The Beginnings to 1800 or	3
ENG 204 or	American Literature I or		ENGLISH 1221 or	American Literature: 1600 to 1865 or	
ENG 231	World Literature or other non-prerequisite literature		ENGLISH 1231	World Literature I or other non-prerequisite literature	
		Total Hours	3		
				Total Hours	3

Additional Degree Requirements

Select additional courses to total up to the maximum transfer credit hours shown below.

MTH 240	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
MTH 215	Linear Algebra	3	MATH 3108	Linear Algebra	3
IS 187 or IS 280	Java Programming I (4) or Python (3)	3-4	CS 1500	Computational Problem Solving	3

Teacher Certification Requirements

Take all courses.

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	15			Total Hours	13

Professional Requirements for Teacher Education Program: Please view all program requirements at <https://teachereducation.mst.edu/secondaryeducation/>.

Maximum credit hours to be transferred to Missouri S&T degree requirements.

60

Missouri S&T residency requirements: The last 60 hours of any Missouri S&T degree must be completed at Missouri S&T.
Students must receive special permission from Missouri S&T to apply more than the maximum credit hours listed above toward the Missouri S&T degree.
Students are not required to complete all courses on this guide before transferring to Missouri S&T.