

# Metropolitan Community College — Missouri S&T

## Physics BS with Secondary Education Teacher Certification Transfer Guide

Effective as of Fall 2023

### Metropolitan Community College

### Missouri S&T

#### Communication Skills (Take all courses)

ENGL 101	Composition and Reading I	3	ENGLISH 1120	Exposition and Argumentation	3
ENGL 102 or ENGL 215	Composition and Reading II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
COMM 100	Fundamentals of Speech	3	SPMS 1185	Principles of Speech	3
Total Hours			Total Hours		
9			9		

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

MATH 180	Analytic Geometry & Calculus I	5	MATH 1214	Calculus I	4
MATH 190	Analytic Geometry & Calculus II	5	MATH 1215	Calculus II	4
MATH 210	Analytic Geometry & Calculus III	4	MATH 2222	Calculus III	4
PHYS 220	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
PHYS 221	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
CHEM 111	General College Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 112	General College Chemistry II	5	CHEM 1320	General Chemistry II	3
Total Hours			Total Hours		
34			28		

#### Social Sciences (Take all courses)

HIST 120 or HIST 121 or HIST 134	United States History to 1865 or United States History since 1865 or Western Civilization II	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1200	American History to 1877 or American History Since 1877 or Modern Western Civilization	3
POLS 136	Intro to American Politics	3	POL SCI 1200	American Government	3
PSYC 140	General Psychology	3	PSYCH 1101	General Psychology	3
Total Hours			Total Hours		
9			9		

#### Humanities (Take all courses)

ART 108 or MUSI 108 or SPDR 106	Survey of Art or Music Appreciation or Theater Appreciation	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video	3
ENGL 220 or ENGL 222 or ENGL 254 or ENGL 268 or ENGL 260	British Literature to 1750 or American Literature I or World Literature I or Women's Literature or African-American Literature (or other literature elective)	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2242 or ENGLISH 2245 or	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 (or other literature elective)	3
Total Hours			Total Hours		
6			6		

#### Additional Degree Requirements

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

MATH 230	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
BIOL 101	General Biology	5	BIO SCI 1113	General Biology	3
PHYS 106 or GEOL 101	General Astronomy or Physical Geology	4	PHYSICS 1505 or GEOLOGY 1110	Introductory Astronomy or Physical and Environmental Geology	3

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

EDUC 100	Introduction to Education	2	EDUC 1040	Perspectives in Education	2
EDUC 270	Educational Psychology	3	PSYCH 2300 (EDUC 2102)	Educational Psychology	3
PSYC 241	Human Development	4	PSYCH 3310	Developmental Psychology	3
EDUC 285	Education of Exceptional Learners	3	PSYCH 4310	Psychology of the Exceptional Child	3

**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.

**61**

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.