

# Metropolitan Community College — Missouri S&T

## Physics BS 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	Composition and Reading II	3	ENGLISH 1160	Writing and Research	3
		Total Hours	6		
				Total Hours	6

#### 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
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
PHYS 220	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
PHYS 221	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
		Total Hours	34		
				Total Hours	28

#### Social Sciences

##### Select 9 hours to include at least one course to satisfy the state requirement.

HIST 134 or HIST 120 or HIST 121 or POLS 136	Western Civilization II or United States History to 1865 or United States History since 1865 or Introduction to American Politics (At least one of these courses is required to satisfy state requirement)	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 (At least one of these courses is required to satisfy state requirement)	3
ECON 211 or ECON 210	Microeconomics or Macroeconomics (or other economics)	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics (or other economics)	3
PSYC 140	General Psychology (or other psychology)	3	PSYCH 1101	General Psychology (or other psychology)	3
	Social Sciences Elective: Any economics, history, political science, sociology, psychology elective	3	Social Sciences	Social Sciences Elective: Any economics, history, political science, sociology, psychology elective	3
		Total Hours	9		
				Total Hours	9

#### Humanities

##### Select 6 credit hours to include at least one literature.

PHIL 100	Introduction to Philosophy (or other philosophy)	3	PHILOS 1105	Self and World: Intro to Philosophy (or other philosophy)	3
ART 108	Survey of Art (or other art)	3	ART 118	Art Appreciation (or other fine art)	3
MUSI 108	Music Appreciation (or other music)	3	MUS 1150	Music Understanding and Appreciation (or other music)	3
SPDR 106	Theatre Appreciation (or other theatre)	3	THEATRE 1190	Theatre via Video (or other theatre)	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
	Other fine art, literature, or philosophy elective			Other fine art, literature, or philosophy elective	
		Total Hours	6		
				Total Hours	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
CSIS 271 or CSIS 123 or CSIS 223	Data Structures and Algorithm Analysis or Programming Fundamentals or Object-Oriented Programming With C++	3	CS 1500 or CS 1972, 1982	Computational Problem Solving or Intro to MATLAB Programming and Lab	3
	Maximum Free Electives	6		Maximum Free Electives	6

#### 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.