

# Johnson County Community College — Missouri S&T

## Physics BS with Secondary Education Teacher Certification

Transfer Guide Effective as of Fall 2025

### Johnson County Community College

### Missouri S&T

#### Communication Skills

Take all courses.

ENGL 121	Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENGL 122 or	Composition II or		ENGLISH 1160 or	Writing and Research or	
ENGL 123	Technical Writing I	3	ENGLISH 3560	Technical Writing	3
COMS 121	Public Speaking	3	SPMS 1185	Principles of Speech	3
		Total Hours			Total Hours
		9			9

#### Mathematics and Science

Take all courses.

MATH 241 and	Calculus I and		MATH 1214 and	Calculus I and	
MATH 242	Calculus II	10	MATH 1215	Calculus II	8
MATH 243	Calculus III	5	MATH 2222	Calculus III	4
PHYS 220	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
PHYS 221	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
CHEM 124, 125	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHEM 131	General Chemistry II	4	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2)	3
		Total Hours			Total Hours
		34			28

\*CHEM 1510 is not an S&T degree requirement. Will transfer as general credit.

#### Social Sciences

Take all courses.

HIST 126 or	Western Civ: Scientific Revolution to Modern Age or		HISTORY 1300 or	American History to 1877 or	
HIST 140 or	US History to 1877 or		HISTORY 1310 or	American History Since 1877 or	
HIST 141	US History since 1877	3	HISTORY 1200	Modern Western Civilization	3
POLS 124	American National Government	3	POL SCI 1200	American Government	3
PSYC 130	Intro to Psychology	3	PSYCH 1101	General Psychology	3
		Total Hours			Total Hours
		9			9

#### Humanities

Take all courses.

MUS 121 or	Intro to Music Listening or		ART 1180 or	Art Appreciation or	
MUS 126 or	Intro to World Music or		MUSIC 1150 or	Music Appreciation or	
THEA 120	Intro to Theatre	3	THEATRE 1190	Theatre via Video	3
ENGL 236 or	British Literature to 1800 or		ENGLISH 1211 or	British Literature I: The Beginnings to 1800 or	
ENGL 246 or	American Literature I or		ENGLISH 1221 or	American Literature: 1600 to 1865 or	
ENGL 251 or	World Literature to 1620 or		ENGLISH 1231 or	World Literature I or	
ENGL 217	Literature by Women or other literature	3	ENGLISH 2242	Literature by Women or other literature	3
		Total Hours			Total Hours
		6			6

#### Additional Degree Requirements

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

MATH 254	Differential Equations	4	MATH 3304	Elementary Differential Equations	3
MATH 246	Elementary Linear Algebra	3	MATH 3108	Linear Algebra	3
					Applies to degree as math/stat elective.
BIOL 121	Intro to Biology for Non-Majors	4	BIO SCI 1113, 1219	General Biology and Lab*	3
ASTR 120 or	Fundamentals of Astronomy (3) or				*BIO SCI 1213 will be substituted for 1113. The lab is not a degree requirement, will transfer as general elective credit.
ASTR 122 or	Astronomy (4) or		PHYSICS 1505 or	Introductory Astronomy or	
GEOS 130	General Geology (5)	3	GEOLOGY 1110	Physical and Environmental Geology	3
					Will be substituted for PHYSICS 1605.

#### Teacher Certification Requirements

Take all courses.

EDUC 121	Introduction to Teaching	3	EDUC 1074	Education in a Diverse Society	3
PSYC 225	Educational Psychology	3	EDUC 2102 or	Educational Psychology	1
PSYC 215	Child Development	3	PSYCH 2300	Developmental Psychology	3
		Total Hours			Total Hours
		9			7

Professional Requirements for Teacher Education Program: Please view all program requirements at <https://teachereducation.mst.edu/secondaryeducation/>.

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

61

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.