

Metropolitan Community Colleges — Missouri S&T

Applied Mathematics BS Transfer Guide

Effective as of Fall 2020

Metropolitan Community Colleges

Missouri S&T

English and Communication Skills (Take all courses)

ENGL 101	Composition and Reading I	3
ENGL 102 or ENGL 215	Composition and Reading II or Technical Writing	3
ENGL 220 or ENGL 221 or ENGL 222 or ENGL 223 or ENGL 254	British Literature to 1750 or British Literature 1750 - Present or American Literature I or American Literature II or World Literature I	3

ENGLISH 1120	Exposition and Argumentation	3
ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231	British Literature I: Beginnings to 1800 or British Literature II: 1800 to Present or American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature	3

Language and Communication Requirement Option 1 or Option 2 <small>The requirement will be satisfied by either 6 credits of Speech and Media Studies or 2 semesters of the same foreign language.</small>	Option 1: Foreign Language <small>(2 semesters of same language satisfies the Language and Communication Requirement.)</small>	6
	Option 2: Speech and Media Studies COMM 100 Fundamentals of Speech and one additional course <small>(6 credit hours of Speech and Media Studies satisfies the Language and Communication Requirement)</small>	

Language and Communication Requirement Option 1 or Option 2 <small>The requirement will be satisfied by either 6 credits of Speech and Media Studies or 2 semesters of the same foreign language.</small>	Option 1: Foreign Language <small>(2 semesters of same language satisfies the Language and Communication Requirement.)</small>	6
	Option 2: Speech and Media Studies SPMS 1185 Principles of Speech and one additional course <small>(6 credit hours of Speech and Media Studies satisfies the Language and Communication Requirement)</small>	

Total Hours 9

Total Hours 15

Social Sciences (Take all courses)

HIST 134 or HIST 120 or HIST 121 or POLS 136	Western Civilization II or United States History to 1865 or United States History since 1865 or Introduction to American Politics <small>(At least one of these courses is required to satisfy state requirement)</small>	3
ECON 211* or ECON 210*	Microeconomics or 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

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 <small>(At least one of these courses is required to satisfy state requirement)</small>	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 6

Total Hours 6

Mathematics and Science (Take all courses)

MATH 180	Analytic Geometry & Calculus I	5
MATH 190	Analytic Geometry & Calculus II	5
MATH 210	Analytic Geometry & Calculus III	4
MATH 230* or ENGR 215*	Differential Equations* or Engineering Statistics and Computation* <small>*Select 1 or 2 of these courses</small>	3
PHYS 220	Engineering Physics I	5
PHYS 221	Engineering Physics II	5
CSIS 271 or CSIS 123 or CSIS 223	Data Structures and Algorithm Analysis or Programming Fundamentals or Object-Oriented Programming with C++ or	3
CHEM 111 or BIOL 101	General College Chemistry I or General Biology	5

MATH 1214	Calculus for Engineers I	4
MATH 1215	Calculus for Engineers II	4
MATH 2222	Calculus with Analytic Geometry III	4
MATH 3304* or STAT 3115*	Elementary Differential Equations* or Engineering Statistics* <small>*Select 1 or 2 of these courses</small>	3-6
PHYSICS 1135	Engineering Physics I	4
PHYSICS 2135	Engineering Physics II	4
CS 1500 or CS 1971,1981	Computational Problem Solving or Object-Oriented Programming with C++	3
CHEM 1310, 1319 or BIO SCI 1113, 1219	General Chemistry I and Lab or General Biology and Lab	5

See your advisor for course options

Total Hours 17

Total Hours 38-41

Maximum credit hours to be transferred to Missouri S&T degree requirements.

68

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.