

East Central College — Missouri S&T

Physics BS with Secondary Education Teacher Certification Transfer Guide

Effective as of Fall 2023

East Central College

Missouri S&T

Communication Skills (Take all courses)

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|-----------------------|--|---|---------------------------------|--|---|
| ENG 101 | English Composition I | 3 | ENGLISH 1120 | Exposition and Argumentation | 3 |
| ENG 102 or ENG 104 | English Composition II or Technical Writing | 3 | ENGLISH 1160 or ENGLISH 3560 | Writing and Research or Technical Writing | 3 |
| COM 110 | Public Speaking | 3 | SPMS 1185 | Principles of Speech | 3 |
| Total Hours | | | 9 | | |

Mathematics and Science (Take all courses)

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|--------------|------------------------------------|---|------------------|---|---|
| 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 |
| 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 |
| 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, 1510* | General Chemistry II (3) and Quantitative Analysis (2)* <small>*Note: CHEM 1510 is not an S&T degree requirement; course will transfer as elective credit.</small> | 3 |
| Total Hours | | | 35 | | |
| | | | Total Hours | | |

Social Sciences (Take all courses)

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|-------------------------------------|--|---|--|--|---|
| HST 101 or HST 102 or CIV 202 | US History to 1865 or US History 1865-1945 or European Civilization II | 3 | HISTORY 1300 or HISTORY 1310 or HISTORY 1200 | American History to 1877 or American History Since 1877 or Modern Western Civilization | 3 |
| PSC 102 | US Government I: National and State | 3 | POL SCI 1200 | American Government | 3 |
| PSY 101 | General Psychology | 3 | PSYCH 1101 | General Psychology | 3 |
| Total Hours | | | 9 | | |
| | | | Total Hours | | |

Humanities (Take all courses)

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|---|---|---|---|---|---|
| ART 101 or MUS 101 or THE 101 | Art Appreciation 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 |
| ENG 210 or ENG 221 or EMG 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) | 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 | | |

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 |
| BIO 111 | General Biology I and Lab | 5 | BIO SCI 1113 | General Biology | 3 |
| PHY 102 or GEO 101 | Intro to Astronomy or Intro to Physical Geology Lec | 3 | PHYSICS 1505 or GEOLOGY 1110 | Introductory Astronomy or Physical and Environmental Geology | 3 |

Additional Courses for Teacher Certification Option (Take all courses)

| | | | | | |
|-----------------------|--|---|---------------------------|-------------------------------------|---|
| EDU 201 or EDU 214 | Foundations of Education or Multicultural Education | 3 | EDUC 1040 | Perspectives in Education | 2 |
| EDU 241 | Educational Psychology | 3 | PSYCH 2300 (EDUC 2102) | Educational Psychology | 3 |
| PSY 250 | Human Development | 3 | PSYCH 3310 | Developmental Psychology | 3 |
| EDU 244 | Education of the Exceptional Learner | 3 | PSYCH 4310 | Psychology of the Exceptional Child | 3 |

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.

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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.