

Johnson County Community College — Missouri S&T

Computer Science BS Transfer Guide Effective as of Fall 2025

Students are not required to complete all courses on this guide before transferring to Missouri S&T.

Johnson County Community College

Missouri S&T

Communication Skills

Take all courses.

ENGL 121 or ENGL 119	Composition I (3) or College Composition I with Review (5)	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
Total Hours		6	Total Hours		6

Computer Science, Mathematics, and Science

Take all courses.

CS 211	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
Total Hours		20	Total Hours		17

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 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 other course with the equivalent of a Missouri S&T engineering designation.	3
PHYS 130 or PHYS 220	College Physics I or Engineering Physics I	5	PHYSICS 1145 or PHYSICS 1135	College Physics I or Engineering Physics I Only one of these courses may be applied to the engineering/science elective requirement.	4
PHYS 131 or PHYS 221	College Physics II or Engineering Physics II	5	PHYSICS 2145 or PHYSICS 2135	College Physics II or Engineering Physics II Only one of these courses may be applied to the engineering/science elective requirement.	4
Physics	Any physics excluding the equivalent of S&T PHYS 2111, 2119, 2135, and 2145, except as noted above.	3	Physics	Any physics excluding the equivalent of S&T PHYS 2111, 2119, 2135, and 2145, except as noted above.	3
Science	Any biology, chemistry, geology, or environmental science.	3	Science	Any biology, chemistry, geology, or environmental science.	3
Total Hours		6	Total Hours		6

*A maximum of 6 hours applies to engineering/science elective requirements. Any additional credit hours apply to degree totals as general elective credit.

Natural Sciences General Education Requirements

Select 7 hours to include at least two specific disciplines and to include at least 1 hour of lab.

CHEM 124, 125 or BIOL 121 or BIOL 135 or ASTR 120 or ASTR 122	General Chemistry I and Lab (5) or Intro to Biology for Non-Majors (4) or Principles of Cell and Molecular Biology (4) or Fundamentals of Astronomy (3) or Astronomy (4)	4	CHEM 1310, 1319 or BIO SCI 1113, 1219 or BIO SCI 2213, 2219 or PHYSICS 1505 or PHYSICS 1505, 1509	General Chemistry I (4) and Lab (1) or General Biology (3) and Lab (1) or Cell Biology (3) and Lab (1) or Introductory Astronomy (3) or Introductory Astronomy (3) and Lab (1) Satisfies the gen ed natural science lecture/lab requirement. Lecture/lab pair must total a minimum of 4 hours.	4
Natural Science	Any Biology (1113 or higher), Chemistry (1301 or higher), Geology (1110 or higher) or Physics (1111 or higher)	3	Natural Science	Any Biology (1113 or higher), Chemistry (1301 or higher), Geology (1110 or higher) or Physics (1111 or higher)	3
Total Hours		7	Total Hours		7

Humanities, Arts, and Social Sciences General Education Requirements

From the options listed in each group below, select 15 hours to include
6 hours Humanities and Fine Arts from at least two specific disciplines and
6 hours Behavioral and Social Sciences from at least two specific disciplines.

*At least one course must be selected from HISTORY 1200, 1300, 1310, or POL SCI 1200 to satisfy the State of Missouri government requirement.

Humanities and Fine Arts

Select 6 hours from at least two specific disciplines.

ENGL 236 or ENGL 237 or ENGL 246 or ENGL 247 or ENGL 251 or HIST 140* or HIST 141* or MUS 121 or MUS 126 or THEA 120	British Literature to 1800 or British Literature after 1800 or American Literature I or American Literature II or World Literature to 1620 or US History to 1877* or US History since 1877* or Intro to Music Listening or Intro to World Music or Intro to Theatre *Satisfies the State of Missouri government requirement.	6	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231 or HISTORY 1300* or HISTORY 1310* or MUSIC 1150 or MUSIC 1150 or THEATRE 1150	British Literature I: The Beginnings to 1800 or British Literature II: 1800 to Present American Literature: 1600 to 1865 or American Literature: 1865 to Present or World Literature I: Beginnings to the Renaissance or American History to 1877* or American History Since 1877* or Music Understanding and Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	6
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Behavioral and Social Sciences

Select 3 hours.

HIST 125 or HIST 151 or HIST 126* or GEOS 145 or POLS 124* or PSYC 130 or ECON 231 or ECON 230 or Foreign Language	Western Civ: Ancient World to the Renaissance or World History: Traditional or Western Civ: Scientific Revolution to Modern Age* or World Regional Geography or American National Government* or Intro to Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 1100 or HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or POL SCI 1200* or PSYC 1101 or ECON 1100 or ECON 1200 or Foreign Language	Early Western Civilization or Early Western Civilization or Modern Western Civilization* or World Regional Geography or American Government* or General Psychology or Principles of Microeconomics or Principles of Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3
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Humanities, Arts, and Social Sciences

COMS 121	Public Speaking	3	SPMS 1185	Principles of Speech	3
Total Hours		15	Total Hours		12

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	7	Electives	Maximum Free Electives	7

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.
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