

Johnson County Community College — Missouri S&T

Computer Science BS
Transfer Guide Effective as of Fall 2024

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
COMS 121	Public Speaking	3	SPMS 1185	Principles of Speech	3
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* (<i>preferred</i>) or Intro to Programming Methodology and Lab*	3
*CS 1500 is preferred; CS 1971,1981 will be accepted in lieu of CS 1500 if necessary.					
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	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 Botany (5)	4	CHEM 1310, 1319 or BIO SCI 1113, 1219 or 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)	5
Satisfies the 5-hour science lecture/lab requirement. Credit hours apply to degree totals as indicated for each course.					
Total Hours			34		
			Total Hours		
			30		

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 (4) or Elementary Differential Equations (3) Or other math 2000-level or higher or Any statistics 4000-level or higher Satisfies the 3-hour science lecture/lab requirement. Credit hours apply to degree totals as indicated for each course.	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
Science	Any biology, chemistry, geology, or environmental science.	3	Science	Any biology, chemistry, geology, or environmental science.	3
Physics	Any physics excluding the equivalent of S&T PHYS 2111, 2119, 2135, and 2145.	3	Physics	Any physics excluding the equivalent of S&T PHYS 2111, 2119, 2135, and 2145.	3
*A maximum of 6 hours applies to engineering/science elective requirements. Any additional credit hours apply to degree totals as general elective credit.					
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 <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
ECON 231 or ECON 230	Principles of Microeconomics or Principles of Macroeconomics or upper-level economics	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 <small>or other approved business course; see Social Sciences Approved Electives at https://cs.mst.edu/undergraduate-degree/</small>	3	BUS 1110 or BUS 1210 or BUS 2910	Intro to Management and Entrepreneurship or Financial Accounting or Business Law <small>or other approved business course; see Social Sciences Approved Electives at https://cs.mst.edu/undergraduate-degree/</small>	3
Social Science	Other economics, history, political science, psychology, business elective from the Social Sciences Approved Electives at https://cs.mst.edu/undergraduate-degree/	3	Social Science	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 upper-level 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
Humanities	Other humanities elective from the list of approved courses at https://cs.mst.edu/undergraduate-degree/	3	Humanities	Other humanities elective from the list of approved courses at https://cs.mst.edu/undergraduate-degree/	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 and Computing	1
Electives	Maximum Free Electives	8	Electives	Maximum Free Electives	8

Maximum credit hours to be transferred to Missouri S&T degree requirements.

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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.