

# St. Louis Community College — Missouri S&T

## Applied Math BS with Secondary Education Teacher Certification Transfer Guide

Effective as of Fall 2017

### St. Louis Community College

### Missouri S&T

#### Communication Skills (Take all courses)

ENG 101	College Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENG 102	College Composition II	3	ENGLISH 1160	Writing and Research	3
COM 101	Oral Communications (Required for AA degree)	3	SPMS 1185	Principles of Speech	3
Total Hours			9	Total Hours	
Total Hours			9	Total Hours	

#### Mathematics and Science (Take all courses)

MTH 210	Analytical Geometry and Calculus I	5	MATH 1214	Calculus for Engineers I	4
MTH 220	Analytical Geometry and Calculus II	5	MATH 1215	Calculus for Engineers II	4
MTH 230	Analytical Geometry and Calculus III	5	MATH 2222	Calculus with Analytic Geometry III	4
PHY 122	Engineering Physics	5	PHYSICS 1135	Engineering Physics I	4
PHY 223	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
Total Hours			25	Total Hours	
Total Hours			25	Total Hours	

#### Social Sciences (Take all courses)

HST 101 or HST 102	American History I or History II	American	3	HISTORY 1300 or HISTORY 1310	American History to 1877 or American History Since 1877	3
PSC 101	Introduction to American Politics		3	POL SCI 1200	American Government	3
PSY 200	General Psychology		3	PSYCH 1101	General Psychology	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
Total Hours			12	Total Hours		
Total Hours			12	Total Hours		

#### Humanities (Take all courses)

ART 100 or MUS 103 or THT 101 or PHL 101	Art Appreciation or Basic Music or Introduction to Theatre 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		
Total Hours			6	Total Hours		

#### Additional Degree Requirements (Select up to 14 hours)

MTH 240	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
MTH 215	Linear Algebra	3	MATH 3108	Linear Algebra	3
BIO 140	Principles of Biology	4	BIO SCI 1113, 1219	General Biology and Lab	5
ESC 101 or GE 176 or IS 227	Scientific Computer Programming or Scientific Computer Programming or C Computer Language I	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	
Total Hours			14	Total Hours	

#### Additional Courses for Teacher Certification Option (Take all courses)

EDU 211 or EDU 227	Foundations of Education or Educational Psychology	3	EDUC 1040	Perspectives in Education	2
PSY 205	Human Growth and Development	3	PSYCH 2300 or EDUC 2102	Educational Psychology	3
Total Hours			9	Total Hours	
Total Hours			9	Total Hours	

**\*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.