

# St. Louis Community College — Missouri S&T

## Physics BS Transfer Guide

Effective as of Fall 2023

### St. Louis 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
		Total Hours	6		
				Total Hours	6

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

MTH 210	Analytical Geometry and Calculus I	5	MATH 1214	Calculus I	4
MTH 220	Analytical Geometry and Calculus II	5	MATH 1215	Calculus II	4
MTH 230	Analytical Geometry and Calculus III	5	MATH 2222	Calculus 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	General Chemistry II	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 to include at least one course to satisfy the state requirement.

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 (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
ECO 152 or ECO 151	Principles of Microeconomics or Principles of Macroeconomics (or other economics elective)	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics (or other economics)	3
PSY 200	General Psychology I (or other psychology)	3	PSYCH 1101	General Psychology (or other psychology)	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.

PHL 101	Intro to Philosophy	3	PHILOS 1105	Self and World: Intro to Philosophy (or other philosophy)	3
ART 100	Art Appreciation	3	ART 118	Art Appreciation (or other fine art)	3
MUS 114	Music Appreciation	3	MUS 1150	Music Understanding and Appreciation (or other music)	3
THT 101	Intro to Theatre	3	THEATRE 1190	Theatre via Video (or other theater)	3
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 (or other literature elective)	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1222 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: 1865 to Present or World Literature I or Literature by Women or African American Literature (or other literature elective)	3
			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.

MTH 240	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
MTH 215	Linear Algebra	3	MATH 3108	Linear Algebra Recommended but not required, satisfies a math/stat elective requirement.	3
IS 167 or IS 187 or IS 280	C++ Programming I (4) or Java Programming I (4) or Python (3)	4	CS 1500	Computational Problem Solving	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.