

St. Louis Community Colleges — Missouri S&T

Physics BS Transfer Guide

Effective as of Fall 2020

St. Louis Community Colleges

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
COM 107	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			9		
Total Hours			9		

Mathematics and Science (Take all courses)

MTH 210	Analytical Geometry and Calculus I	5	MATH 1214	Calculus for Engineers I	4
MTH 220	Analytical Geometry and Calculus II	5	MATH 1215	Calculus for Engineers II	4
MTH 230	Analytical Geometry and Calculus III	5	MATH 2222	Calculus with Analytic Geometry III	4
CHM 105	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 106	General Chemistry II	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis* (2) <small>*Note: CHEM 1510 is not an S&T degree requirement; course will transfer as elective credit</small>	3
PHY 122	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
PHY 223	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
Total Hours			35		
Total Hours			28		

Social Sciences (Select 9 hours)

HST 128 or HST 101 or HST 102 or PSC 101	Western Civilization 1500 to Present or US History to 1865 or US History 1865 to Present or Intro to American Politics <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	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
	See your advisor for course options	6	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)

ENG 210 or ENG 204 or ENG 205 or ENG 231 or ENG 216 or ENG 217	British Literature I or American Literature I or American Literature II or World Literature or Women in Literature or Major Black Writers <small>(or other literature elective)</small>	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2242 or ENGLISH 2245	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or American Literature: 1600 to 1865 or World Literature I or Literature by Women or African American Literature <small>(or other literature elective)</small>	3
PHL 102	Intro to Logic	3	PHILOS 1115	Intro to Logic	3
PHL 101	Intro to Philosophy	3	PHILOS 1105	Intro to Philosophy	3
	See your advisor for course options			Other fine art, literature, or philosophy elective	
Total Hours			6		
Total Hours			6		

Additional Degree Requirements (Select up to 12 hours)

MTH 240	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
MTH 215	Linear Algebra	3	MATH 3108	Linear Algebra	3
IS 167 or IS 256 or ESC 101	C++ Programming I (4) or C++ Programming (3) or Scientific Computer Programming (3)	4	CS 1500 or CS 1500 or CS 1971, 1981	Computational Problem Solving or Computational Problem Solving or Intro to Programming Method and Lab (C++)	3
BIO 111 or BIO 140	Intro to Biology I (4) or Principles of Biology I (5) <small>(if required for AA degree)</small>	4-5	BIO SCI 1113,1219 or BIO SCI 1213,1219	General Biology I (3) and Lab (2) or Principles of Biology I (3) and Lab (2) <small>(Transfers as free elective)</small>	5
Total Hours			12		
Total Hours			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.