

Johnson County Community College — Missouri S&T

Chemistry 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 or ENGL 123	Composition II or Technical Writing I	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3		
COMS 121	Public Speaking (if required for AA degree)	3	SPMS 1185	Principles of Speech (Not required for the S&T degree. Applies to S&T degree as Free Elective)	3		
		Total Hours	9			Total Hours	9

Mathematics and Science (Take all courses)

MATH 241 and MATH 242	Calculus I and Calculus II	10	MATH 1214 and MATH 1215	Calculus I and Calculus II	8
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, 132	General Chemistry II and Lab	5	CHEM 1320,1510	General Chemistry II and Qualitative Analysis	5
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 35			Total Hours 30		

Social Sciences (Select up to 6 credit hours to include one course to satisfy 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 course	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics or other economics course	3
PSYC 130	Intro to Psychology	3	PSYCH 1101	General Psychology or other psychology course	3
	Other economics, history, political science, sociology, psychology elective.			Other economics, history, political science, sociology, psychology elective.	3
Total Hours		6	Total Hours		6

Humanities (Select 6 hours)

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
MUS 121 or MUS 126 or THEA 120	Intro to Music Listening or Intro to World Music or Intro to Theatre (or other fine art, music, or theatre)	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation (or other art) or Music Appreciation (or other music) or Theatre via Video (or other theatre)	3
PHIL 121	Intro to Philosophy (or other philosophy)	3	PHILOS 1105	Self and World: Intro to Philosophy (or other philosophy)	3
	Other fine art, literature, or philosophy elective			Other fine art, literature, or philosophy elective	3
		Total Hours 6			Total Hours 6

Additional Degree Requirements

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

CHEM 220	Organic Chemistry I	5	CHEM 2210, 2219	Organic Chemistry I and Lab	4
CHEM 221	Organic Chemistry II	5	CHEM 2220, 2229	Organic Chemistry II and Lab	4
CS 235 or CS 250 or CS 200	Object-Oriented Programming Using C++ or Basic Data Structures using C++ or Concepts of Programming Algorithms Using C++	4	CS 1500 or CS 1971, 1981	Computational Problem Solving or Intro to Programming Methodology and Lab (C++)	3

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.