

East Central College — Missouri S&T

Physics BS 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 (Required for AA Degree)	3	SPMS 1185	Principles of Speech (Not required for S&T degree. Transfers as free elective)	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
CHM 111	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 112	General Chemistry II and Lab	5	CHEM 1320	General Chemistry II	3
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		35	Total Hours		28

Social Sciences (Select 9 hours)

CIV 202 or HST 101 or HST 102 or PSC 102	European Civilization II or US History to 1865 or US History 1865-1945 or US Government National and State	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200	Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government (At least one of these courses is required to satisfy state requirement)	3
<i>See your advisor for course options</i>			Social Sciences	Social Sciences Elective: Any economics, history, political science, sociology, psychology elective	6
Total Hours		9	Total Hours		9

Humanities (Select 6 credit hours to include one literature and one additional humanities)

<i>See your advisor for course options</i>				Literature Elective (required)	3
PHL 101	Introduction to Philosophy	3	PHILOS 1105	Introduction to Philosophy	3
<i>See your advisor for course options</i>				Other fine art, literature, or philosophy elective	
Total Hours		6	Total Hours		6

Additional Degree Requirements (Select up to 12 hours)

MTH 245	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
MTH 241	Linear Algebra	3	MATH 3108	Linear Algebra	3
EGR 221, 222	C++ Program Engineers	3	CS 1570, 1580	Intro to Programming	3
BIO 111	General Biology I and Lab	5	BIO SCI 1113	General Biology (Transfers as required free elective)	3
Total Hours		12	Total Hours		12

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.