

St. Charles Community College — Missouri S&T

Applied Math BS with Secondary Education Teacher Certification Transfer Guide

Effective as of Fall 2017

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	English Composition II	3	ENGLISH 1160	Writing and Research	3
SPE 101	Oral Communications	3	SPMS 1185	Principles of Speech	3
Total Hours			9		

Mathematics and Science (Take all courses)

MAT 180	Calculus and Analytic Geometry I	5	MATH 1214	Calculus for Engineers I	4
MAT 230	Calculus and Analytic Geometry II	5	MATH 1215	Calculus for Engineers II	4
MAT 240	Calculus and Analytical Geometry III	5	MATH 2222	Calculus with Analytic Geometry III	4
PHY 250	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
PHY 251	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
Total Hours			25		
Total Hours			20		

Social Sciences (Take all courses)

HIS 101 or	US History to 1877 or	3	HISTORY 1300 or	American History to 1877 or	3
HIS 102	US History Since 1877		HISTORY 1310	American History Since 1877	
POL 101	American Government	3	POL SCI 1200	American Government	3
PSY 101	Introduction to Psychology	3	PSYCH 1101	General Psychology	3
ECO 120 or	Principles of Microeconomics or	3	ECON 1100 or	ECON Principles of Microeconomics or	3
ECO 110	Principles of Macroeconomics		1200	Principles of Macroeconomics	
Total Hours			12		
Total Hours			9		

Humanities (Take all courses)

ART 1001 or	Art Appreciation or		ART 1180 or	Art Appreciation or	
MUS 111 or	Music Appreciation or	3	MUSIC 1150 or	Music Appreciation or	3
THE 122 or	Introduction of Theatre or		THEATRE 1190 or	Theatre Appreciation or	
PHL 101	Introduction to Philosophy	3	PHILOS 1105	Introduction to Philosophy	3
	<i>See your advisor for course options</i>			Literature Elective	
Total Hours			6		
Total Hours			6		

Additional Degree Requirements (Select up to 14 hours)

MAT 250	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
MAT 242	Introductory Linear Algebra	3	MATH 3108	Linear Algebra	3
BIO 105	Essentials of Biology	3	BIO SCI 1113, 1219	General Biology and Lab	5
CPT 186 or	Object Oriented Programming in C++ or		CS 1570 or	CS Intro to Programming or	
CPT 172 or	Fortran Programming or	3	1970, 1980 or	Basic Scientific Programming and Lab or	3
CPT 182	Beginning Programming in C++		CS 1971, 1981	Intro to Programming Methodology and Lab	
Total Hours			14		
Total Hours			14		

Additional Courses for Teacher Certification Option (Take all courses)

EDU 211	Foundations of Education	3	EDUC 1040	Perspectives in Education	2
EDU 240	Educational Psychology	3	PSYCH 2300 or	Educational Psychology	3
PSY 210	Human Growth and Development	3	EDUC 2102	Developmental Psychology	3
			PSYCH 3310	Developmental Psychology	3
Total Hours			9		
Total Hours			8		

***Teacher certification notes:** Passing scores on MoGEA and MoCA are required. Students must maintain a minimum 2.75 cumulative GPA and a minimum 3.0 content GPA. Students completing this program will have a BA degree in Chemistry with secondary education teacher certification.

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

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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.