

Metropolitan Community Colleges — Missouri S&T

Physics 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.

Metropolitan Community Colleges

Missouri S&T

Communication Skills

Take all courses.

ENGL 101	Composition and Reading I	3	ENGLISH 1120	Exposition and Argumentation	3
ENGL 102 or ENGL 215	Composition and Reading II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
Total Hours 6			Total Hours 6		

Mathematics and Science

Take all courses.

MATH 180	Analytic Geometry & Calculus I	5	MATH 1214	Calculus I	4
MATH 190	Analytic Geometry & Calculus II	5	MATH 1215	Calculus II	4
MATH 210	Analytic Geometry & Calculus III	4	MATH 2222	Calculus III	4
CHEM 111	General College Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 112	General College Chemistry II	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not an S&T degree requirement. Will transfer as general credit.	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
Total Hours 34			Total Hours 28		

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 and at least one literature course.

ENGL 220 or ENGL 222 or ENGL 254 or ENGL 268 or ENGL 260	British Literature to 1750 or American Literature I or World Literature I or Women's Literature or African-American Literature	3	ENGLISH 1211 or ENGLISH 1212 or ENGLISH 1221 or ENGLISH 1222 or ENGLISH 1231	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	3
HIST 120* or HIST 121* or ART 108 or MUSI 108 or SPDR 106	United States History to 1865* or United States History since 1865* or Survey of Art or Music Appreciation or Theatre Appreciation *Satisfies the State of Missouri government requirement.	3	HISTORY 1300* or HISTORY 1310* or ART 1180 or MUSIC 1150 or THEATRE 1150	American History to 1877 or American History Since 1877 or Art Appreciation or Music Understanding and Appreciation or Theatre for Social Change *Satisfies the State of Missouri government requirement.	3

Behavioral and Social Sciences

Select 6 hours from at least two specific disciplines.

HIST 133 or HIST 134* or GEOG 105 or PHIL 100 or PHIL 103 or PHIL 200 or POLS 136* or PSYC 140 or ECON 211 or ECON 210 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 Microeconomics or Macroeconomics or Elementary or Intermediate Foreign Language *Satisfies the State of Missouri government requirement.	6	HISTORY 1100 or HISTORY 1200* or HISTORY 2110 or PHILOS 1105 or PHILOS 1115 or POL SCI 1200* or PSYCH 1101 or ECON 1100 or ECON 1200 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 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.

MATH 230	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
CSIS 271 or CSIS 123 or CSIS 223	Data Structures and Algorithm Analysis or Programming Fundamentals or Object-Oriented Programming With C++	3	CS 1500 or CS 1972, 1982	Computational Problem Solving or Intro to MATLAB Programming and Lab	3
Electives	Maximum Free Electives	6	Electives	Maximum Free Electives	6

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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