

Metropolitan Community Colleges — 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.

Metropolitan Community Colleges

Missouri S&T

English and Communication Skills

Take all courses.

ENGL 101	Composition and Reading I	3		Exposition and Argumentation	3
ENGL 102 or ENGL 215 or COMM 100	Composition and Reading II or Technical Writing or Fundamentals of Speech	3	ENGLISH 1160 or ENGLISH 3560 or SPMS 1185	Writing and Research or Technical Writing or Principles of Speech	3
		Total Hours	6	Applies to degree as Gen Ed communication requirement.	
				Total Hours	6

Mathematics, Statistics, and Computer Science

Take all courses.

MATH 180	Analytic Geometry and Calculus I	5	MATH 1214	Calculus I	4
MATH 190	Analytic Geometry and Calculus II	5	MATH 1215	Calculus II	4
MATH 210	Analytic Geometry and Calculus III	5	MATH 2222	Calculus III	4
MATH 230	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
ENGR 215	Engineering Statistics and Computation	3	STAT 3115	Engineering Statistics	3
MATH 121* and MATH 122*	Discrete Structures for Computer Science I* and Discrete Structures for Computer Science II* *The combination of MCC MATH 121 AND 122 is equivalent to Missouri S&T COMP SCI 1200. Both courses must be taken to receive credit for Missouri S&T COMP SCI 1200.	6	COMP SCI 1200*	Discrete Mathematics for Computer Science* *The combination of MCC MATH 121 AND 122 is equivalent to Missouri S&T COMP SCI 1200. Both courses must be taken to receive credit for Missouri S&T COMP SCI 1200.	3
CSIS 271 or CSIS 223	Data Structures and Algorithm Analysis or Object-Oriented Programming with C++	3	COMP SCI 1500 or COMP SCI 1971,1981*	Computational Problem Solving (3) or Intro to Programming Methodology and Lab*(C++) (3) or *Will be substituted for COMP SCI 1500.	3
		Total Hours	33		
				Total Hours	27

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 111 or BIOL 101 or BIOL 123 or BIOL 124 or GEOL 102 or PHYS 106L	General College Chemistry I (5) or General Biology (5) or General Biology for Majors I (4) or General Biology for Majors II (4) or Historical Geology (4) or General Astronomy with Lab (5)	5	CHEM 1310, 1319 or BIO SCI 1113, 1219 or BIO SCI 1213, 1219 or BIO SCI 1223, 1229 or GEOLOGY 1120, 1129 or PHYSICS 1505, 1509	General Chemistry I (4) and Lab (1) or General Biology (3) and Lab (1) or Principles of Biology and Lab (4) or Biodiversity (3) and Lab (1) or Evolution of the Earth (3) and Lab (1) 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 220 or ENGL 221 or ENGL 222 or ENGL 223 or ENGL 254 or HIST 120* or HIST 121* or ART 108 or MUSI 108 or SPDR 106 or Literature	British Literature to 1750 or British Literature 1750-Present or American Literature to 1860 or American Literature 1860-Present or World Literature I or United States History to 1865* or United States History since 1865* or Survey of Art or Music Appreciation or Theatre Appreciation 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 ART 1180 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 Art 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 211 or ECON 210	Microeconomics or Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
HIST 133 or HIST 134* or GEOG 105 or PHIL 100 or PHIL 103 or PHIL 200 or POLS 136* or PSYC 140 or Foreign Language	Foundations of Western Civilization or Modern Western Civilization* or World Geography or Intro to Philosophy or Intro to Critical Thinking or Logic or Intro to US National Politics* or General Psychology or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	3	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYC 1101 or Foreign Language	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.