St. Charles Community College — Missouri S&T

Applied Mathematics BS Transfer Guide

Effective as of Fall 2023

St. Charles Community College			Missouri S&T		
English and Communication Skills (Take all courses)					
ENG 101	English Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENG 102 or ENG 115	English Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
COM 106	Public Speaking	3	SPMS 1185	Principles of Speech	3
	Total Hours	9		Total Hours	9
Humanities (Select 9 hours to include at least one literature.)					
LIT 250 or LIT 260 or LIT 210 or LIT 220 or LIT 272 or LIT 223	English Literature Before 1800 or English Literature After 1800 or American Literature From 1620-1865 or American Literature From 1865-Present or World Lit-Ancient World thru Renaissance or African American Literature (or other literature elective)	3	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or ENGLISH 2245	British Literature I or British Literature II or American Literature 1600 to 1865 or American Literature 1865 to Present or World Literature I or African American Literature or other literature At least one literature course is required.	3
PSY 101	Intro to Psychology	3	PSYCH 1101	General Psychology or other psychology	3
PHL 101	Intro to Philosophy	3	PHILOS 1105	Self and World: Intro to Philosophy or other philosophy	3
ART 1001	Art Appreciation	3	ART 118	Art Appreciation or other art	3
MUS 111	Music Appreciation	3	MUS 1150	Music Understanding and Appreciation or other music	3
THE 122	Intro of Theatre	3	THEATRE 1190	Theatre via Video or other theater	3
	Any foreign language			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 sicence, or psychology.	3
	Total Hours	6		Total Hours	9
Social Sciences (Take all courses)					
HIS 146 or HIS 101 or HIS 102 or POL 101	Western Civ: Modern European Heritage or US History to 1877 or US History Since 1877 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* *Students pursuing the Actuarial Science emphasis take BOTH ECO110 and 120 (6 hours econ for a total of 9 hours social sciences).	3	ECON 1100* or ECON 1200*	Principles of Microeconomics* or Principles of Macroeconomics* *Students pursuing the Actuarial Science emphasis take BOTH ECON 1100 and 1200 (6 hours econ for a total of 9 hours social sciences).	3
	Total Hours	6		Total Hours	6
Mathematics and Science (Take all courses)					
MAT 180	Calculus and Analytic Geometry I	5	MATH 1214	Calculus I	4
MAT 230	Calculus and Analytic Geometry II	5	MATH 1215	Calculus II	4
MAT 240	Calculus and Analytical Geometry III	5	MATH 2222	Calculus III	4
Mat 250	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
MAT 242	Introductory Linear Algebra	3	MATH 3108	Linear Algebra	3
PHY 250	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
PHY 251	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
CPT 135 or CPT 185or CPT 189	Comp Sci 1 With Python (4) or Programming in C# (3) or Java Programming (3)	3	CS 1500	Computational Problem Solving	3
CPT 182	Beginning Programming in C++	3	CS 1570, 1580	Intro to C++ Programming and Lab	4
CHM 115 or BIO 150 or BIO 105,106	General Chemistry I (5) or General Biology: Cells to Organisms (5) or Essentials of Biology (3) and Lab (1)	4	CHEM 1310, 1319 or BIO SCI 1113, 1219	General Chemistry I and Lab or General Biology and Lab	4
	Total Hours	41		Total Hours	37
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.

This transfer guide is published by Missouri University of Science and Technology and is in effect as of Fall 2023. Further information or updates are available from Missouri S&T Transfer Admissions at transfer.mst.edu, transfer@mst.edu, or 800-522-0938.