

Johnson County Community College — Missouri S&T

Biological Sciences 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		

Mathematics and Sciences

Take all courses.

BIOL 121	Intro to Biology for Non-Majors	4	BIO SCI 1113,1219	General Biology and Lab	4
MATH 231 and 232 OR MATH 241 and 242	Business and Applied Calculus I and II (6) OR Calculus I and II (10) *The combination of JCCC MATH 231 and 232 is equivalent to Missouri S&T 1212. The combination of MATH 241 and 242 is equivalent to the combination of Missouri S&T 1214 and 1215. MATH 1215 is not a degree requirement but will transfer as elective credit.	6	MATH 1212* OR MATH 1214 and 1215*	Survey of Calculus* (3) OR Calculus I and Calculus II* (8) *The combination of JCCC MATH 231 and 232 is equivalent to Missouri S&T 1212. The combination of MATH 241 and 242 is equivalent to the combination of Missouri S&T 1214 and 1215. MATH 1215 is not a degree requirement but will transfer as elective credit.	4
CHEM 124, 125	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 131	General Chemistry II Lecture	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
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
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	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	4
Total Hours 39			Total Hours 32		

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 6 hours from at least two specific disciplines.

HIST 125 or HIST 151 or HIST 126* or GEOS 145 or PHIL 121 or PHIL 124 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 Intro to Philosophy or Logic and Critical Thinking 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 PHIL 1105 or PHIL 1115 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 Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction 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.	6
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Humanities, Arts, and Social Sciences

Select 3 hours.

HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3	HASS Elective	Humanities, Arts, Social Sciences Elective: Any history, art, music, theater, English and technical communication, philosophy, political science, psychology, economics, etymology, or foreign language.	3
Total Hours 15			Total Hours 15		

Additional Degree Requirements

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

BIOL 135	Principles of Cellular and Molecular Biology	4	BIO SCI 2213, 2219	Cell Biology and Lab	4
BIOL 205	General Genetics	3	BIO SCI 2223	General Genetics	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.
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