

Crowder College — Missouri S&T

Physics 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 or ENGL 203	Advanced English Composition or Technical Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
COMM 104	Fundamentals of Speech	3	SPMS 1185	Principles of Speech	3
Total Hours			Total Hours		
9			9		

Mathematics and Science (Take all courses)

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
CHEM 111	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 112	General Chemistry II	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis* (2) <small>*Note: CHEM 1510 is not an S&T degree requirement; course will transfer as elective credit.</small>	3
Total Hours			Total Hours		
35			28		

Social Sciences (Take all courses)

HIST 102 or HIST 106 or HIST 107	Western Civilization II or U.S. History I or U.S. 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
Total Hours			Total Hours		
9			9		

Humanities (Take all courses)

ART 101 or MUSC 101 or TA 205	Art Appreciation or Music Appreciation or Intro to Theatre	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre Appreciation	3
ENGL 240 or ENGL 230 or ENGL 222 or	British Literature I or Survey of American Literature 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			Total Hours		
6			6		

Additional Degree Requirements (Select up to 10 credit hours)

MATH 210	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
BIOL 101	General Biology	4	BIO SCI 1113,1219*	General Biology (3) and Lab* (2) <small>*Note: BIO SCI 1219 is not an S&T degree requirement; course will transfer as elective credit.</small>	3
PHYS 105 or GEOL 115	Descriptive Astronomy (3) or Intro to Geology (4)	3-4	PHYSICS 1505 or GEOLOGY 1110	Introductory Astronomy or Physical and Environmental Geology	3
Total Hours			Total Hours		
10			9		

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			Total Hours		
12			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 Physics.

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.