

# Ozarks Technical Community College — Missouri S&T

## Physics BS with Secondary Education Teacher Certification

Transfer Guide Effective as of Fall 2026

Students are not required to complete all courses on this guide before transferring to Missouri S&T.

### Ozarks Technical Community College

### Missouri S&T

#### Communication Skills

Take all courses.

|                       |                                        |             |                                 |                                              |   |
|-----------------------|----------------------------------------|-------------|---------------------------------|----------------------------------------------|---|
| ENG 101               | Composition I                          | 3           | ENGLISH 1120                    | Exposition and Argumentation                 | 3 |
| ENG 102 or<br>ENG 150 | Composition II or<br>Technical Writing | 3           | ENGLISH 1160 or<br>ENGLISH 3560 | Writing and Research or<br>Technical Writing | 3 |
| COM 105               | Public Speaking                        | 3           | SPMS 1185                       | Principles of Speech                         | 3 |
|                       |                                        | Total Hours | 9                               | Total Hours                                  |   |
|                       |                                        |             |                                 |                                              | 9 |

#### Mathematics and Science

Take all courses.

|              |                                         |             |                  |                                                       |    |
|--------------|-----------------------------------------|-------------|------------------|-------------------------------------------------------|----|
| MTH 140      | Analytical Geometry/Calculus I          | 5           | MATH 1214        | Calculus I                                            | 4  |
| MTH 141      | Analytical Geometry/Calculus II         | 5           | MATH 1215        | Calculus II                                           | 4  |
| MTH 240      | Analytical Geometry/Calculus III        | 5           | MATH 2222        | Calculus III                                          | 4  |
| PHY 220      | Physics for Engineers and Scientists I  | 5           | PHYSICS 1135     | Engineering Physics I                                 | 4  |
| PHY 222      | Physics for Engineers and Scientists II | 5           | PHYSICS 2135     | Engineering Physics II                                | 4  |
| CHM 160, 161 | General Chemistry I and Lab             | 5           | CHEM 1310, 1319  | General Chemistry I and Lab                           | 5  |
| CHM 170      | General Chemistry II                    | 3           | CHEM 1320, 1510* | General Chemistry II (3) and Qualitative Analysis (2) | 3  |
|              |                                         | Total Hours | 33               | Total Hours                                           |    |
|              |                                         |             |                  |                                                       | 28 |

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

#### Social Sciences

Take all courses.

|                                     |                                                                                   |             |                                                    |                                                                                              |   |
|-------------------------------------|-----------------------------------------------------------------------------------|-------------|----------------------------------------------------|----------------------------------------------------------------------------------------------|---|
| HST 106 or<br>HST 120 or<br>HST 130 | World History II or<br>US History I: to 1865 or<br>US History II: 1865-Present or | 3           | HISTORY 1300 or<br>HISTORY 1310 or<br>HISTORY 1200 | American History to 1877 or<br>American History Since 1877 or<br>Modern Western Civilization | 3 |
| PLS 101                             | American Government and Politics                                                  | 3           | POL SCI 1200                                       | American Government                                                                          | 3 |
| PSY 110                             | Intro to Psychology                                                               | 3           | PSYCH 1101                                         | General Psychology                                                                           | 3 |
|                                     |                                                                                   | Total Hours | 9                                                  | Total Hours                                                                                  |   |
|                                     |                                                                                   |             |                                                    |                                                                                              | 9 |

#### Humanities

Take all courses.

|                                     |                                                                                                                                      |             |                                                    |                                                                                                                                   |   |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---|
| ART 100 or<br>MUS 105 or<br>THR 101 | Art and Experience or<br>Western Music Appreciation or<br>Intro to Theater                                                           | 3           | ART 1180 or<br>MUSIC 1150 or<br>THEATRE 1190       | Art Appreciation or<br>Music Appreciation or<br>Theatre via Video                                                                 | 3 |
| ENG 240 or<br>ENG 270 or<br>ENG 260 | Survey of English Literature I or<br>Survey of American Literature I or<br>Survey of World Literature I or other literature elective | 3           | ENGLISH 1211 or<br>ENGLISH 1221 or<br>ENGLISH 1231 | British Literature I: The Beginnings to 1800 or<br>American Literature: 1600 to 1865 or<br>World Literature I or other literature | 3 |
|                                     |                                                                                                                                      | Total Hours | 6                                                  | Total Hours                                                                                                                       |   |
|                                     |                                                                                                                                      |             |                                                    |                                                                                                                                   | 6 |

#### Additional Degree Requirements

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

|                       |                                           |   |                                 |                                                                 |   |
|-----------------------|-------------------------------------------|---|---------------------------------|-----------------------------------------------------------------|---|
| MTH 241               | Differential Equations                    | 3 | MATH 3304                       | Elementary Differential Equations                               | 3 |
| MHT 230               | Linear Algebra                            | 3 | MATH 3108                       | Linear Algebra                                                  | 3 |
| BIO 100 or<br>BIO 160 | Life Science or<br>General Biology I      | 4 | BIO SCI 1113, 1213*             | General Biology (3) and Lab* (1)                                | 3 |
| PHY 115 or<br>PHY 110 | Intro to Astronomy or<br>Intro to Geology | 4 | PHYSICS 1505 or<br>GEOLOGY 1110 | Introductory Astronomy or<br>Physical and Environmental Geology | 3 |

\*The lab is not a degree requirement, will transfer as general elective credit.

Will be substituted for PHYSICS 1605

#### Teacher Certification Requirements

Take all courses.

|         |                                           |             |                            |                                                                              |    |
|---------|-------------------------------------------|-------------|----------------------------|------------------------------------------------------------------------------|----|
| EDU 220 | Foundations of Education                  | 3           | EDUC 1074                  | Education in a Diverse Society                                               | 3  |
| EDU 270 | Teaching Profession with Field Experience | 3           | EDUC 1104                  | Teacher Field Experience I                                                   | 1  |
| EDU 250 | Educational Psychology                    | 3           | EDUC 2102 or<br>PSYCH 2300 | Educational Psychology                                                       | 3  |
| PSY 130 | Life Span Developmental Psychology        | 3           | PSYCH 3310                 | Developmental Psychology                                                     | 3  |
| EDU 260 | Education Exceptional Learner             | 3           | EDUC 2310 or<br>PSYCH 4310 | Education of the Exceptional Child or<br>Psychology of the Exceptional Child | 3  |
|         |                                           | Total Hours | 15                         | Total Hours                                                                  |    |
|         |                                           |             |                            |                                                                              | 13 |

#### 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.

This transfer guide is published by Missouri University of Science and Technology and is in effect as of Fall 2026.  
Further information or updates are available from Missouri S&T Transfer Admissions at [transfer@mst.edu](mailto:transfer@mst.edu), or 800-522-0938.