

St. Charles Community College — Missouri S&T

Applied Math BS with Secondary Education Teacher Certification

Transfer Guide Effective as of Fall 2025

St. Charles Community College

Missouri S&T

Communication Skills

Take all courses.

ENG 101	English Composition I	3	ENGLISH 1120	Exposition and Argumentation	3		
ENG 102 or COM 106	English 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:					
MAT 180	Calculus and Analytic Geometry I	5	MATH 1214	Calculus I	4
MAT 230	Calculus and Analytic Geometry II	5	MATH 1215	Calculus II	4
MAT 240	Calculus and Analytical Geometry III	5	MATH 2222	Calculus III	4
PHY 250	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
CHM 115 or BIO 105, 106 or BIO 150 or PHY 125	General Chemistry I and Lab (5) or Essentials of Biology and Lab (4) or General Biology: Cells to Organisms (5) or Intro to Physical Geology (3)	3	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)	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.	
Total Hours		23	Total Hours		19

Social Sciences

Take all courses.

HIS 101 or HIS 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		
POL 101	American Government	3	POL SCI 1200	American Government	3		
PSY 101	Intro to Psychology	3	PSYCH 1101	General Psychology	3		
		Total Hours	9			Total Hours	9

Humanities

Select one course.

ART 1001	Art Appreciation	3	ART 1180	Art Appreciation	3		
MUS 111	Music Appreciation	3	MUSIC 1150	Music Appreciation	3		
THE 122	Intro to the Theatre	3	THEATRE 1190	Theatre via Video	3		
LIT 250 or LIT 210 or LIT 272	English Literature Before 1800 or American Literature From 1620-1865 or World Lit-Ancient World thru Renaissance or other non-prerequisite literature	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I or other non-prerequisite literature	3		
		Total Hours	3			Total Hours	3

Additional Degree Requirements

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

MAT 250	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
MAT 242	Introductory Linear Algebra	3	MATH 3108	Linear Algebra	3
CPT 135 or CPT 185 or CPT 189	Computer Science I with Python (4) or C# Programming (3) or Computer Science II with Java (3)	3	CS 1500	Computational Problem Solving	3

Teacher Certification Requirements

Take all courses.

EDU 212	Foundations of Education in a Diverse Society	3	EDUC 1074	Education in a Diverse Society	3		
EDU 285	Teaching Profession with Field Experience	3	EDUC 1104	Teacher Field Experience I	1		
EDU 240	Educational Psychology	3	EDUC 2102 or PSYCH 2300	Educational Psychology	3		
PSY 110	Human Growth and Development	3	PSYCH 3310	Developmental Psychology	3		
EDU 250	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.