

# St. Charles Community College — Missouri S&T

## Applied Mathematics BS 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 (Required for AA degree)	3	SPMS 1185	Principles of Speech (Will apply to B.S. degree as free elective)	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

#### Social Sciences (Take all courses)

HIS 101 or HIS 102 or HIS 146 or POL 101	US History to 1877 or US History Since 1877 or Western Civilization of Modern Europe or American Government (At least one of these courses is required to satisfy state requirement)	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government (At least one of these courses is required to satisfy state requirement)	3
ECO 120 or ECO 110	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics Other economics, history, political science, sociology, psychology elective	3
<i>See your advisor for course options</i>					
Total Hours					6

#### Humanities (Take all courses)

<i>See your advisor for course options</i>		3	Literature Elective	3
		6	Foreign Language (2 semesters of same language)	6
Total Hours				9

#### Additional Degree Requirements (Select up to 17 hours)

MAT 250	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
MAT 242	Introductory Linear Algebra	3	MATH 3108	Linear Algebra	3
MAT 215	Probability Theory	4	STAT 3115	Engineering Statistics	3
CHM 115 or BIO 150	General Chemistry I and Lab or General Biology I	5	CHEM 1310, 1319 or BIO SCI 1113, 1219	General Chemistry I and Lab or General Biology and Lab	5
CPT 186 or CPT 172 or CPT 182	Object Oriented Programming in C++ or Fortran Programming or Beginning Programming in C++	3	CS 1570 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					17

#### 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.