

East Central College — Missouri S&T

Geology and Geophysics BS
Transfer Guide Effective as of Fall 2025

East Central College

Missouri S&T

Communication Skills

Take all courses.

ENG 101	English Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENG 102 or ENG 104 or COM 110	English Composition II or Technical Writing or Public Speaking	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech	3
		Total Hours	6	Total Hours	
			6		

Mathematics and Science

Take all courses.

MTH 190	Analytic Geometry & Calculus I	5	MATH 1214	Calculus I	4
MTH 210	Analytic Geometry & Calculus II	5	MATH 1215	Calculus II	4
MTH 242	Engineering Statistics	3	STAT 3115	Engineering Statistics	3
CHM 111	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
PHY 211, 212	General Physics I and Lab	5	PHYSICS 1135	Engineering Physics I	4
PHY 221, 222	General Physics II and Lab	5	PHYSICS 2135	Engineering Physics II	4
GEO 101	Intro to Physical Geology	3	GEOLOGY 1110 (GEO ENG 1150)	Physical and Environmental Geology	3
EGR 221, 222* or EGR 251	C++ Program Engineers and Lab* (4) or Data Structures (3)	3	CS 1500 or CS 1971, 1981*	Computational Problem Solving or Intro to Programming Methodology and Lab *	3
		Total Hours	34	Total Hours	
			30		

*Will be substituted for COMP SCI 1500.

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.

ENG 210 or ENG 211 or ENG 221 or ENG 222 or ENG 124 or HST 101* or HST 102* or ART 101 or MUS 101 or THE 101	Survey British Lit: Beginnings - 1784 or Survey British Lit: Romantic-Present or Survey American Lit: Beginnings - 1865 or Survey American Lit: 1865-Present or World Literature I or US History to 1877* or US History Since 1877* or Art Appreciation or Music Appreciation or Theatre Appreciation	6	ENGLISH 1211 or ENGLISH 1212 or 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1150	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 Understanding and Appreciation or Theatre for Social Change	6
				*Satisfies the State of Missouri government requirement.	

Behavioral and Social Sciences

Select 6 hours from at least two specific disciplines.

CIV 201 or CIV 202* or GRY 101 or PHL 101 or PHL 111 or PSC 102* or PSY 101 or ECO 102 or ECO 101 or Foreign Language	Western Civilization I or Western Civilization II* or World Geography or Intro to Philosophy or Intro to Logic or US Government I: National and State* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language	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	6
				*Satisfies the State of Missouri government requirement.	

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 Hours	15	Total Hours	
			15		

Additional Degree Requirements

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

MTH 220	Analytical Geometry & Calculus III	5	MATH 2222	Calculus III Applies to the degree as a required science/engineering elective.	4
MTH 245	Differential Equations	3	MATH 3304	Elementary Differential Equations Applies to the degree as a required science/engineering elective.	3
CHM 112	General Chemistry II and Lab	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
BIO 111	General Biology I and Lab	5	BIO SCI 1113, 1219*	General Biology (3) and Lab* (1) Applies to the degree as a required science/engineering elective. *The lab is not a degree requirement, transfers as general elective credit.	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.
Students are not required to complete all courses on this guide before transferring to Missouri S&T.