

# Moberly Area Community College — Missouri S&T

## Physics BS with Secondary Education Teacher Certification Transfer Guide

Effective as of Fall 2020

### Moberly Area Community College

### Missouri S&T

#### Communication Skills (Take all courses)

LAL 101	Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
LAL 102 or IND 120	Composition II or Technical Report Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
SPK 101	Public Speaking	3	SPMS 1185	Principles of Speech	3
Total Hours			9		

Total Hours 9

#### Mathematics and Science (Take all courses)

MTH 201	Analytic Geometry and Calculus I	5	MATH 1214	Calculus for Engineers I	4
MTH 202	Analytic Geometry and Calculus II	5	MATH 1215	Calculus for Engineers II	4
MTH 203	Analytic Geometry and Calculus III	5	MATH 2222	Calculus with Analytic Geometry III	4
PHY 201	Engineering Physics I	5	PHYSICS 1135	Engineering Physics I	4
PHY 202	Engineering Physics II	5	PHYSICS 2135	Engineering Physics II	4
PHY 121	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
PHY 122	General Chemistry II	5	CHEM 1320, 1510*	General Chemistry II and Qualitative Analysis*	3
Total Hours			35		

\*Note: CHEM 1510 is not an S&T degree requirement; course transfers as elective credit.

Total Hours 28

#### Social Sciences (Take all courses)

HST 102 or HST 105 or HST 106	Western Civilization II or American History to 1865 or American History from 1865	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Modern Western Civilization or American History to 1877 or American History Since 1877	3
PCS 105	Intro to American Government	3	POL SCI 1200	American Government	3
PSY 101	General Psychology	3	PSYCH 1101	General Psychology	3
Total Hours			9		

Total Hours 9

#### Humanities (Take all courses)

ART 101 or ART 102 or MUS 101 or MUS 102 or DRM 120	Art Survey and Appreciation I or Art Survey and Appreciation II or Fundamentals of Music or Music Appreciation or Theatre Appreciation	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video	3
LAL 150 or LAL 120 or LAL 210 or LAL 255 or LAL 125	English Literature Survey to 1750 or American Literature Survey to 1870 or A Survey of 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
Total Hours			6		

Total Hours 6

#### Additional Degree Requirements (Select up to 10 credit hours)

MTH 250	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
BIO 101	Biology	5	BIO SCI 1113	General Biology	3
PHY 162 or PHY 163	General Astronomy (3) or Geology (4)	3-4	PHYSICS 1505 or GEOLOGY 1110	Introductory Astronomy or Physical and Environmental Geology	3
Total Hours			11		

Total Hours 9

#### Additional Courses for Teacher Certification Option (Take all courses)

EDU 220	Foundations of Education in a Diverse Society	3	EDUC 1040	Perspectives in Education	2
EDU 245	Educational Psychology	3	PSYCH 2300 (EDUC 2102)	Educational Psychology	3
PSY 205	Human Lifespan Development	3	PSYCH 3310	Developmental Psychology	3
EDU 242	Educational of Exceptional Learners	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.

**87**

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.