

# St. Charles Community College — Missouri S&T

## Physics BS with Secondary Education Teacher Certification Transfer Guide

Effective as of Fall 2017

### St. Charles Community 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
SPE 101	Oral Communications	3	SPMS 1185	Principles of Speech	3
Total Hours			Total Hours		
9			9		

#### Mathematics and Science (Take all courses)

MAT 180	Calculus and Analytic Geometry I	5	MATH 1214	Calculus for Engineers I	4
MAT 230	Calculus and Analytic Geometry II	5	MATH 1215	Calculus for Engineers II	4
MAT 240	Calculus and Analytical Geometry III	5	MATH 2222	Calculus with Analytic Geometry III	4
PHY 250	Engineering Physics I	4	PHYSICS 1135	Engineering Physics I	4
PHY 251	Engineering Physics II	4	PHYSICS 2135	Engineering Physics II	4
CHM 115	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 116	General Chemistry II	3	CHEM 1320	General Chemistry II	3
Total Hours			Total Hours		
31			28		

#### Social Sciences (Take all courses)

HIS 101 or HIS 102	US History to 1877 or US History Since 1877	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History Since 1877 or Modern Western Civilization	3
POL 101	American Government	3	POL SCI 1200	American Government	3
PSY 101	Introduction to Psychology	3	PSYCH 1101	General Psychology	3
Total Hours			Total Hours		
9			9		

#### Humanities (Take all courses)

ART 1001 or MUS 111 or THE 122	Art Appreciation or Music Appreciation or Introduction of Theatre <i>See your advisor for course options</i>	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre Appreciation Literature Elective	3
Total Hours			Total Hours		
3			6		

#### Additional Degree Requirements (Select up to 10 credit hours)

MAT 250	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
BIO 105	Essentials of Biology	3	BIO SCI 1113	General Biology	3
Total Hours			Total Hours		
12			6		

#### Additional Courses for Teacher Certification Option (Take all courses)

EDU 211	Foundations of Education	3	EDUC 1040	Perspectives in Education	2
EDU 240	Educational Psychology	3	PSYCH 2300 or EDUC 2102	Educational Psychology	3
PSY 210	Human Growth and Development	3	PSYCH 3310	Developmental Psychology	3
Total Hours			Total Hours		
9			8		

**\*Teacher certification notes:** Passing scores on MoGEA and MoCA are required. Students must maintain a minimum 2.75 cumulative GPA and a minimum 3.0 content GPA. Students completing this program will have a BA degree in Chemistry with secondary education teacher certification.

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

**81**

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.