

East Central College — Missouri S&T

Chemistry 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.

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	English Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	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 220	Analytical Geometry & Calculus III	5	MATH 2222	Calculus III	4
CHM 111	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 112	General Chemistry II and Lab	5	CHEM 1320, 1510	General Chemistry II and Qualitative Analysis	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
MTH 242	Engineering Statistics	3	STAT 3115	Engineering Statistics	3
Total Hours					38
Total Hours					33

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 or Literature	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 or Any literature with prerequisite of no more than English Composition I.	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.	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 *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
*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 HASS Hours					15
Total HASS Hours					15

Additional Degree Requirements

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

CHM 205	Organic Chemistry I and Lab	5	CHEM 2210, 2219	Organic Chemistry I and Lab	4
CHM 206	Organic Chemistry II and Lab	5	CHEM 2220, 2229	Organic Chemistry II and Lab	4
EGR 221, 222	C++ Program Engineers	4	CS 1971, 1981	Intro to Programming Methodology and Lab	3
Will be substituted for COMP SCI 1973, 1983.					

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.