

# Crowder College — Missouri S&T

## Applied Math BS with Secondary Education Teacher Certification Transfer Guide

Effective as of Fall 2020

### Crowder College

### Missouri S&T

#### Communication Skills (Take all courses)

ENGL 101	English Composition	3	ENGLISH 1120	Exposition and Argumentation	3
ENGL 102	Advanced English Composition	3	ENGLISH 1160	Writing and Research	3
COMM 104	Fundamentals of Speech	3	SPMS 1185	Principles of Speech	3
Total Hours					9

#### Mathematics and Science (Take all courses)

MATH 135	Algebra for Calculus	3	MATH 1140*	College Algebra*	3*
				<small>*Required for teacher certification; not a Mathematics BS requirement.</small>	
MATH 112	Trigonometry	3	MATH 1160*	Trigonometry*	2*
				<small>*Required for teacher certification; not a Mathematics BS requirement.</small>	
MATH 150, 160	Calculus I Part I and II	5	MATH 1214	Calculus for Engineers I	4
MATH 201	Calculus II	5	MATH 1215	Calculus for Engineers II	4
MATH 202	Calculus III	5	MATH 2222	Calculus with Analytic Geometry III	4
PHYS 190	General Physics I	5	PHYSICS 1135	Engineering Physics I	4
PHYS 210	General Physics II	5	PHYSICS 2135	Engineering Physics II	4
Total Hours				31	Total Hours 20

#### Social Sciences (Take all courses)

HIST 102 or HIST 106 or HIST 107	Westen Civilization II or US History or US 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
PLSC 103	National, State, Local Government	3	POL SCI 1200	American Government	3
PSYC 101	General Psychology	3	PSYCH 1101	General Psychology	3
ECON 202 or ECON 201	Principles of Economics II (Micro) or Principles of Economics I (Macro)	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Total Hours				12	Total Hours 12

#### Humanities (Take all courses)

ART 101 or MUSC 101 or TA 205 or PHIL 101	Art Appreciation or Music Appreciation or Intro to Theatre or Intro to Western Philosophy	3	ART 1180 or MUSIC 1150 or THEATRE 1190 or PHILOS 1105	Art Appreciation or Music Appreciation or Theatre Appreciation or Intro to Philosophy	3
ENGL 240 or ENGL 230 or ENGI 222 or	British Literature I or Survey of American Litererature I or World Literature I (or other literature elective)	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 literature elective)	3
Total Hours				6	Total Hours 6

#### Additional Degree Requirements (Select up to 10 hours)

MATH 210	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
CHEM 111 or BIOL 101	General Chemistry I (5) or General Biology I (4)	4-5	CHEM 1310, 1319 or BIO SCI 1113, 1219	General Chemistry I and Lab or General Biology and Lab	5
COMP 111	Intro to Computer Science	4	CS 1500	Computational Problem Solving	3
Total Hours				10	Total Hours 10

#### Additional Courses for Teacher Certification Option (Take all courses)

EDUC 125	Intro to Education	3	EDUC 1040	Perspectives in Education	2
EDUC 231	Educational Psychology	3	PSYCH 2300 (EDUC 2102)	Educational Psychology	3
PSYC 211	Lifespan Development	3	PSYCH 3310	Developmental Psychology	3
EDUC 240	Education of Exceptional Learners	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.