

St. Louis Community College — Missouri S&T

Applied Mathematics BS

Transfer Guide Effective as of Fall 2024

St. Louis Community College

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
COM 107	Public Speaking	3	SPMS 1185	Principles of Speech	3
Total Hours			Total Hours		9

Humanities

Select 9 hours to include at least one literature.

ENG 211 or ENG 204 or ENG 205 or ENG 231 or ENG 216 or ENG 217	British Literature II or American Literature I or American Literature II or World Literature or Women in Literature or Major Black Writers or other literature <small>At least one literature course is required.</small>	3	ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or ENGLISH 2242 or ENGLISH 2245	British Literature II or American Literature 1600 to 1865 or American Literature 1865 to Present or World Literature I or Literature by Women or African American Literature or other literature <small>At least one literature course is required.</small>	3
PSY 200	General Psychology	3	PSYCH 1101	General Psychology	3
PHL 101	Intro to Philosophy	3	PHILOS 1105	Self and World: Intro to Philosophy	3
ART 100	Art Appreciation	3	ART 118	Art Appreciation	3
MUS 114	Music Appreciation	3	MUS 1150	Music Understanding and Appreciation	3
THT 101	Intro to Theatre	3	THEATRE 1190	Theatre via Video	3
Foreign Language	Any foreign language	3	Foreign Language	Any foreign language	3
Humanities	Any fine art, English, music, theatre, philosophy or speech.	3	Humanities	Any fine art, English, music, theatre, philosophy or speech.	3
Social Science	Any history, political science, or psychology.	3	Social Science	Any history, political science, or psychology.	3
Total Hours			Total Hours		9

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	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

Mathematics, Statistics, and Computer Science

Take all courses.

MTH 210	Analytical Geometry and Calculus I	5	MATH 1214	Calculus I	4
MTH 220	Analytical Geometry and Calculus II	5	MATH 1215	Calculus II	4
MTH 230	Analytical Geometry and Calculus III	5	MATH 2222	Calculus III	4
MTH 240	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
MTH 215	Linear Algebra	3	MATH 3108	Linear Algebra	3
IS 167 or IS 187 or IS 280	C++ Programming I (4) or Java Programming I (4) or Python (3)	3	CS 1500	Computational Problem Solving	3
Total Hours			Total Hours		24

Science

Select PHYSICS 1135 and 2 additional courses from the options below. A total of 13 hours will apply to this requirement.

PHY 122	Engineering Physics I <small>required</small>	5	PHYSICS 1135	Engineering Physics I <small>required</small>	4
PHY 223	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
CHM 105	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 106	General Chemistry II	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*Chem 1510 is not an S&T degree requirement. Will transfer as general credit.</small>	3
BIO 111 or BIO 140	Intro to Biology I (4) or Principles of Biology I (5)	4	BIO SCI 1113, 1219 or BIO SCI 1213, 1219	General Biology and Lab or Principles of Biology and Lab	4
Total Hours			Total Hours		13

Additional Degree Requirements

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

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