

Metropolitan Community College — Missouri S&T

Applied Mathematics BS
Transfer Guide Effective as of Fall 2024

Metropolitan Community College

Missouri S&T

English and Communication Skills

Take all courses.

ENGL 101	Composition and Reading I	3	ENGLISH 1120	Exposition and Argumentation	3
ENGL 102 or ENGL 215	Composition and Reading II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
COMM 100	Fundamentals of Speech	3	SPMS 1185	Principles of Speech	3
Total Hours					9

Humanities

Select 9 hours to include at least one literature.

ENGL 220 or ENGL 221 or ENGL 222 or ENGL 223 or ENGL 254 or ENGL 268 or ENGL 260	British Literature to 1750 or British Literature 1750 to Present or American Literature I or American Literature II or World Literature I or Women's Literature or African-American Literature <small>At least one literature course is required.</small>	3	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or ENGLISH 2242 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 Literature by Women or African American Literature or other literature <small>At least one literature course is required.</small>	3
PSYC 140	General Psychology	3	PSYCH 1101	General Psychology	3
PHIL 100	Intro to Philosophy or other philosophy	3	PHILOS 1105	Self and World: Intro to Philosophy or other philosophy	3
ART 108	Survey of Art or other art	3	ART 118	Art Appreciation	3
MUSI 108	Music Appreciation or other music	3	MUS 1150	Music Understanding and Appreciation	3
SPDR 106	Theatre Appreciation or other 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					9

Social Sciences

Take all courses.

HIST 134 or HIST 120 or HIST 121 or POLS 136	Modern Western Civilization or United States History to 1865 or United States History since 1865 or Intro to U.S. National 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
ECON 211* or ECON 210*	Microeconomics or Macroeconomics <small>*Students pursuing the Actuarial Science emphasis take BOTH ECON 211 and 210 (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

Mathematics, Statistics, and Computer Science

Take all courses.

MATH 180	Analytic Geometry & Calculus I	5	MATH 1214	Calculus I	4
MATH 190	Analytic Geometry & Calculus II	5	MATH 1215	Calculus II	4
MATH 210	Analytic Geometry & Calculus III	4	MATH 2222	Calculus III	4
MATH 230	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
ENGR 215	Engineering Statistics and Computation	3	STAT 3115	Engineering Statistics	3
CSIS 271	Data Structures	3	CS 1500	Computational Problem Solving	3
Total Hours					23

Science

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

PHYS 220	Engineering Physics I <small>required</small>	5	PHYSICS 1135	Engineering Physics I <small>required</small>	4
PHYS 221	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
CHEM 111	General College Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 112	General College 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
BIOL 101 or BIOL 123	General Biology (5) or General Biology for Majors I (4)	4-5	BIO SCI 1113, 1219 or BIO SCI 1213, 1219	General Biology and Lab or Principles of Biology and Lab	4
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.