

# East Central College — Missouri S&T

## Chemistry BA with Secondary Education Teacher Certification Transfer Guide

Effective as of Fall 2023

### 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	English Composition II	3	ENGLISH 1160	Writing and Research	3
COM 110	Public Speaking	3	SPMS 1185	Principles of Speech	3
Total Hours			Total Hours		
9			9		

#### Social Sciences (Take all courses)

HST 101 or HST 102	US History to 1877 or US History Since 1877	3	HISTORY 1300 or HISTORY 1310	American History to 1877 or American History since 1877	3
PSC 102	US Government I: National and State	3	POL SCI 1200	American Government	3
PSY 101	General Psychology	3	PSYCH 1101	General Psychology	3
Total Hours			Total Hours		
9			9		

#### Humanities (Take all courses)

ART 101 or MUS 101 or THE 101	Art Appreciation or Music Appreciation or Theatre Appreciation	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video	3
PHL 101	Introduction to Philosophy	3	PHILOS 1105	Intro to Philosophy	3
ENG 221 or ENG 222	Survey American Literature: Beginnings-1865 or Survey American Literature:1865-Present	3	ENGLISH 1221 or ENGLISH 1222	American Literature: 1600 to 1865 or American Literature 1865 to Present	3
Total Hours			Total Hours		
9			9		

#### Mathematics and Sciences (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
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
BIO 111	General Biology Lecture and Lab	5	BIO SCI 1113, 1219	General Biology and Lab	4
Total Hours			Total Hours		
25			22		

#### Additional Degree Requirements

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

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 3113	Applied Engineering Statistics	3
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

#### Teacher Certification Requirements (Take all courses)

EDU 201 or EDU 214	Foundations of Education or Multicultural Education	3	EDUC 1040	Perspectives in Education	2
EDU 241	Educational Psychology	3	PSYCH 2300 (EDUC 2102)	Educational Psychology	3
PSY 250	Human Development	3	PSYCH 3310	Developmental Psychology	3
EDU 244	Education of the Exceptional Learner	3	PSYCH 4310	Psychology of the Exceptional Child	3
Total Hours			Total Hours		
12			11		

**Professional Requirements for Teacher Education Program: Please view all program requirements at <https://teachereducation.mst.edu/secondaryeducation/>.**

**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.