Johnson County Community College — Missouri S&T
Applied Math BS with Secondary Education Teacher Certification Transfer Guide
Effective as of Fall 2023

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	Composition II	3	ENGLISH 1160	Writing and Research	3
COMS 121	Public Speaking	3	SPMS 1185	Principles of Speech	3
	Total Hours	9		Total Hours	9
Mathematics and Science (Take all courses)					
MATH 171	College Algebra	3	MATH 1140*	College Algebra* *Required for teacher certification; not a Mathematics BS requirement.	3
MATH 172	Trigonometry	2	MATH 1160*	Trigonometry* *Required for teacher certification; not a Mathematics BS requirement.	2
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
PHYS 221	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
	Total Hours	30		Total Hours	25
Social Sciences (Take all courses)					
HIST 126 or HIST 140 or HIST 141	Western Civ: Scientific Revolution to Modern Age or US History to 1877 or US History since 1877	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Modern Western Civilization or 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
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
	Total Hours	12		Total Hours	12
Humanities (Take all courses)					
MUS 121 or MUS 126 or THEA 120 or PHIL 121	Intro to Music Listening or Intro to World Music or Intro to Theatre or Intro to Philosophy	3	MUSIC 1150 or THEATRE 1190 or PHILOS 1105	Music Appreciation or Theatre via Video or Self and World: Intro to Philosophy	3
ENGL 236 or ENGL 246 or ENGL 251 or ENGL 217	British Literature to 1800 or American Literature I or World Literature to 1620 or Literature by Women (or other literature elective)	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2242	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I or Literature by Women (or other literature elective)	3
	Total Hours	6		Total Hours	6
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
CHEM 124, 125 or BIOL 121	General Chemistry I and Lab (5) or Intro to Biology for Non-Majors (4)	4	CHEM 1310, 1319 or BIO SCI 1113, 1219	General Chemistry I and Lab or General Biology and Lab	5
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	CS 1500 or CS 1971,1981	Computational Problem Solving or Intro to Programming Methodology and Lab (C++)	3
Additional Courses for Teacher Certification Option (Take all courses)					
EDUC 121	Introduction to Teaching	3	EDUC 1040	Perspectives in Education	2
PSYC 225	Educational Psychology	3	PSYCH 2300 (EDUC 2102)	Educational Psychology	3
PSYC 215	Child Development	3	PSYCH 3310	Developmental Psychology	3
	Total Hours	9		Total Hours	8

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.