

East Central College — Missouri S&T

Physics BS Transfer Guide

Effective as of Fall 2023

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
		Total Hours			Total Hours
		6			6

Mathematics and Science (Take all courses)

MTH 190	Analytic Geometry & Calculus I	5	MATH 1214	Calculus I	4
MTH 210	Analytic Geometry & Calculus II	5	MATH 1215	Calculus II	4
MTH 220	Analytical Geometry & Calculus III	5	MATH 2222	Calculus 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			Total Hours
		35			28

Social Sciences

Select 9 hours to include at least one course to satisfy the state requirement.

HST 101 or HST 102 or CIV 202 or PSC 102	US History to 1877 or US History Since 1877 or European Civilization II or US Government I: National and State (At least one of these courses is required to satisfy state requirement)	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
ECO 102 or ECO 101	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics (or other economics)	3
PSY 101	General Psychology	3	PSYCH 1101	General Psychology (or other psychology)	3
	Social Sciences Elective: Any economics, history, political science, sociology, psychology elective	3	Social Sciences	Social Sciences Elective: Any economics, history, political science, sociology, psychology elective	3
		Total Hours			Total Hours
		9			9

Humanities

Select 6 credit hours to include at least one literature.

PHL 101	Introduction to Philosophy	3	PHILOS 1105	Self and World: Intro to Philosophy (or other philosophy)	3
ART 101	Art Appreciation	3	ART 118	Art Appreciation (or other fine art)	3
MUS 101	Music Appreciation	3	MUS 1150	Music Understanding and Appreciation (or other music)	3
THE 101	Theatre Appreciation	3	THEATRE 1190	Theatre via Video (or other theater)	3
ENG 210 or ENG 221 or ENG 124 or ENG 214 or ENG 215	Survey British Lit: Beginnings to 1784 or Survey American Lit: Colonial to 1865 or World Literature I or Women's Literature or African-American Literature (or other literature elective)	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2242 or ENGLISH 2245 or	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I or Literature by Women or African American Literature (or other literature elective)	3
		Other fine art, literature, or philosophy elective			Other fine art, literature, or philosophy elective
		Total Hours			Total Hours
		6			6

Additional Degree Requirements

Select additional courses to total up to the maximum transfer credit hours shown below.

MTH 245	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
MTH 241	Linear Algebra	3	MATH 3108	Linear Algebra Recommended but not required, satisfies a math/stat elective requirement.	3
EGR 251 or EGR 221,222	Data Structures or C++ Program Engineers and Lab	3	CS 1500 or CS 1972, 1982	Computational Problem Solving or Intro to MATLAB Programming and Lab	3
					Maximum Free Electives
					6

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

60

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.