

Metropolitan Community Colleges — Missouri S&T

Geology and Geophysics BS Transfer Guide Effective as of Fall 2026

Students are not required to complete all courses on this guide before transferring to Missouri S&T.

Metropolitan Community Colleges

Missouri S&T

Communication Skills

Take all courses.

Take all courses:					
ENGL 101	Composition and Reading I	3	ENGLISH 1120	Exposition and Argumentation	3
ENGL 102 or ENGL 215 or COMM 100	Composition and Reading II or Technical Writing or Fundamentals of Speech	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed communication requirement.	3
Total Hours		6	Total Hours		6

Mathematics and Science

Take all courses.

Take an 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 215	Engineering Statistics and Computation	3	STAT 3113 or STAT 3115* or STAT 3117	Applied Engineering Statistics or Engineering Statistics* or Intro to Probability and Statistics *Will be substituted for the statistics requirement.	3
CHEM 111	General College Chemistry I	5	CHEM 1305, 1319 or CHEM 1310*, 1319	Fundamentals of General Chemistry and Lab or General Chemistry I* and Lab *CHEM 1310 will be substituted for CHEM 1305.	5
PHYS 220	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
GEOL 101	Physical Geology	5	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
CSIS 271 or CSIS 223 or ENGR 204	Data Structures and Algorithm Analysis or Object-Oriented Programming with C++ or Programming for Engineers and Scientists	3	COMP SCI 1500 or COMP SCI 1971, 1981* or COMP SCI 1972, 1982*	Computational Problem Solving or Intro to Programming Methodology and Lab * or Intro to MATLAB Programming and Lab* *Will be substituted for COMP SCI 1500.	3
		Total Hours	34		
				Total Hours	29

Humanities, Arts, and Social Sciences General Education Requirements

From the options listed in each group below, select 15 hours to include
6 hours Humanities and Fine Arts from at least two specific disciplines and
6 hours Behavioral and Social Sciences from at least two specific disciplines.

*At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.

Humanities and Fine Arts

Select 6 hours from at least two specific disciplines.

ENGL 220 or ENGL 221 or ENGL 222 or ENGL 223 or ENGL 254 or HIST 120* or HIST 121* or ART 108 or MUSI 108 or SPDR 106 or Literature	British Literature to 1750 or British Literature 1750-Present or American Literature to 1860 or American Literature 1860-Present or World Literature I or United States History to 1865* or United States History since 1865* or Survey of Art or Music Appreciation or Theatre Appreciation or Any literature with prerequisite of no more than English Composition I. *Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1190 or Literature	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Art Appreciation or Music Appreciation or Theatre via Video or Any literature with prerequisite of no more than ENGLISH 1120. *Satisfies the State of Missouri government requirement.	6
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Behavioral and Social Sciences

Select 6 hours from at least two specific disciplines.

HIST 133 or HIST 134* or GEOG 105 or PHIL 100 or PHIL 103 or PHIL 200 or POLS 136* or PSYC 140 or ECON 211 or ECON 210 or Foreign Language	Foundations of Western Civilization or Modern Western Civilization* or World Geography or Intro to Philosophy or Intro to Critical Thinking or Logic or Intro to US National Politics* or General Psychology or Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Modern Western Civilization* or World Regional Geography or Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6
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Humanities, Arts, and Social Sciences

Select 3 hours.

HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
Total HASS Hours		15	Total HASS Hours		15

Additional Degree Requirements

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

MATH 210	Analytic Geometry & Calculus III	4	MATH 2222	Calculus III Applies to the degree as a required science/engineering elective.	4
MATH 230	Differential Equations	3	MATH 3304	Elementary Differential Equations Applies to the degree as a required science/engineering elective.	3
PHYS 221	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II *Applies to the degree as a Science/Engineering Elective.	4
CHEM 112	General College Chemistry II	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) Applies to the degree as a required science/engineering elective. *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
GEOL 102	Historical Geology	4	GEOLOGY 1120, 1129	Evolution of the Earth (3) and Lab (1)	4
BIOL 101 or BIOL 123	General Biology (5) or General Biology for Majors (4)	4	BIO SCI 1113, 1219* or BIO SCI 1213*, 1219*	General Biology (3) and Lab* (1) BIO SCI 1113 applies to the degree as a required science elective. BIO SCI 1219 transfers as general elective credit. BIO SCI 1213 will be substituted for BIO SCI 1113.	3
Science, Math, Engineering	Other science, mathematics, or engineering course.	3	Science, Math, Engineering	Other science, mathematics, or engineering course.	3

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

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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.
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