

Mineral Area College — Missouri S&T

Applied Math BS with Secondary Education Teacher Certification Transfer Guide

Effective as of Fall 2020

Mineral Area College

Missouri S&T

Communication Skills (Take all courses)

ENG 1330	English Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENG 1340	English Composition	3	ENGLISH 1160	Writing and Research	3
ENG 1440	Public Speaking	3	SPMS 1185	Principles of Speech	3
		Total Hours	9		
				Total Hours	9

Mathematics and Science (Take all courses)

MAT 1230	College Algebra	3	MATH 1140*	College Algebra* <small>*Required for teacher certification; not a Mathematics BS requirement.</small>	3
MAT 1330	Trigonometry	3	MATH 1160*	Trigonometry* <small>*Required for teacher certification; not a Mathematics BS requirement.</small>	2
MAT 1650	Analytical Geometry and Calculus I	5	MATH 1214	Calculus for Engineers I	4
MAT 2150	Analytical Geometry and Calculus II	5	MATH 1215	Calculus for Engineers II	4
MAT 2250	Analytical Geometry and Calculus III	5	MATH 2222	Calculus with Analytic Geometry III	4
PHS 2230	General Physics I	4	PHYSICS 1135	Engineering Physics I	4
PHS 2240	General Physics II	4	PHYSICS 2135	Engineering Physics II	4
		Total Hours	29		
				Total Hours	25

Social Sciences (Take all courses)

HIS 1140 or HIS 1230 or HIS 1240	Western Civilization II or American History I or American History II	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Modern Western Civilization or American History to 1877 or American History Since 1877	3
POS 1180	American Political Systems	3	POL SCI 1200	American Government	3
PSY 1130	General Psychology I	3	PSYCH 1101	General Psychology	3
BUS 2940 or BUS 2930	Principles of Macroeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Macroeconomics or Principles of Macroeconomics	3
		Total Hours	12		
				Total Hours	12

Humanities (Take all courses)

ART 1490 or MUS 1630 or THE 1000 or PHI 1400	History of Art I or Appreciation of Music or Intro to Theatre or Intro to Philosophy	3	ART 1180 or MUSIC 1150 or THEATRE 1190 or PHILOS 1105	Art Appreciation or Music Appreciation or Theatre Appreciation or Introduction to Philosophy	3
ENG 2330 or ENG 2430 or ENG 2492	English Literature I or American Literature I or Women's Literature <small>(or other literature elective)</small>	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 2242	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or Literature by Women <small>(or other literature elective)</small>	3
		Total Hours	6		
				Total Hours	6

Additional Degree Requirements (Select up to 8 hours)

MAT 2330	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
PHS 1350 or BIO 1150	General Chemistry I or General Biology	5	CHEM 1310, 1319 or BIO SCI 1113, 1219	General Chemistry I and Lab or General Biology and Lab	5
CSC 2400	Computer Programming in C++	3	CS 1971, 1981	Intro to Programming Methodology and Lab	3
		Total Hours	8		
				Total Hours	8

Additional Courses for Teacher Certification Option (Take all courses)

EDU 2040	Foundations of Education	3	EDUC 1040	Perspectives in Education	2
EDU 2320	Educational Psychology	3	PSYCH 2300 (EDUC 2102)	Educational Psychology	3
PSY 1250	Human Growth and Development	3	PSYCH 3310	Developmental Psychology	3
EDU 2500	Education of Exceptional Learner	3	PSYCH 4310	Psychology of the Exceptional Child	3
		Total Hours	12		
				Total Hours	11

***Teacher certification notes:** An ACT of 22 or a 220 on the MoGEA is required for professional standing in the department. Students must pass the MoCA, maintain a 2.75 cumulative GPA, and a 3.0 content GPA to qualify for student teaching. Students completing this program will earn a BS in Applied Mathematics.

Maximum credit hours to be transferred to Missouri S&T degree requirements.

68

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.