

Johnson County Community College — Missouri S&T

Data Science BS

Transfer Guide Effective as of Fall 2026

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

Johnson County Community College

Missouri S&T

English and 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 or COMS 121	Composition II or Technical Writing I or Public Speaking	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech Applies to degree as Gen Ed communication requirement.	3
Total Hours 6			Total Hours 6		

Mathematics, Statistics, and Computer Science

Take all courses.

MATH 241	Calculus I	5	MATH 1214	Calculus I	4
MATH 242	Calculus II	5	MATH 1215	Calculus II	4
MATH 243	Calculus III	5	MATH 2222	Calculus III	4
MATH 254	Differential Equations	4	MATH 3304	Elementary Differential Equations *Applies to degree as Data Science elective.	3
MATH 246	Elementary Linear Algebra	3	MATH 3108	Linear Algebra	3
CS 210 or CS 211	Discrete Structures I or Discrete Structures II	3	COMP SCI 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	COMP SCI 1500 or COMP SCI 1971, 1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* *COMP SCI 1971, 1981 will be substituted for COMP SCI 1500.	3
Total Hours 29			Total Hours 24		

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 or Literature	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 or Any literature with prerequisite of no more than English Composition I. *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 1190 or Literature	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 Appreciation or Music Appreciation or Theatre via Video or Any literature with prerequisite of no more than ENGLISH 1120. *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 to include either ECON 1100 or 1200.

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	3
HIST 125 or HIST 151 or HIST 126* or GEOS 145 or PHIL 121 or PHIL 124 or POLS 124* or PSYC 130 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 Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	HISTORY 1100 or HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHIL 1105 or PHIL 1115 or POL SCI 1200* or PSYCH 1101 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 Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3

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 HASS Hours 15			Total HASS Hours 15		

Additional Degree Requirements

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

Technical Electives	Technical electives in biology, business, chemistry, computer science, economics, education, engineering, finance, geology, geophysics, information science and technology, marketing, mechanics, physics, or technical communication approved by advisor.	Technical Electives	Technical electives in biology, business, chemistry, computer science, economics, education, engineering, finance, geology, geophysics, information science and technology, marketing, mechanics, physics, or technical communication approved by advisor.
Electives	Free Electives	Electives	Free Electives

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.