

Metropolitan Community Colleges — Missouri S&T

Applied Math BS with Secondary Education Teacher Certification Transfer Guide

Effective as of Fall 2017

Metropolitan Community Colleges

Missouri S&T

Communication Skills (Take all courses)

ENGL 101	Composition and Reading I	3	ENGLISH 1120	Exposition and Argumentation	3
ENGL 102	Composition and Reading II	3	ENGLISH 1160	Writing and Research	3
COMM 100	Fundamentals of Speech (Required for AA degree)	3	SPMS 1185	Principles of Speech	3
Total Hours		9	Total Hours		9

Mathematics and Science (Take all courses)

MATH 180	Analytic Geometry & Calculus I	5	MATH 1214	Calculus for Engineers I	4
MATH 190	Analytic Geometry & Calculus II	5	MATH 1215	Calculus for Engineers II	4
MATH 210	Analytic Geometry & Calculus III	4	MATH 2222	Calculus with Analytic Geometry III	4
PHYS 220	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
PHYS 221	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
Total Hours		24	Total Hours		20

Social Sciences (Take all courses)

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
POLS 136	Introduction To American Politics	3	POL SCI 1200	American Government	3
PSYC 140	General Psychology	3	PSYCH 1101	General Psychology	3
ECON 211 or ECON 210	Microeconomics or Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Total Hours		12	Total Hours		9

Humanities (Take all courses)

ART 108 or MUSI 108 or SPDR 106 or PHIL 100	Survey of Art or Music Appreciation or Theater Appreciation or Introduction to Philosophy <i>See your advisor for course options</i>	3	ART 1180 or MUSIC 1150 or THEATRE 1190 or PHILOS 1105	Art Appreciation or Music Appreciation or Theatre Appreciation or Introduction to Philosophy Literature Elective	3
Total Hours		6	Total Hours		6

Additional Degree Requirements (Select up to 14 hours)

MATH 230	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
BIOL 101	General Biology	5	BIO SCI 1113, 1219	General Biology and Lab	5
CSIS 155 or CSIS 135 or CSIS 123	C++ Programming or Fortran Programming or Programming Fundamentals C++	3	CS 1570, 1580 or CS 1970, 1980 or CS 1971, 1981	Intro to Programming or Basic Scientific Programming and Lab or Intro to Programming Methodology and Lab	3
Total Hours		14	Total Hours		14

Additional Courses for Teacher Certification Option (Take all courses)

EDUC 100	Introduction to Education	2	EDUC 1040	Perspectives in Education	2
EDUC 270	Educational Psychology	3	PSYCH 2300 or EDUC 2102	Educational Psychology	3
PSYC 241	Human Development	4	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.

72

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.