Johnson County Community College — Missouri S&T

Computer Science BS Transfer Guide

Effective as of Fall 2023

Johnson County Community College			Missouri S&T		
Communication Skills and (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
COMS 121	Public Speaking	3	SPMS 1185	Principles of Speech	3
	Total Hours	9		Total Hours	9
Computer Science, Mathematics, and Science (Take all courses)					
CS 210 or CS 211	Discrete Structures I or Discrete Structures II	3	CS 1200	Discrete Mathematics for Computer Science	3
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 1500* or CS 1971,1981*	Computational Problem Solving* *(preferred)* or Intro to Programming Methodology and Lab* *CS 1500 is preferred; CS 1971,1981 will be accepted in lieu of CS 1500 if necessary.	3
MATH 241 and MATH 242	Calculus I and Calculus II	10	MATH 1214 and MATH 1215	Calculus I and Calculus II	8
MATH 246	Elementary Linear Algebra	3	MATH 3108	Linear Algebra	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
CHEM 124, 125 or BIOL 121 or BIOL 135 or BIOL 127 or BIOL 125 or	General Chemistry I and Lab (5) or Intro to Biology for Non-Majors (4) or Principles of Cell and Molecular Biology (4) or General Zoology (5) or General Botony (5)	4	CHEM 1310, 1319 or BIO SCI 1113, 1219or BIO SCI 2213, 2219 or BIO SCI 2353, 2359 or BIO SCI 2383, 2389	General Chemistry I (4) and Lab (1) or General Biology (3) and Lab (1) or Cell Biology (3) and Lab (1) or Zoology (3) and Lab (1) or Plant Biology (3) and Lab (1) Satisfies science lecture/lab requirement.	4
	Total Hours	34		Total Hours	29
Engineering/Science Electives **Select up to 6 hours in engineering/science electives not already used to satisfy another degree requirement. See Approved Science and Engineering Electives at https://cs.mst.edu/undergraduate-degree/**					
MATH 243 or MATH 254	Calculus III (5) or Differential Equations (4)	4	MATH 2222 or MATH 3304	Calculus III or Elementary Differential Equations Or other math 2000-level or higher or Any statistics 4000-level or higher	3
ENGR 251 or ENGR 254	Statics or Dynamics	3	CIV ENG 2200 or MECH ENG 2350	Statics or Engineering Mechanics-Dynamics (2) or Or other course with the equivalent of a Missouri S&T engineering designation.	3
	Any biology, chemistry, geology, or environmental science.	3		Any biology, chemistry, geology, or environmental science.	3
	Any physics excluding the equivalent of S&T PHYS 2111, 2119, 2135, and 2145.	3		Any physics excluding the equivalent of S&T PHYS 2111, 2119, 2135, and 2145.	3
	Total Hours	6		Total Hours	6
Social Sciences (Select 9 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	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics (or upper-level economics)	3
PSYC 130	Intro to Psychology	3	PSYCH 1101	General Psychology (or upper-level psychology)	3
BUS 141 or ACCT 121 or BLAW 261	Principles of Management or Accounting I or Business Law I (or other approved business course; see Social Sciences Approved Electives at https://cs.mst.edu/undergraduate-degree/)	3	BUS 1110 or BUS 1210 or BUS 2910	Intro to Management and Entrepreneurship or Financial Accounting or Business Law (or other approved business course; see Social Sciences Approved Electives at https://cs.mst.edu/undergraduate-degree/)	3
	Other economics, history, political science, psychology, business elective from the Social Sciences Approved Electives at https://cs.mst.edu/undergraduate-degree/	3		Other economics, history, political science, psychology, business elective from the Social Sciences Approved Electives at https://cs.mst.edu/undergraduate-degree/	3
	Total Hours	9		Total Hours	9
Humanities and Ethics **(Select one humanities and one ethics course)**					
PHIL 121	Intro to Philosophy	3	PHILOS 1105	Self and World: Intro to Philosophy	3
MUS 121 or MUS 126	Intro to Music Listening or Intro to World Music	3	MUS 1150	Music Understanding and Appreciation	3
THEA 120	Intro to Theatre	3	THEATRE 1190	Theatre via Video	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	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	3
Foreign Language	Any foreign language	3	Foreign Language	Any foreign language	3
	Other humanities elective from the list of approved courses.	3		Other humanities elective from the list of approved courses.	3
	Total Hours	6		Total Hours	6
Additional Degree Requirements **Select additional courses to total up to the maximum transfer credit hours shown below.**					
ENGR 121	Engineering Orientation	2	FR ENG 1100	Study and Careers in Engineering	1
	Maximum Free Electives	8		Maximum Free Electives	8

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.

This transfer guide is published by Missouri University of Science and Technology and is in effect as of Fall 2023. Further information or updates are available from Missouri S&T Transfer Admissions at transfer.mst.edu, transfer@mst.edu, or 800-522-0938.