

Johnson County Community College — Missouri S&T

Physics BS Transfer Guide

Effective as of Fall 2017

Partner School

Missouri S&T

Communication Skills (Take all courses)

ENGL 121	Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENGL 122	Composition II	3	ENGLISH 1160	Writing and Research	3
SPD 121	Public Speaking (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)

MATH 241 & MATH 242	Calculus I and Calculus II	10	MATH 1214 & MATH 1215	Calculus for Engineers I and Calculus II for Engineers	8
MATH 243	Calculus III	5	MATH 2222	Calculus with Analytic Geometry III	4
CHEM 122 or CHEM 124,125	Principles of Chemistry or General Chemistry I Lecture and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 131	General Chemistry II Lecture	4	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			Total Hours		
34			28		

Social Sciences (Select 9 hours)

HIST 126 or HIST 140 or HIST 141 or POLS 122 or POLS 124	Modern Western Civilization or U.S. History to 1877 or U.S. History since 1877 or Political Science or American National Government <small>(At least one of these courses is required to satisfy state requirement)</small>	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government <small>(At least one of these courses is required to satisfy state requirement)</small>	3
<i>See your advisor for course options</i>			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)

<i>See your advisor for course options</i>					
PHIL 132	Logic	3	PHILOS 1115	Literature Elective (required)	3
PHIL 121	Introduction to Philosophy	3	PHILOS 1105	Intro to Logic (preferred)	3
<i>See your advisor for course options</i>					
				Other fine art, literature, or philosophy elective	3
Total Hours			Total Hours		
6			6		

Additional Degree Requirements (Select up to 12 hours)

MATH 254	Differential Equations	4	MATH 3304	Elementary Differential Equations	3
MATH 246	Elementary Linear Algebra	3	MATH 3108	Linear Algebra	3
CS 200 or CS 235	Concepts of Programming Algorithms/C++ or Object Oriented Programming/C++	4	CS 1971, 1981 or CS 1570, 1580	Intro to Programming Method and Lab (C++) or Intro to Programming and Lab (C++)	3 4
BIOL 121	Introductor Biology for Non-Majors (Required for AA degree)	4	BIO SCI 1113	General Biology (Transfers as required free elective)	3
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.