# State Fair Community College — Missouri S&T

## Applied Math BS with Secondary Education Teacher Certification Transfer Guide

Effective as of Fall 2023

| State Fair Community College | | | Missouri S&T | | |
|---|---|---|---|---|---|
| **Communication Skills (Take all courses)** | | | | | |
| ENGL 101 | English Composition I | 3 | ENGLISH 1120 | Exposition and Argumentation | 3 |
| ENGL 102 | English Composition II | 3 | ENGLISH 1160 | Writing and Research | 3 |
| COM 101 | Public Speaking | 3 | SPMS 1185 | Principles of Speech | 3 |
| | Total Hours | 9 | | Total Hours | 9 |
| **Mathematics and Science (Take all courses)** | | | | | |
| MATH 114 | Precalculus Algebra | 3 | MATH 1140* | College Algebra*<br>*Required for teacher certification; not a Mathematics BS requirement. | 3 |
| MATH 120 | Precalculus Trigonometry | 3 | MATH 1160* | Trigonometry*<br>*Required for teacher certification; not a Mathematics BS requirement. | 2 |
| MATH 130 | Calculus and Analytic Geometry I | 5 | MATH 1214 | Calculus I | 4 |
| MATH 131 | Calculus and Analytic Geometry II | 5 | MATH 1215 | Calculus II | 4 |
| MATH 132 | Calculus and Analytic Geometry III | 5 | MATH 2222 | Calculus III | 4 |
| PHYS 118 | General Physics I with Lab | 5 | PHYSICS 1135 | Engineering Physics I | 4 |
| PHYS 119 | General Physics II with Lab | 5 | PHYSICS 2135 | Engineering Physics II | 4 |
| | Total Hours | 31 | | Total Hours | 25 |
| **Social Sciences (Take all courses)** | | | | | |
| HIST 109 or<br>HIST 101 or<br>HIST 102 | World Civilization after 1500 or<br>US History Before 1877 or<br>US History Since 1877 | 3 | HISTORY 1200 or<br>HISTORY 1300 or<br>HISTORY 1310 | Modern Western Civilization or<br>American History to 1877 or<br>American History Since 1877 | 3 |
| POLS 101 | American/National Government | 3 | POL SCI 1200 | American Government | 3 |
| PSY 101 | General Psychology | 3 | PSYCH 1101 | General Psychology | 3 |
| ECON 102 or<br>ECON 101 | Principles of Microeconomics or<br>Principles of Macroeconomics | 3 | ECON 1100 or<br>ECON 1200 | Principles of Microeconomics or<br>Principles of Macroeconomics | 3 |
| | Total Hours | 12 | | Total Hours | 12 |
| **Humanities (Take all courses)** | | | | | |
| ART 101 or<br>MUS 101 or<br>THEA 107 or<br>PHIL 101 | Art Appreciation or<br>Music Appreciation or<br>Intro to Theatre or<br>Intro to Philosophy | 3 | ART 1180 or<br>MUSIC 1150 or<br>THEATRE 1190 or<br>PHILOS 1105 | Art Appreciation or<br>Music Appreciation or<br>Theatre via Video or<br>Intro to Philosophy | 3 |
| LIT 112 or<br>LIT 107 or<br>LIT 109 | World Literature or<br>American Literature or<br>British Literature<br>(or other literature elective) | 3 | ENGLISH 1211 or<br>ENGLISH 1221 or<br>ENGLISH 1231 | World Literature I or<br>American Literature Elective or<br>British Literature Elective<br>(or other literature elective) | 3 |
| | Total Hours | 6 | | Total Hours | 6 |
| **Additional Degree Requirements**<br>**Select additional courses to total up to the maximum transfer credit hours shown below.** | | | | | |
| MATH 134 | Differential Equations | 3 | MATH 3304 | Elementary Differential Equations | 3 |
| CHEM 123 or<br>BIO 112 or<br>BIO 125 | General Chemistry I with Lab or<br>Intro to Biology with Lab (5) or<br>Biology I with Lab | 5 | CHEM 1310, 1319 or<br>BIO SCI 1113, 1219 | General Chemistry I and Lab or<br>General Biology and Lab | 5 |
| CIS 120 or<br>CIS 155 | Programming in Python or<br>Programming in C# | 3 | CS 1500 | Computational Problem Solving | 3 |
| **Additional Courses for Teacher Certification Option (Take all courses)** | | | | | |
| EDUC 209 | Foundations of Education | 3 | EDUC 1040 | Perspectives in Education | 2 |
| EDUC 220 | Educational Psychology | 3 | PSYCH 2300<br>(EDUC 2102) | Educational Psychology | 3 |
| PSY 210 | Lifespan Development | 3 | PSYCH 3310 | Developmental Psychology | 3 |
| EDUC 228 | Education of Exceptional Learners Pre K-12 | 3 | PSYCH 4310 | Psychology of the Exceptional Child | 3 |
| | Total Hours | 12 | | Total Hours | 11 |

**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.
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 2023. Further information or updates are available from Missouri S&T Transfer Admissions at transfer.mst.edu, transfer@mst.edu, or 800-522-0938.