

Jefferson College — Missouri S&T

Applied Mathematics 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.

Jefferson College

Missouri S&T

English and Communication Skills

Take all courses.

ENG 101	English Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENG 102 or COM 110	English Composition II or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3
		Total Hours			Total Hours
		6			6

Mathematics, Statistics, and Computer Science

Take all courses.

MTH 180	Calculus I	5	MATH 1214	Calculus I	4
MTH 185	Calculus II	5	MATH 1215	Calculus II	4
MTH 201	Calculus III	5	MATH 2222	Calculus III	4
MTH 205	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
MTH 172	Linear Algebra	3	MATH 3108	Linear Algebra	3
CIS 155	Intro to Computer Programming	3	COMP SCI 1500	Computational Problem Solving	3
		Total Hours			Total Hours
		24			21

Natural Sciences

Select PHYSICS 1135 and 1 additional course from the options below. A total of 7 hours will apply to this requirement.

PHY 223	General Physics I	4	PHYSICS 1135	Engineering Physics I required	4
PHY 224	General Physics II	4	PHYSICS 2135	Engineering Physics II	4
CHM 111	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 112	General Chemistry II	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not a degree requirement, transfers as general elective credit.	3
BIO 101 or BIO 103	General Biology (5) or Biology for Majors I (4)	4	BIO SCI 1113, 1219 or BIO SCI 1213, 1219	General Biology and Lab or Principles of Biology and Lab	4
BIO 201	Genetics	4	BIO SCI 2223	Genetics	3
PHY 105	Physical Geology	4	GEOLOGY 1110	Physical and Environmental Geology or higher geology	3
		Total Hours			Total Hours
		13			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.

ENG 225 or ENG 226 or ENG 228 or ENG 229 or ENG 215 or HST 103* or HST 104* or ART 101 or MUS 121 or THT 100	English Literature before 1800 or English Literature after 1800 or American Literature before 1865 or American Literature after 1865 or World Literature before 1650 or US History I to Reconstruction* or US History II from Reconstruction* or Art Appreciation or Appreciation of Music or Theatre Appreciation *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 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 Art 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 to include ECON 1100 or 1200 and from at least two specific disciplines.

ECO 102 or ECO 101	Microeconomics or Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
HST 201 or HST 202* or GEO 103 or PHL 102 or PHL 101 or PSC 102* or PSY 101 or Foreign Language	Ancient and Medieval Civilization or Renaissance to Early Modern Europe* MOTR WCIV 102 OF World Regional Geography or Intro to Philosophy or Logic or US and Missouri Government and Constitution* 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 PSYCH 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
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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.