

# Crowder College — Missouri S&T

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

Effective as of Fall 2023

### Crowder College

### Missouri S&T

#### Communication Skills (Take all courses)

|             |                              |   |              |                              |   |
|-------------|------------------------------|---|--------------|------------------------------|---|
| ENGL 101    | English Composition          | 3 | ENGLISH 1120 | Exposition and Argumentation | 3 |
| ENGL 102    | Advanced English Composition | 3 | ENGLISH 1160 | Writing and Research         | 3 |
| COMM 104    | Fundamentals of Speech       | 3 | SPMS 1185    | Principles of Speech         | 3 |
| Total Hours |                              |   | Total Hours  |                              |   |
| 9           |                              |   | 9            |                              |   |

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

|               |                          |   |              |   |   |
|---------------|--------------------------|---|--------------|---|---|
| MATH 135      | Algebra for Calculus     | 3 | MATH 1140*   | College Algebra*  | 3 |
|               |                          |   |              | <small>*Required for teacher certification; not a Mathematics BS requirement.</small> |   |
| MATH 112      | Trigonometry             | 3 | MATH 1160*   | Trigonometry*   | 2 |
|               |                          |   |              | <small>*Required for teacher certification; not a Mathematics BS requirement.</small> |   |
| MATH 150, 160 | Calculus I Part I and II | 5 | MATH 1214    | Calculus I  | 4 |
| MATH 201      | Calculus II              | 5 | MATH 1215    | Calculus II   | 4 |
| MATH 202      | Calculus III             | 5 | MATH 2222    | Calculus III  | 4 |
| PHYS 190      | General Physics I        | 5 | PHYSICS 1135 | Engineering Physics I   | 4 |
| PHYS 210      | General Physics II       | 5 | PHYSICS 2135 | Engineering Physics II  | 4 |
| Total Hours   |                          |   | Total Hours  |   |   |
| 31            |                          |   | 25           |   |   |

#### Social Sciences (Take all courses)

|  |  |   |  |  |   |
|--|--|---|--|--|---|
| HIST 102 or<br>HIST 106 or<br>HIST 107 | Westen Civilization II or<br>US History or<br>US History II                | 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 |
| PLSC 103                               | National, State, Local Government  | 3 | POL SCI 1200                                       | American Government  | 3 |
| PSYC 101                               | General Psychology   | 3 | PSYCH 1101   | General Psychology   | 3 |
| ECON 202 or<br>ECON 201                | Principles of Economics II (Micro) or<br>Principles of Economics I (Macro) | 3 | ECON 1100 or<br>ECON 1200                          | Principles of Microeconomics or<br>Principles of Macroeconomics                              | 3 |
| Total Hours                            |  |   | Total Hours  |  |   |
| 12                                     |  |   | 12   |  |   |

#### Humanities (Take all courses)

|  |   |   |  |   |   |
|--|---|---|--|---|---|
| ART 101 or<br>MUSC 101 or<br>TA 205 or<br>PHIL 101 | Art Appreciation or<br>Music Appreciation or<br>Intro to Theatre or<br>Intro to Western 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 |
| ENGL 240 or<br>ENGL 230 or<br>ENGI 222 or          | British Literature I or<br>Survey of American Literature I or<br>World Literature I<br>(or other literature elective) | 3 | ENGLISH 1211 or<br>ENGLISH 1221 or<br>ENGLISH 1231 or<br>ENGLISH 2242 or<br>ENGLISH 2245 | British Literature I: The Beginnings to 1800 or<br>American Literature: 1600 to 1865 or<br>World Literature I or<br>Literature by Women or<br>African American Literature<br>(or other literature elective) | 3 |
| Total Hours  |   |   | Total Hours  |   |   |
| 6  |   |   | 6  |   |   |

#### Additional Degree Requirements

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

|                         |   |     |  |  |   |
|-------------------------|---|-----|--|--|---|
| MATH 210                | Differential Equations                              | 3   | MATH 3304                                | Elementary Differential Equations  | 3 |
| CHEM 111 or<br>BIOL 101 | General Chemistry I (5) or<br>General Biology I (4) | 4-5 | CHEM 1310, 1319 or<br>BIO SCI 1113, 1219 | General Chemistry I and Lab or<br>General Biology and Lab                    | 5 |
| COMP 111                | Intro to Computer Science                           | 4   | CS 1500 or<br>CS 1971,1981               | Computational Problem Solving or<br>Intro to Programming Methodology and Lab | 3 |

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

|             |                                   |   |                           |                                     |   |
|-------------|-----------------------------------|---|---------------------------|-------------------------------------|---|
| EDUC 125    | Intro to Education                | 3 | EDUC 1040                 | Perspectives in Education           | 2 |
| EDUC 231    | Educational Psychology            | 3 | PSYCH 2300<br>(EDUC 2102) | Educational Psychology              | 3 |
| PSYC 211    | Lifespan Development              | 3 | PSYCH 3310                | Developmental Psychology            | 3 |
| EDUC 240    | Education of Exceptional Learners | 3 | PSYCH 4310                | Psychology of the Exceptional Child | 3 |
| Total Hours |                                   |   | Total Hours               |                                     |   |
| 12          |                                   |   | 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.