

Moberly Area Community College — Missouri S&T

Applied Mathematics BS

Transfer Guide Effective as of Fall 2024

Moberly Area Community College

Missouri S&T

English and Communication Skills

Take all courses.

| | | | | | |
|-------------|-----------------|---|--------------|------------------------------|---|
| LAL 101 | Composition I | 3 | ENGLISH 1120 | Exposition and Argumentation | 3 |
| LAL 102 | Composition II | 3 | ENGLISH 1160 | Writing and Research | 3 |
| SPK 101 | Public Speaking | 3 | SPMS 1185 | Principles of Speech | 3 |
| Total Hours | | | 9 | | |

Humanities

Select 9 hours to include at least one literature.

| | | | | | |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| LAL 150 or LAL 120 or LAL 210 or LAL 255 or LAL 125 | English Literature Survey to 1750 or American Literature Survey to 1870 or A Survey of World Literature I or Women's Literature or African-American Literature or other literature | 3 | ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2242 or ENGLISH 2245 | British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I or Literature by Women or African American Literature or other literature <small>At least one literature course is required.</small> | 3 |
| PSY 101 | General Psychology | 3 | PSYCH 1101 | General Psychology | 3 |
| PHI 150 | Intro to Philosophy | 3 | PHILOS 1105 | Self and World: Intro to Philosophy | 3 |
| ART 101 or | Art Survey and Appreciation I or | 3 | ART 118 | Art Appreciation | 3 |
| MUS 101 or MUS 102 | Fundamentals of Music or Music Appreciation | 3 | MUS 1150 | Music Understanding and Appreciation | 3 |
| DRM 120 | Theatre Appreciation | 3 | THEATRE 1190 | Theatre via Video | 3 |
| Foreign Language | Any foreign language | 3 | Foreign Language | Any foreign language | 3 |
| Humanities | Any fine art, English, music, theatre, philosophy or speech. | 3 | Humanities | Any fine art, English, music, theatre, philosophy or speech. | 3 |
| Social Science | Any history, political science, or psychology. | 3 | Social Science | Any history, political science, or psychology. | 3 |
| Total Hours | | | 9 | | |

Social Sciences

Take all courses.

| | | | | | |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| HST 102 or HST 105 or HST 106 or PSC 105 | Western Civilization II or American History to 1865 or American History from 1865 or Intro to American Government <small>At least one of these courses is required to satisfy state requirement.</small> | 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 <small>At least one of these courses is required to satisfy state requirement.</small> | 3 |
| ECN 102* or ECN 101* | Microeconomics or Macroeconomics <small>*Students pursuing the Actuarial Science emphasis take BOTH ECON 1100 and 1200 (6 hours econ for a total of 9 hours social sciences).</small> | 3 | ECON 1100* or ECON 1200* | Principles of Microeconomics* or Principles of Macroeconomics* <small>*Students pursuing the Actuarial Science emphasis take BOTH ECON 1100 and 1200 (6 hours econ for a total of 9 hours social sciences).</small> | 3 |
| Total Hours | | | 6 | | |

Mathematics, Statistics, and Computer Science

Take all courses.

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|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---|-----------|-----------------------------------|---|
| MTH 201 | Analytic Geometry and Calculus I | 5 | MATH 1214 | Calculus I | 4 |
| MTH 202 | Analytic Geometry and Calculus II | 5 | MATH 1215 | Calculus II | 4 |
| MTH 203 | Analytic Geometry and Calculus III | 5 | MATH 2222 | Calculus III | 4 |
| MTH 250 | Differential Equations | 3 | MATH 3304 | Elementary Differential Equations | 3 |
| ITC 125 or ITC 243 or ITC 244 or ITC 247 | Object-Oriented Programming I or Object-Oriented Programming II: Java or Object-Oriented Programming II: C# or Python Programming | | CS 1500 | Computational Problem Solving | 3 |
| Total Hours | | | 18 | | |

Science

Select PHYSICS 1135 and 2 additional courses from the options below. A total of 13 hours will apply to this requirement.

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|-----------------------|--------------------------------------------|---|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| PHY 201 | Engineering Physics I | 5 | PHYSICS 1135 | Engineering Physics I <small>required</small> | 4 |
| PHY 202 | Engineering Physics II | 5 | PHYSICS 2135 | Engineering Physics II | 4 |
| PHY 121 | General Chemistry I | 5 | CHEM 1310, 1319 | General Chemistry I and Lab | 5 |
| PHY 122 | General Chemistry II | 5 | CHEM 1320, 1510* | General Chemistry II (3) and Qualitative Analysis (2) <small>*CHEM 1510 is not an S&T degree requirement. Will transfer as general credit.</small> | 3 |
| BIO 101 or BIO 155 | Biology or General Biology for Majors I | 4 | BIO SCI 1113, 1219 or BIO SCI 1213, 1219 | General Biology and Lab or Principles of Biology and Lab | 4 |
| Total Hours | | | 13 | | |

Additional Degree Requirements

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

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|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Technical Electives | Technical electives in biology, chemistry, computer science, economics, engineering, geology, mechanics, or physics approved by advisor. | 3 | Technical Electives | Technical electives in biology, chemistry, computer science, economics, engineering, geology, mechanics, or physics approved by advisor. | 3 |
| Electives | Maximum Free Electives | 14 | Electives | 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.