

Mineral Area College — Missouri S&T

Applied Math BS with Secondary Education Teacher Certification Transfer Guide

Effective as of Fall 2023

Mineral Area College

Missouri S&T

Communication Skills (Take all courses)

| | | | | | |
|-------------|-----------------------|---|--------------|------------------------------|---|
| ENG 1330 | English Composition I | 3 | ENGLISH 1120 | Exposition and Argumentation | 3 |
| ENG 1340 | English Composition | 3 | ENGLISH 1160 | Writing and Research | 3 |
| ENG 1440 | Public Speaking | 3 | SPMS 1185 | Principles of Speech | 3 |
| Total Hours | | | | | 9 |
| Total Hours | | | | | 9 |

Mathematics and Science (Take all courses)

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|-------------|--------------------------------------|---|--------------|------------------------------------------------------------------------|----|
| MAT 1230 | College Algebra | 3 | MATH 1140* | College Algebra* | 3 |
| | | | | *Required for teacher certification; not a Mathematics BS requirement. | |
| MAT 1330 | Trigonometry | 3 | MATH 1160* | Trigonometry* | 2 |
| | | | | *Required for teacher certification; not a Mathematics BS requirement. | |
| MAT 1650 | Analytical Geometry and Calculus I | 5 | MATH 1214 | Calculus I | 4 |
| MAT 2150 | Analytical Geometry and Calculus II | 5 | MATH 1215 | Calculus II | 4 |
| MAT 2250 | Analytical Geometry and Calculus III | 5 | MATH 2222 | Calculus III | 4 |
| PHS 2230 | General Physics I | 4 | PHYSICS 1135 | Engineering Physics I | 4 |
| PHS 2240 | General Physics II | 4 | PHYSICS 2135 | Engineering Physics II | 4 |
| Total Hours | | | | | 29 |
| Total Hours | | | | | 25 |

Social Sciences (Take all courses)

| | | | | | |
|----------------------------------------|----------------------------------------------------------------------------|---|----------------------------------------------------|----------------------------------------------------------------------------------------------|----|
| HIS 1140 or HIS 1230 or HIS 1240 | Western Civilization II or American History I or American History II | 3 | HISTORY 1200 or HISTORY 1300 or HISTORY 1310 | Modern Western Civilization or American History to 1877 or American History Since 1877 | 3 |
| POS 1180 | American Political Systems | 3 | POL SCI 1200 | American Government | 3 |
| PSY 1130 | General Psychology I | 3 | PSYCH 1101 | General Psychology | 3 |
| BUS 2940 or BUS 2930 | Principles of Microeconomics or Principles of Macroeconomics | 3 | ECON 1100 or ECON 1200 | Principles of Microeconomics or Principles of Macroeconomics | 3 |
| Total Hours | | | | | 12 |
| Total Hours | | | | | 12 |

Humanities (Take all courses)

| | | | | | |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---|
| ART 1490 or MUS 1630 or THE 1000 or PHI 1400 | History of Art I or Appreciation of Music or Intro to Theatre or Intro to Philosophy | 3 | ART 1180 or MUSIC 1150 or THEATRE 1190 or PHILOS 1105 | Art Appreciation or Music Appreciation or Theatre via Video or Intro to Philosophy | 3 |
| ENG 2330 or ENG 2430 or ENG 2492 | English Literature I or American Literature I or Women's Literature (or other literature elective) | 3 | ENGLISH 1211 or ENGLISH 1221 or ENGLISH 2242 | British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or Literature by Women (or other literature elective) | 3 |
| Total Hours | | | | | 6 |
| Total Hours | | | | | 6 |

Additional Degree Requirements

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

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|----------------------------------------|---------------------------------------------------------------------------|---|------------------------------------------|------------------------------------------------------------------------------|---|
| MAT 2330 | Differential Equations | 3 | MATH 3304 | Elementary Differential Equations | 3 |
| PHS 1350 or BIO 1150 | General Chemistry I or General Biology | 5 | CHEM 1310, 1319 or BIO SCI 1113, 1219 | General Chemistry I and Lab or General Biology and Lab | 5 |
| CSC 1100 or CSC 1600 or CSC 2400 | Programming Logic or C++ Programming or Computer Programming in C++ | 3 | CS 1500 or CS 1971,1981 | Computational Problem Solving or Intro to Programming Methodology and Lab | 3 |

Additional Courses for Teacher Certification Option (Take all courses)

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|-------------|----------------------------------|---|---------------------------|-------------------------------------|----|
| EDU 2040 | Foundations of Education | 3 | EDUC 1040 | Perspectives in Education | 2 |
| EDU 2320 | Educational Psychology | 3 | PSYCH 2300 (EDUC 2102) | Educational Psychology | 3 |
| PSY 1250 | Human Growth and Development | 3 | PSYCH 3310 | Developmental Psychology | 3 |
| EDU 2500 | Education of Exceptional Learner | 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.