

# State Fair Community College — Missouri S&T

## Applied Mathematics BS Transfer Guide

Effective as of Fall 2023

### State Fair Community College

### Missouri S&T

#### English and Communication Skills (Take all courses)

ENGL 101	English Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENGL 102 or ENGL 112	English Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
SPMS 1185	Principles of Speech	3	SPMS 1185	Principles of Speech	3
Total Hours			Total Hours		
6			6		

#### Humanities (Select 9 hours to include at least one literature.)

LIT 112 or LIT 107 or LIT 109	World Literature or American Literature or British Literature (or other literature elective)	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231	World Literature I or American Literature Elective or British Literature Elective (or other literature elective)	3
PSY 101	General Psychology	3	PSYCH 1101	General Psychology or other psychology	3
PHIL 101	Introduction to Philosophy	3	PHILOS 1105	Self and World: Intro to Philosophy or other philosophy	3
ART 101	Art Appreciation	3	ART 118	Art Appreciation or other art	3
MUS 101	Music Appreciation	3	MUS 1150	Music Understanding and Appreciation or other music	3
THEA 107	Intro to Theatre	3	THEATRE 1190	Theatre via Video or other theater	3
	Any foreign language	3		Any foreign language	3
	Any fine art, English, music, philosophy or speech.	3		Any fine art, English, music, philosophy or speech.	3
	Any history, political science, or psychology.	3		Any history, political science, or psychology.	3
Total Hours			Total Hours		
6			9		

#### Social Sciences (Take all courses)

HIST 109 or HIST 101 or HIST 102 or POLS 101	World Civilization After 1500 or US History Before 1877 or US History Since 1877 or American/National 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
ECON 102 or ECON 101	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100* or ECON 1200*	Principles of Microeconomics* or Principles of Macroeconomics* <small>*Students pursuing the Actuarial Science emphasis take BOTH ECON 1100 and 1200 (6 hours econ for a total of 9 hours social sciences).</small>	3
Total Hours			Total Hours		
6			6		

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

MATH 130	Calculus and Analytic Geometry I	5	MATH 1214	Calculus I	4
MATH 131	Calculus and Analytic Geometry II	5	MATH 1215	Calculus II	4
MATH 132	Calculus and Analytic Geometry III	5	MATH 2222	Calculus III	4
MATH 134	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
PHYS 118	General Physics I with Lab	5	PHYSICS 1135	Engineering Physics I	4
PHYS 119	General Physics II with Lab	5	PHYSICS 2135	Engineering Physics II	4
CIS 120 or CIS 155	Programming in Python or Programming in C#	3	CS 1500	Computational Problem Solving	3
CHEM 123 or BIO 112 or BIO 125	General Chemistry I with Lab or Intro to Biology with Lab (5) or Biology I with Lab	5	CHEM 1310, 1319 or BIO SCI 1113, 1219	General Chemistry I and Lab or General Biology and Lab	4
Total Hours			Total Hours		
36			30		

#### Additional Degree Requirements

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

Technical electives in biology, chemistry, computer science, economics, engineering, geology, mechanics, or physics approved by advisor.	3	Technical electives in biology, chemistry, computer science, economics, engineering, geology, mechanics, or physics approved by advisor.	3
Maximum Free Electives	14	Maximum Free Electives	14

**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.