

Johnson County Community College — Missouri S&T

Physics BS Transfer Guide

Effective as of Fall 2023

Johnson County Community College

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
		Total Hours			Total Hours
		6			6

Mathematics and Science (Take all courses)

MATH 241 and	Calculus I and	10	MATH 1214 and	Calculus I and	8
MATH 242	Calculus II		MATH 1215	Calculus II	
MATH 243	Calculus III	5	MATH 2222	Calculus III	4
CHEM 124, 125	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 131	General Chemistry II	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 to include at least one course to satisfy the state requirement.

HIST 126 or HIST 140 or HIST 141 or POLS 124	Western Civ: Scientific Revolution to Modern Age or US History to 1877 or US History since 1877 or American National 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
ECON 231 or ECON 230	Principles of Microeconomics or Principles of Macroeconomics (or other economics)	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics (or other economics)	3
PSYC 130	Intro to Psychology	3	PSYCH 1101	General Psychology (or other psychology)	3
		Social Sciences Elective: Any economics, history, political science, sociology, psychology elective			Social Sciences Social Sciences Elective: Any economics, history, political science, sociology, psychology elective
		Total Hours			Total Hours
		9			9

Humanities

Select 6 credit hours to include at least one literature.

PHIL 121	Intro to Philosophy (or other philosophy)	3	PHILOS 1105	Self and World: Intro to Philosophy (or other philosophy)	3
MUS 121 or MUS 126	Intro to Music Listening or Intro to World Music	3	MUS 1150	Music Understanding and Appreciation (or other music)	3
THEA 120	Intro to Theatre	3	THEATRE 1190	Theatre via Video (or other theater)	3
ENGL 236 or ENGL 246 or ENGL 251 or ENGL 217	British Literature to 1800 or American Literature I or World Literature to 1620 or Literature by Women (or other literature elective)	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2242	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I or Literature by Women (or other literature elective)	3
		Other fine art, literature, or philosophy elective			Other fine art, literature, or philosophy elective
		Total Hours			Total Hours
		6			6

Additional Degree Requirements

Select additional courses to total up to the maximum transfer credit hours shown below.

MATH 254	Differential Equations	4	MATH 3304	Elementary Differential Equations	3
MATH 246	Elementary Linear Algebra	3	MATH 3108	Linear Algebra Recommended but not required, satisfies a math/stat elective requirement.	3
CS 235 or CS 250	Object-Oriented Programming Using C++ or Basic Data Structures using C++	4	CS 1500	Computational Problem Solving	3
		Maximum Free Electives			Maximum Free Electives
		6			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.