

St. Louis Community Colleges — Missouri S&T

Applied Mathematics BS Transfer Guide

Effective as of Fall 2020

St. Louis Community Colleges

Missouri S&T

English and Communication Skills (Take all courses)

ENG 101	College Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENG 102 or ENG 103	College Composition II or Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
ENG 210 or ENG 204 or ENG 205 or ENG 231 or ENG 216 or ENG 217	British Literature I or American Literature I or American Literature II or World Literature or Women in Literature or Major Black Writers (or other literature elective)	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2242 or ENGLISH 2245	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or American Literature: 1600 to 1865 or World Literature I or Literature by Women or African American Literature (or other literature elective)	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 COM 107 Public Speaking 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 15

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Social Sciences (Take all courses)

HST 128 or HST 101 or HST 102 or PSC 101	Western Civilization 1500 to Present or US History to 1865 or US History 1865 to Present or Intro to American Politics <small>(At least one of these courses is required to satisfy state requirement)</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
ECO 152* or ECO 151*	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	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

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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
MTH 240* or MTH 215*	Differential Equations* or Linear Algebra* <small>*Select 1 or 2 of these courses</small>	3	MATH 3304* or MATH 3108*	Elementary Differential Equations* or Linear Algebra* <small>*Select 1 or 2 of these courses</small>	3-6
PHY 122	Engineering Physics	5	PHYSICS 1135	Engineering Physics I	4
PHY 223	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
IS 167 or IS 256 or ESC 101 or IS 275	C++ Programming I or C++ Programming or Scientific Computer Programming or Advanced C++ Programming	3	CS 1500 or CS 1971,1981	Computational Problem Solving or Intro to Programming Methodology and Lab	3
CHM 105 or BIO 111	General Chemistry I or Intro to Biology I	5	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	3		Technical electives in biology, chemistry, computer science, economics, engineering, geology, mechanics, or physics approved by advisor.	3

Total Hours 39

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.