

# St. Louis Community College — Missouri S&T

## Applied Math 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.

### St. Louis Community College

### Missouri S&T

#### Communication Skills

Take all courses.

|                       |                                              |   |                              |                                                 |   |
|-----------------------|----------------------------------------------|---|------------------------------|-------------------------------------------------|---|
| ENG 101               | College Composition I                        | 3 | ENGLISH 1120                 | Exposition and Argumentation                    | 3 |
| ENG 102 or<br>COM 107 | College Composition II or<br>Public Speaking | 3 | ENGLISH 1160 or<br>SPMS 1185 | Writing and Research or<br>Principles of Speech | 3 |
| Total Hours 6         |                                              |   | Total Hours 6                |                                                 |   |

#### Mathematics and Science

Take all courses.

|                                                   |                                                                                                                   |   |                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |   |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| MTH 210                                           | Analytic Geometry and Calculus I                                                                                  | 5 | MATH 1214                                                                                | Calculus I                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4 |
| MTH 220                                           | Analytic Geometry and Calculus II                                                                                 | 5 | MATH 1215                                                                                | Calculus II                                                                                                                                                                                                                                                                                                                                                                                                                                           | 4 |
| MTH 230                                           | Analytic Geometry and Calculus III                                                                                | 5 | MATH 2222                                                                                | Calculus III                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4 |
| PHY 122                                           | Engineering Physics I                                                                                             | 5 | PHYSICS 1135                                                                             | Engineering Physics I                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4 |
| CHM 105 or<br>BIO 111 or<br>BIO 140 or<br>GEO 111 | General Chemistry I (5) or<br>Intro to Biology I (4) or<br>Principles of Biology I (5) or<br>Physical Geology (5) | 4 | CHEM 1310, 1319* or<br>BIO SCI 1113, 1219* or<br>BIO SCI 1213*, 1219* or<br>GEOLOGY 1110 | General Chemistry I (4) and Lab* (1) or<br>General Biology* (3) and Lab* (1) or<br>Principles of Biology (3) and Lab*(3) or<br>Physical and Environmental Geology (3)<br><small>Satisfies the 3-hour science requirement. Credit hours apply to degree totals as indicated for each course.<br/>*BIO SCI 1213 will be substituted for 1113. CHEM 1319 and BIO SCI 1219 are not degree requirements, will transfer as general elective credit.</small> | 3 |
| Total Hours 24                                    |                                                                                                                   |   | Total Hours 19                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |   |

#### Social Sciences

Take all courses.

|                       |                                                     |   |                                 |                                                            |   |
|-----------------------|-----------------------------------------------------|---|---------------------------------|------------------------------------------------------------|---|
| HST 101 or<br>HST 102 | US History to 1865 or<br>US History 1865 to Present | 3 | HISTORY 1300 or<br>HISTORY 1310 | American History to 1877 or<br>American History Since 1877 | 3 |
| PSC 101               | Intro to American Politics                          | 3 | POL SCI 1200                    | American Government                                        | 3 |
| PSY 200               | General Psychology                                  | 3 | PSYCH 1101                      | General Psychology                                         | 3 |
| Total Hours 9         |                                                     |   | Total Hours 9                   |                                                            |   |

#### Humanities

Select one course.

|                                     |                                                                                                                                                       |   |                                                    |                                                                                                                                                                                   |   |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| ART 100                             | Art Appreciation                                                                                                                                      | 3 | ART 1180                                           | Art Appreciation                                                                                                                                                                  | 3 |
| MUS 114                             | Music Appreciation                                                                                                                                    | 3 | MUSIC 1150                                         | Music Appreciation                                                                                                                                                                | 3 |
| THT 101                             | Intro to Theatre                                                                                                                                      | 3 | THEATRE 1190                                       | Theatre via Video                                                                                                                                                                 | 3 |
| ENG 211 or<br>ENG 204 or<br>ENG 231 | British Literature II or<br>American Literature I or<br>World Literature or other literature with prerequisite no greater than English Composition I. | 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 with prerequisite no greater than ENGLISH 1120. | 3 |
| Total Hours 3                       |                                                                                                                                                       |   | Total Hours 3                                      |                                                                                                                                                                                   |   |

#### Additional Degree Requirements

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

|         |                        |     |               |                                   |   |
|---------|------------------------|-----|---------------|-----------------------------------|---|
| MTH 240 | Differential Equations | 3   | MATH 3304     | Elementary Differential Equations | 3 |
| MTH 215 | Linear Algebra         | 3   | MATH 3108     | Linear Algebra                    | 3 |
| IS 187  | Java Programming I (4) | 3-4 | COMP SCI 1500 | Computational Problem Solving     | 3 |

#### Teacher Certification Requirements

Take all courses.

|                |                                               |   |                            |                                                                              |   |
|----------------|-----------------------------------------------|---|----------------------------|------------------------------------------------------------------------------|---|
| EDU 211        | Foundations of Education in a Diverse Society | 3 | EDUC 1074                  | Education in a Diverse Society                                               | 3 |
| EDU 210        | Teaching Profession with Field Experience     | 3 | EDUC 1104                  | Teacher Field Experience I                                                   | 1 |
| EDU 227        | Educational Psychology                        | 3 | EDUC 2102 or<br>PSYCH 2300 | Educational Psychology                                                       | 3 |
| PSY 205        | Human Growth and Development                  | 3 | PSYCH 3310                 | Developmental Psychology                                                     | 3 |
| EDU 219        | Education of Exceptional Learners             | 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.

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.  
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