

Ozarks Technical College — Missouri S&T

Applied Mathematics BS Transfer Guide

Effective as of Fall 2023

Ozarks Technical College

Missouri S&T

English and Communication Skills (Take all courses)

| | | | | | |
|------------|------------------------|-------------|-----------------|------------------------------|---|
| ENG 101 | Composition I | 3 | ENGLISH 1120 | Exposition and Argumentation | 3 |
| ENG 102 or | Composition II or | 3 | ENGLISH 1160 or | Writing and Research or | 3 |
| ENG 150 | Technical Writing | | ENGLISH 3560 | Technical Writing | |
| COM 100 or | Human Communication or | 3 | SPMS 1185 | Principles of Speech | 3 |
| COM 105 | Public Speaking | | | | |
| | | Total Hours | 9 | | |
| | | | | Total Hours | 9 |

Humanities (Select 9 hours to include at least one literature.)

| | | | | | |
|-------------------------------------|---|---|--|---|---|
| ENG 240 or ENG 270 or ENG 260 | Survey of English Literature I or Survey of American Literature I or Survey of World Literature I (or other literature elective) | 3 | ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 | British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I (or other literature elective) | 3 |
| PSY 110 | Intro to Psychology | 3 | PSYCH 1101 | General Psychology or other psychology | 3 |
| PHL 101 | Introduction to Philosophy | 3 | PHILOS 1105 | Self and World: Intro to Philosophy or other philosophy | 3 |
| ART 100 | Art and Experience | 3 | ART 118 | Art Appreciation or other art | 3 |
| MUS 105 | Western Music Appreciation | 3 | MUS 1150 | Music Understanding and Appreciation or other music | 3 |
| THR 101 | Intro to Theater | 3 | THEATRE 1190 | Theatre via Video or other theater | 3 |
| | Any foreign language | 3 | | Any foreign language | 3 |
| | Any fine art, English, music, philosophy or speech. | 3 | | Any fine art, English, music, philosophy or speech. | 3 |
| | Any history, political science, or psychology. | 3 | | Any history, political science, or psychology. | 3 |
| Total Hours 9 | | | Total Hours 9 | | |

Social Sciences (Take all courses)

| | | | | | |
|---|---|---|---|---|---|
| HST 106 or HST 120 or HST 130 or PLS 101 | World History II or US History I: to 1865 or US History II: 1865-Present or American Government and Politics (At least one of these courses is required to satisfy state requirement) | 3 | HISTORY 1200 or HISTORY 1300 or HISTORY 1310 or POL SCI 1200 | Modern Western Civilization or American History to 1877 or American History Since 1877 or American Government (At least one of these courses is required to satisfy state requirement) | 3 |
| ECO 275 or ECO 270 | Principles of Microeconomics or Principles of Macroeconomics *Students pursuing the Actuarial Science emphasis take BOTH ECO 275 and 270 (6 hours econ for a total of 9 hours social sciences). | 3 | ECON 1100* or ECON 1200* | Principles of Microeconomics* or Principles of Macroeconomics* *Students pursuing the Actuarial Science emphasis take BOTH ECON 1100 and 1200 (6 hours econ for a total of 9 hours social sciences). | 3 |
| Total Hours | | 6 | Total Hours | | 6 |

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 |
| MTH 241 | Differential Equations | 3 | MATH 3304 | Elementary Differential Equations | 3 |
| MTH 230 | Linear Algebra | 3 | MATH 3108 | Linear Algebra | 3 |
| 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 |
| CSC 210 or CSC 160 | Data Structures (4) or Python Programming I (3) | 3 | CS 1500 | Computational Problem Solving | 3 |
| CHM 160, 161 or BIO 160 | General Chemistry or General Biology | 4-5 | CHEM 1310, 1319 or BIO SCI 1113, 1219 | General Chemistry I and Lab or General Biology and Lab | 4-5 |
| | | Total Hours 38 | | | Total Hours 33 |

Additional Degree Requirements

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

Technical electives in biology, chemistry, computer science, economics, engineering, geology, mechanics, or physics approved by advisor.

Maximum Free Electives

14

Technical electives in biology, chemistry, computer science, economics, engineering, geology, mechanics, or physics approved by advisor.

Maximum Free Electives

14

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.