

St. Charles Community College — Missouri S&T

Physics BS 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 (Required for AA degree)	3	SPMS 1185	Principles of Speech (Not required for S&T degree. Transfers as free elective)	3
Total Hours		9	Total Hours		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
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
PHY 250	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
PHY 251	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
Total Hours		33	Total Hours		28

Social Sciences (Select 9 hours)

HIS 101 or HIS 102 or HIS 146 or POL 101	US History to 1877 or US History Since 1877 or Western Civilization of Modern Europe or American Government (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
Total Hours		9	Social Sciences	Social Sciences Elective: Any economics, history, political science, sociology, psychology elective	6
Total Hours		9	Total Hours		9

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

<i>See your advisor for course options</i>			Literature Elective (required)	3	
PHIL 102	Introduction to Logic	3	PHILOS 1115	Intro to Logic (preferred)	3
PHL 101	Introduction to Philosophy	3	PHILOS 1105	Introduction to Philosophy	3
<i>See your advisor for course options</i>			Other fine art, literature, or philosophy elective		
Total Hours		6	Total Hours		6

Additional Degree Requirements (Select up to 12 hours)

MAT 250	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
MAT 242	Introductory Linear Algebra	3	MATH 3108	Linear Algebra	3
CPT 182 or CPT 186	Beginning Programming in C++ or Object Oriented Programming C++	3	CS 1971, 1981 or CS 1570	Intro to Programming Method and Lab (C++) or Intro to Programming (C++)	3
BIO 105	Essentials of Biology (Required for AA degree)	3	BIO SCI 1113	General Biology (Transfers as required free elective)	3
Total Hours		12	Total Hours		12

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

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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.