

East Central College — Missouri S&T

Applied Math BS with Secondary Education Teacher Certification Transfer Guide Effective as of Fall 2017

East Central College

Missouri S&T

Communication Skills (Take all courses)

ENG 101	English Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENG 102	English Composition II	3	ENGLISH 1160	Writing and Research	3
COM 110	Public Speaking	3	SPMS 1185	Principles of Speech	3
		Total Hours			9
					Total Hours
					9

Mathematics and Science (Take all courses)

MTH 190	Analytic Geometry & Calculus I	5	MATH 1214	Calculus for Engineers I	4
MTH 210	Analytic Geometry & Calculus II	5	MATH 1215	Calculus for Engineers II	4
MTH 220	Analytical Geometry & Calculus III	5	MATH 2222	Calculus with Analytic Geometry III	4
PHY 211, 212	General Physics I and Lab	5	PHYSICS 1135	Engineering Physics I	4
PHY 221, 222	General Physics II and Lab	5	PHYSICS 2135	Engineering Physics II	4
		Total Hours			25
					Total Hours
					20

Social Sciences (Take all courses)

HST 101 or	US History to 1865 or	3	HISTORY 1300 or	American History to 1877 or	3
HST 102	US History 1865-1945		HISTORY 1310	American History Since 1877	
PSC 102	US Government: National and State	3	POL SCI 1200	American Government	3
PSY 101	General Psychology	3	PSYCH 1101	General Psychology	3
ECO 102 or	Principles of Microeconomics or	3	ECON 1100 or ECON	Principles of Microeconomics or	3
ECO 101	Principles of Macroeconomics		1200	Principles of Macroeconomics	
		Total Hours			12
					Total Hours
					9

Humanities (Take all courses)

ART 101 or	Art Appreciation or		ART 1180 or	Art Appreciation or	
MUS 101 or	Music Appreciation or	3	MUSIC 1150 or	Music Appreciation or	3
THE 101 or PHL	Theatre Appreciation or		THEATRE 1190 or	Theatre Appreciation or	
101	Introduction to Philosophy		PHILOS 1105	Introduction to Philosophy	
	<i>See your advisor for course options</i>	3		Literature Elective	3
		Total Hours			6
					Total Hours
					6

Additional Degree Requirements (Select up to 14 hours)

MTH 245	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
MTH 241	Linear Algebra	3	MATH 3108	Linear Algebra	3
BIO 111	General Biology I and Lab	5	BIO SCI 1113, 1219	General Biology and Lab	5
EGR 221, 222	C++ Program Engineers	4	CS 1570, 1580	Intro to Programming	3
		Total Hours			14
					Total Hours
					14

Additional Courses for Teacher Certification Option (Take all courses)

EDU 201 or	Foundations of Education or	3	EDUC 1040	Perspectives in Education	2
EDU 214	Multicultural Education				
EDU 241	Educational Psychology	3	PSYCH 2300 or	Educational Psychology	3
PSY 250	Human Development	3	EDUC 2102		
			PSYCH 3310	Developmental Psychology	3
		Total Hours			9
					Total Hours
					8

***Teacher certification notes:** Passing scores on MoGEA and MoCA are required. Students must maintain a minimum 2.75 cumulative GPA and a minimum 3.0 content GPA. Students completing this program will have a BA degree in Chemistry with secondary education teacher certification.

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

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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.