

# Mineral Area College — Missouri S&T

## Physics BS Transfer Guide

Effective as of Fall 2020

### Mineral Area College

### Missouri S&T

#### Communication Skills (Take all courses)

ENG 1330	English Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENG 1340	English Composition	3	ENGLISH 1160	Writing and Research	3
ENG 1440	Public Speaking (if required for AA Degree)	3	SPMS 1185	Principles of Speech (Not required for S&T degree. Transfers as free elective)	3
Total Hours			Total Hours		
9			9		

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

MAT 1650	Analytical Geometry and Calculus I	5	MATH 1214	Calculus for Engineers I	4
MAT 2150	Analytical Geometry and Calculus II	5	MATH 1215	Calculus for Engineers II	4
MAT 2250	Analytical Geometry and Calculus III	5	MATH 2222	Calculus with Analytic Geometry III	4
PHS 1350	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
PHS 1390	General Chemistry II	4	CHEM 1320	General Chemistry II	3
PHS 2230	General Physics I	4	PHYSICS 1135	Engineering Physics I	4
PHS 2240	General Physics II	4	PHYSICS 2135	Engineering Physics II	4
Total Hours			Total Hours		
32			28		

#### Social Sciences (Select 9 hours)

HIS 1140 or HIS 1230 or HIS 1240 or POS 1180	Western Civilization II or American History I or American History II or American Political Systems (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
<i>See your advisor for course options</i>		6	Social Sciences	Social Sciences Elective: Any economics, history, political science, sociology, psychology elective	6
Total Hours			Total Hours		
9			9		

#### Humanities (Select 6 credit hours to include one literature and one additional humanities)

ENG 2330 or ENG 2430 or ENG 2492	English Literature I or American Literature I or Women's Literature (or other literature elective)	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 2242	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or Literature by Women (or other literature elective)	3
PHI 1400	Intro to Philosophy <i>See your advisor for course options</i>	3	PHILOS 1105	Introduction to Philosophy Other fine art, literature, or philosophy elective	3
Total Hours			Total Hours		
6			6		

#### Additional Degree Requirements (Select up to 12 hours)

MAT 2330	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
CSC 2400	Computer Programming in C++	3	CS 1971, 1981	Intro to Programming Method and Lab (C++)	3
BIO 1150 or BIO 1100 or	General Biology (5) or Intro to Biological Science (3) (transfers as free elective)	3-5	BIO SCI 1113, 1219 or BIO SCI 1113	General Biology (3) and Lab (2) or General Biology (3) (no lab) (transfers as free elective)	3-5
Total Hours			Total Hours		
12			12		

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

**68**

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.