

# East Central College — Missouri S&T

## Chemistry BS

Transfer Guide Effective as of Fall 2024

### 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		

#### Social Sciences

Select up to 9 credit hours to include one course to satisfy Missouri state requirement.

CIV 202 or HST 101 or HST 102 or PSC 102	European Civilization II or US History to 1877 or US History Since 1877 or US Government I: National and State <small>At least one of these courses is required to satisfy a State of Missouri 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 Missouri state requirement.</small>	3
ECO 102 or ECO 101	Principles of Microeconomics or Principles of Macroeconomics <small>or other economics course</small>	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics <small>or other economics course</small>	3
PSY 101	General Psychology <small>or other psychology course</small>	3	PSYCH 1101	General Psychology <small>or other psychology course</small>	3
Social Science	Other economics, history, political science, sociology, psychology elective.	3	Social Science	Other economics, history, political science, sociology, psychology elective.	3
Total Hours			9		
Total Hours			9		

#### Humanities

Select 6 hours.

ENG 210 or ENG 221 or ENG 124 or ENG 214 or ENG 215	Survey British Lit: Beginnings - 1784 or Survey American Lit: Beginnings - 1865 or World Literature I or Women's Literature or African-American Literature	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2242 or ENGLISH 2245	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I or Literature by Women or African American Literature	3
ART 101 or MUS 101 or THE 101	Art Appreciation or Music Appreciation or Theatre Appreciation <small>or other art, music, or theatre</small>	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video <small>or other art, music, or theatre</small>	3
PHL 101	Introduction to Philosophy <small>or other philosophy</small>	3	PHILOS 1105	Self and World: Intro to Philosophy <small>or other philosophy</small>	3
Humanities	Other fine art, literature, or philosophy	3	Humanities	Other fine art, literature, or philosophy	3
Total Hours			6		
Total Hours			6		

#### 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* <small>*Will be substituted for CS 1500..</small>	3

#### 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.