

# Mineral Area College — Missouri S&T

## Applied Mathematics BS

Transfer Guide Effective as of Fall 2024

### Mineral Area College

### Missouri S&T

#### English and 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			Total Hours		
9			9		

#### Humanities

Select 9 hours to include at least one literature.

ENG 2330 or ENG 2430 or ENG 2492	English Literature I or American Literature I or Women's Literature or other literature <small>At least one literature course is required.</small>	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 <small>At least one literature course is required.</small>	3
PSY 1130	General Psychology I	3	PSYCH 1101	General Psychology	3
PHI 1400	Intro to Philosophy or other philosophy	3	PHILOS 1105	Self and World: Intro to Philosophy or other philosophy	3
ART 1490	History of Art I	3	ART 118	Art Appreciation	3
MUS 1630	Appreciation of Music	3	MUS 1150	Music Understanding and Appreciation	3
THE 1000	Intro to Theatre	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			Total Hours		
9			9		

#### Social Sciences

Take all courses.

HIS 1140 or HIS 1230 or HIS 1240 or POS 1180	Western Civilization II or American History I or American History II or American Political Systems <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
BUS 2940* or BUS 2930*	Principles of Microeconomics or Principles of Macroeconomics <small>*Students pursuing the Actuarial Science emphasis take BOTH ECON 2940 and 12930 (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			Total Hours		
6			6		

#### Mathematics, Statistics, and Computer Science

Take all courses.

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
MAT 2330	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
CSC 1100	Programming Logic	3	CS 1500	Computational Problem Solving	3
Total Hours			Total Hours		
21			18		

#### Science

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

PHS 1350	General Chemistry I	5	CHEM 1310, 1319	General Chemistry I and Lab	5
PHS 1390	General Chemistry II	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) <small>*Chem 1510 is not an S&amp;T degree requirement. Will transfer as general credit.</small>	3
BIO 1150	General Biology	5	BIO SCI 1113, 1219	General Biology and Lab	4
Total Hours			Total Hours		
13			13		

#### Additional Degree Requirements

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

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.