

Johnson County Community College — Missouri S&T

Applied Math BS with Secondary Education Teacher Certification

Transfer Guide Effective as of Fall 2025

Johnson County Community College

Missouri S&T

Communication Skills

Take all courses.

ENGL 121	Composition I	3	ENGLISH 1120	Exposition and Argumentation	3		
ENGL 122 or COMS 121	Composition II or Public Speaking	3	ENGLISH 1160 or SPMS 1185	Writing and Research or Principles of Speech	3		
		Total Hours	6			Total Hours	6

Mathematics and Science

Take all courses.

MATH 241 and MATH 242	Calculus I and Calculus II	10	MATH 1214 and MATH 1215	Calculus I and Calculus II	8
MATH 243	Calculus III	5	MATH 2222	Calculus III	4
PHYS 220	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
CHEM 124, 125 or BIOL 121 or GEOS 130	General Chemistry I and Lab (5) or Intro to Biology for Non-Majors (4) or General Geology (5)	4	CHEM 1310, 1319* or BIO SCI 1113, 1219* or GEOLOGY 1110	General Chemistry I (4) and Lab* (1) or General Biology* (3) and Lab* (1) or Physical and Environmental Geology (3) Satisfies the 3-hour science requirement. Credit hours apply to degree totals as indicated for each course. *BIO SCI 1213 will be substituted for 1113. CHEM 1319 and BIO SCI 1219 are not degree requirements, will transfer as general elective credit.	3
Total Hours		24	Total Hours		19

Social Sciences

Take all courses.

Take all courses:					
HIST 140 or HIST 141	US History to 1877 or US History since 1877	3	HISTORY 1300 or HISTORY 1310	American History to 1877 or American History Since 1877	3
POLS 124	American National Government	3	POL SCI 1200	American Government	3
PSYC 130	Intro to Psychology	3	PSYCH 1101	General Psychology	3
		Total Hours	9		
				Total Hours	9

Humanities

Select one course.

Select one course:					
MUS 121 or MUS 126	Intro to Music Listening or Intro to World Music	3	MUSIC 1150	Music Appreciation	3
PHIL 121	Intro to Philosophy	3	THEATRE 1190	Theatre via Video	3
ENGL 236 or ENGL 246 or ENGL 251	British Literature to 1800 or American Literature I or World Literature to 1620 or or other non-prerequisite literature	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I or other non-prerequisite literature	3
		Total Hours	3		
				Total Hours	3

Additional Degree Requirements

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

MATH 254	Differential Equations	4	MATH 3304	Elementary Differential Equations	3
MATH 246	Elementary Linear Algebra	3	MATH 3108	Linear Algebra	3
CS 235 or CS 250	Object-Oriented Programming Using C++ or Basic Data Structures using C++	4	CS 1500	Computational Problem Solving	3

Teacher Certification Requirements

Take all courses.

EDUC 121	Introduction to Teaching	3	EDUC 1074	Education in a Diverse Society	3		
PSYC 225	Educational Psychology	3	EDUC 2102 or PSYCH 2300	Educational Psychology	1		
PSYC 215	Child Development	3	PSYCH 3310	Developmental Psychology	3		
		Total Hours	9			Total Hours	7

Professional Requirements for Teacher Education Program: Please view all program requirements at <https://teachereducation.mst.edu/secondaryeducation/>.

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.