

Ozarks Technical College — Missouri S&T

Physics BS with Secondary Education Teacher Certification Transfer Guide

Effective as of Fall 2020

Ozarks Technical College

Missouri S&T

Communication Skills (Take all courses)

ENG 101	Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENG 102 or ENG 150	Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
COM 105	Public Speaking	3	SPMS 1185	Principles of Speech	3
Total Hours		9	Total Hours		9

Mathematics and Science (Take all courses)

MTH 140	Analytical Geometry/Calculus I	5	MATH 1214	Calculus for Engineers I	4
MTH 141	Analytical Geometry/Calculus II	5	MATH 1215	Calculus for Engineers II	4
MTH 240	Analytical Geometry/Calculus III	5	MATH 2222	Calculus with Analytic Geometry III	4
PHY 220	Physics for Engineers and Scientists I	5	PHYSICS 1135	Engineering Physics I	4
PHY 222	Physics for Engineers and Scientists II	5	PHYSICS 2135	Engineering Physics II	4
CHM 160, 161	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 170	General Chemistry II	3	CHEM 1320	General Chemistry II	3
Total Hours		33	Total Hours		28

Social Sciences (Take all courses)

HST 106 or HST 120 or HST 130	World History II or US History I: to 1865 or US History II: 1865-Present or	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Modern Western Civilization or American History to 1877 or American History Since 1877	3
PLS 101	American Government and Politics	3	POL SCI 1200	American Government	3
PSY 110	Intro to Psychology	3	PSYCH 1101	General Psychology	3
Total Hours		9	Total Hours		9

Humanities (Take all courses)

ART 100 or MUS 105 or THR 101	Art and Experience or Western Music Appreciation or Intro to Theater	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre Appreciation	3
ENG 340 or ENG 350 or ENG 260	Survey of English Literature I or Survey of American Literature I or Survey of 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 credit hours)

MTH 241	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
BIO 100 or BIO 160	Life Science or General Biology I	4	BIO SCI 1113	General Biology	3
PHY 115 or PHY 110	Intro to Astronomy or Intro to Geology	4	PHYSICS 1505 or GEOLOGY 1110	Introductory Astronomy or Physical and Environmental Geology	3
Total Hours		10	Total Hours		10

Additional Courses for Teacher Certification Option (Take all courses)

EDU 220	Foundations of Education	3	EDUC 1040	Perspectives in Education	2
EDU 250	Educational Psychology	3	PSYCH 2300 (EDUC 2102)	Educational Psychology	3
PSY 130	Life Span Developmental Psychology	3	PSYCH 3310	Developmental Psychology	3
EDU 260	Education 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 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.