State Fair Community College — Missouri S&T

Applied Mathematics BS Transfer Guide

Effective as of Fall 2023

| Maximum credit hours to be transferred to Missouri S&T degree requirements. 60 | | State Fair Community College | | | Missouri S&T | |
|--|----------------------------|---|--------------------------|---|--|----|
| ENGL 112 or Technical Winting 3 | | English and Co | mmuni | ication Skills (Take all | courses) | |
| ENGL I12 Technical Writing 3 ENGLEH 350 Technical Writing 3 SPMS 1185 Principles of Speech 3 Total Hours 6 Total Hours 7 ENGLEH 1210 Total England Total Hours 7 ENGLEH 1210 Total Hours 7 | ENGL 101 | | | <u>-</u> | | 3 |
| SPINS 1195 Principles of Speech Total Hours of Total Hours of Total Hours of Speech Total Hours of Spins 1195 Principles of Speech Total Hours of Total Hour | | | 3 | ENGLISH 1160 or | Writing and Research or | 3 |
| Total Hours Foundation Fo | | <u> </u> | | | <u> </u> | |
| Company Comp | SPMS 1185 | | | SPMS 1185 | | |
| Celect 9 hours to Include at least one literature | | I otal Hours | | | I otal Hours | 6 |
| In the content of t | | (Select 9 hou | | | rature.) | |
| ENGLISH 1221 or | LIT 112 or | · · · · · · · · · · · · · · · · · · · | | | <u> </u> | |
| PHIL 01 Introduction to Philosophy 3 PHILOS 1105 Self and World: Intro to Philosophy 3 ART 101 Ant Appreciation 3 ART 118 Art Appreciation certain 4 3 Must 101 Music Appreciation 3 ART 118 Art Appreciation and Appreciation and Art 118 Art | | British Literature | 3 | | British Literature Elective | 3 |
| ART 101 An An Appreciation | PSY 101 | General Psychology | 3 | PSYCH 1101 | General Psychology or other psychology | 3 |
| ART 101 | PHIL 101 | Introduction to Philosophy | 3 | PHILOS 1105 | | 3 |
| MUS 101 Music Appreciation 3 MUS 1150 Music Understanding and Appreciation 5 dust in three to Theatre 3 Any froir art. English, music, philosophy or speech, Any fine art. Eng | ART 101 | . , | 3 | ΔPT 118 | | 3 |
| THEA 107 Intro to Theatre 3 THEATRE 1190 Theatre via Video or other masor 3 Any foreign language 3 | | | | | * * | |
| Any foreign language Any foreign language Any fine art, English, music, philosophy or speech. Any history, political sicence, or psychology. Total Hours Social Sciences (Take all courses) HIST 109 or HIST 109 or US History Before 1877 or HIST 102 or US History Steel 1877 or HIST 102 or US History Steel 1877 or HIST 102 or PULS 101 American/National Government (At least one of these courses is required to saidly state requirement) ECON 102 or Principles of Microeconomics or ECON 101 ECON 101 Total Hours Total Hour | MUS 101 | Music Appreciation | 3 | MUS 1150 | | 3 |
| Any fine art, English, music, philosophy or speech. Speech. Any history, political sicence, or psychology. Total Hours 6 Social Sciences (Take all courses) HIST 109 or HIST 101 or HIST 101 or US History Selore 1877 or 1815T 101 or HIST 102 or US History Selore 1877 or 1815T 101 or HIST 102 or HIST 101 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 1877 or POLS 101 American/National Government (Alexandro et American History Since 187 | THEA 107 | | 3 | THEATRE 1190 | | |
| Any history, political sicence, or psychology. Any history, political sicence, or psychology. Total Hours Social Sciences (Take all courses) HIST 109 or World Civilization After 1500 or US History Before 1877 or HIST 102 or US History Before 1877 or HIST 102 or US History Before 1877 or HIST 102 or American History to 1877 or HIST 102 or American Alterian Socience 1877 or HIST 102 or US History Before 1877 or HIST 102 or Police 1877 or HIST 102 or American History to 1877 or HIST 102 or Police 1877 or HIST 102 or Principles of Microeconomics or ECON 102 or Principles of Microeconomics or ECON 120 or Principles of Microeconomics or Principles | | | | | Any foreign language | 3 |
| Any history, political sicence, or psychology. Total Hours 6 Social Sciences (Take all courses) HIST 109 or World Civilization After 1500 or HIST 101 or US History Before 1877 or HIST 101 or US History Science 1877 or US History Science 1877 or HIST 102 or US History Since 1877 or US History Since 1877 or US History Since 1877 or HIST 102 or US History Since 1877 or HIST 102 or US History Since 1877 or HIST 102 or US History Since 1877 or US History Since 1877 or HIST 102 or American History Since 1877 or HIST 102 or Pol. Sci 1 200 Principles of Microeconomics or Principles of Microeconomics or Principles of Macroeconomics or | | | 3 | | Any fine art, English, music, philosophy or speech. | 3 |
| Social Sciences (Take all courses) | | -1 | 3 | | Any history, political sicence, or psychology. | 3 |
| HIST 109 or World Civilization After 1500 or US History Before 1877 or US History Before 1877 or HISTORY 1200 or American History to 1877 or HISTORY 1310 or American History to 1877 or American History Since 1877 or American Government (Aleast one of these courses is required to autily state requirement) (Aleast one of these courses is required to autily state requirement) (Aleast one of these courses is required to autily state requirement) (Aleast one of these courses is required to autily state requirement) (Aleast one of these courses) (Aleast one of the Substate Institution of Principles of Microeconomics or Princip | | Total Hours | 6 | | Total Hours | 9 |
| HIST 109 or World Civilization After 1500 or US History Before 1877 or US History Before 1877 or HISTORY 1200 or American History to 1877 or HISTORY 1310 or American History to 1877 or American History Since 1877 or American Government (Aleast one of these courses is required to autily state requirement) (Aleast one of these courses is required to autily state requirement) (Aleast one of these courses is required to autily state requirement) (Aleast one of these courses is required to autily state requirement) (Aleast one of these courses) (Aleast one of the Substate Institution of Principles of Microeconomics or Princip | | Social | Scien | ces (Take all courses) | | |
| HIST 101 or HIST 102 or US History Before 1877 or VAmerican/National Government (Altsidor piece to History Sine 1877 or American/National Government (Altsidor piece 1877 or American/National Government (Altsidor piece 1877 or American/National Government (Altsidor piece 1877 or American/National Government) (Altsidor piece 1877 or American/National Government) (Altsidor piece 1877 or American Government) (Altsidor piece 18 | HIST 109 or | | | · · · · · · · · · · · · · · · · · · · | Modern Western Civilization or | |
| ECON 102 or Principles of Microeconomics or ECON 101 Principles of Microeconomics or Principles of Macroeconomics and ECON 1200° Principles of Macroeconomics or ECON 1200° Principles of Macroeconomics or ECON 1200° Principles of Macroeconomics or Total Hours of Total Hours of 1100 and 1200 (6 hours secon for a total of 9 hours social sciences). MATH 130 Calculus and Analytic Geometry I 5 MATH 1214 Calculus I 4 AMTH 131 Calculus and Analytic Geometry II 5 MATH 1215 Calculus II 4 AMTH 132 Calculus and Analytic Geometry III 5 MATH 1222 Calculus II 4 Differential Equations 3 MATH 3304 Elementary Differential Equations 4 PHYS 119 General Physics II with Lab 5 PHYSICS 1135 Engineering Physics I 4 PHYS 119 General Physics II with Lab 5 PHYSICS 2135 Engineering Physics II 4 PHYS 119 General Physics II with Lab 5 PHYSICS 2135 Engineering Physics II 4 PHYS 119 General Chemistry I with Lab 5 PHYSICS 2135 Engineering Physics II 4 PHYS 119 General Chemistry I with Lab or Biology with Lab (5) or Biolo 125 Biology I with Lab (5) or Biology in the Into Biology with Lab (5) or Biology in the Into Biology with Lab (5) or Biology in the Into Biology with Lab (5) or Biology in the Into Biology, chemistry, computer science, economics, engineering, geology, mechanics, or physics approved by advisor. **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** **Maximum Free Electives** **Maximum Credit hours to be transferred to Missouri S&T degree requirements** | HIST 101 or HIST 102 or | US History Before 1877 or US History Since 1877 or American/National Government (At least one of these courses is required to satisfy state | 3 | HISTORY 1300 or HISTORY 1310 or | American History to 1877 or American History Since 1877 or American Government | 3 |
| MATH 130 | | Principles of Microeconomics or | 3 | | Principles of Macroeconomics* *Students pursuing the Actuarial Science emphasis take BOTH ECON | 3 |
| MATH 130 Calculus and Analytic Geometry I MATH 131 Calculus and Analytic Geometry II MATH 131 Calculus and Analytic Geometry III MATH 132 Calculus and Analytic Geometry III MATH 134 Differential Equations 3 MATH 222 Calculus III 4 MATH 2304 Elementary Differential Equations 3 PHYS 118 General Physics I with Lab 5 PHYSICS 1135 Engineering Physics I Engineering Physics II Programming in Python or CIS 120 or CIS 120 or CIS 155 Programming in Python or CIS 155 Programming in C# CHEM 123 or BIO 112 or BIO 125 Select alchemistry I with Lab or BIO 125 Total Hours 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 Maximum Free Electives Maximum credit hours to be transferred to Missouri S&T degree requirements. 60 MATH 1214 Calculus II A ATH 1215 Calculus II A ACICULUS II A ATH 1215 Calculus II A ATH 1215 Calculus II A ACICULUS II A ACICULUS II A ATH 1222 Calculus II A ATH 1222 Calculus II A A ACICULUS II A ATH 1222 Calculus II A ATH 1222 Calculus II A A ATH 1222 Calculus II A A ACICULUS II A A AFT 4222 Calculus II A ATH 1215 Engineering Physics I Bengineering Physics I Bengineering Physics I Bengineering Physics I A CS 1500 Computational Problem Solving Chemistry I and Lab or BIO SCI 1113, 1219 General Chemistry I and Lab or General Biology and Lab Total Hours 30 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 | | | | | | 6 |
| MATH 131 Calculus and Analytic Geometry II MATH 132 Calculus and Analytic Geometry III MATH 132 Calculus and Analytic Geometry III MATH 134 Differential Equations 3 MATH 2222 Calculus III MATH 2304 Elementary Differential Equations 3 MATH 3304 Elementary Differential Equations 3 PHYS 118 General Physics I with Lab 5 PHYSICS 1135 Engineering Physics I 4 PHYS 119 General Physics II with Lab 5 PHYSICS 2135 PHYSICS 2135 Physics 2135 Physics II 4 CIS 120 or Computational Problem Solving 3 CS 1500 Computational Problem Solving 3 CHEM 123 or Biology with Lab or Intro 10 Biology with Lab (5) or Biology I with Lab Total Hours 36 CHEM 1310, 1319 or BIO SCI 1113, 1219 General Chemistry I and Lab or General Biology and Lab Total Hours 36 CHEM 1310, 1319 or BIO SCI 1113, 1219 General Biology and Lab Total Hours 36 Total Hours 30 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 Maximum Free Electives 5 Maximum credit hours to be transferred to Missouri S&T degree requirements. 60 | | Mathematic | cs and | Science (Take all cour | rses) | |
| MATH 132 Calculus and Analytic Geometry III MATH 134 Differential Equations 3 MATH 3304 Elementary Differential Equations 3 PHYS 118 General Physics I with Lab 5 PHYSICS 1135 Engineering Physics I 4 PHYS 119 General Physics II with Lab 5 PHYSICS 2135 PHYSICS 2135 Programming in Python or CIS 155 Programming in Python or CIS 155 General Chemistry I with Lab or Intro to Biology with Lab (5) or BIO 112 or BIO 125 Biology I with Lab Total Hours 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 credit hours to be transferred to Missouri S&T degree requirements. 60 MATH 2222 Calculus III 4 4 AHTH 2304 Elementary Differential Equations 3 MATH 3304 Elementary Differential Equations 3 CS 1500 Computational Problem Solving 3 CHEM 1310, 1319 or General Chemistry I and Lab or General Chemistry I and Lab or General Biology and Lab Total Hours 30 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 | MATH 130 | Calculus and Analytic Geometry I | 5 | MATH 1214 | Calculus I | 4 |
| MATH 134 Differential Equations 3 MATH 3304 Elementary Differential Equations 3 PHYS 118 General Physics I with Lab 5 PHYSICS 1135 Engineering Physics I 4 PHYS 119 General Physics II with Lab 5 PHYSICS 2135 Engineering Physics II 4 PHYS 119 General Physics II with Lab 5 PHYSICS 2135 Engineering Physics II 4 PHYSICS 120 or CIS 155 Programming in Python or CIS 155 Programming in C# General Chemistry I with Lab or Intro to Biology with Lab or Biology I with Lab or Biology I with Lab (5) or Biology I with Lab (5) or Biology I with Lab (5) or Biology I with Lab Total Hours 36 Folian Physics II 4 Total Hours 30 Folian Physics II 4 Folian Physic | MATH 131 | Calculus and Analytic Geometry II | 5 | MATH 1215 | Calculus II | 4 |
| MATH 134 Differential Equations 3 MATH 3304 Elementary Differential Equations 3 PHYS 118 General Physics I with Lab 5 PHYSICS 1135 Engineering Physics I 4 PHYS 119 General Physics II with Lab 5 PHYSICS 2135 Engineering Physics II 4 PHYS 119 General Physics II with Lab 5 PHYSICS 2135 Engineering Physics II 4 PHYSICS 120 or CIS 155 Programming in Python or CIS 155 Programming in C# General Chemistry I with Lab or Intro to Biology with Lab or Biology I with Lab or Biology I with Lab or Biology I with Lab (5) or Biology I with Lab or Biology I with Lab (5) or Biology I with Lab (6) or Biology I with Lab (7) or Bi | MATH 132 | Calculus and Analytic Geometry III | 5 | MATH 2222 | Calculus III | 4 |
| PHYS 118 General Physics I with Lab 5 PHYSICS 1135 Engineering Physics I 4 PHYS 119 General Physics II with Lab 5 PHYSICS 2135 Engineering Physics II 4 CIS 120 or Programming in Python or CIS 155 Programming in C# CS 1550 Computational Problem Solving 3 CIS 155 Programming in C# General Chemistry I with Lab or Intro to Biology with Lab (5) or BIO 125 Biology I with Lab (5) or Biology I with Lab or Biology I with Lab or Biology I with Lab (5) or Biology I with Lab or Biology I with Lab (5) or Biology I with | MATH 134 | Differential Equations | 3 | MATH 3304 | Elementary Differential Equations | 3 |
| PHYS 119 General Physics II with Lab 5 PHYSICS 2135 Engineering Physics II 4 CIS 120 or CIS 120 or CIS 155 Programming in Python or Programming in Python or Programming in C# CHEM 123 or BIO 112 or BIO 125 Biology I with Lab (5) or BIO 125 Biology I with Lab Total Hours 36 CHEM 1310, 1319 or BIO SCI 11113, 1219 General Chemistry I and Lab or BIO SCI 11113, 1219 General Biology and Lab Total Hours 30 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 Maximum credit hours to be transferred to Missouri S&T degree requirements. 60 Additional Degree Requirements Technical electives in biology, chemistry, computer science, economics, engineering, geology, mechanics, or physics approved by advisor. Maximum Free Electives Maximum Credit hours to be transferred to Missouri S&T degree requirements. | PHYS 118 | | | PHYSICS 1135 | - | 4 |
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| CIS 155 CHEM 123 or BIO 112 or Biology I with Lab or Intro to Biology I with Lab Total Hours 36 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 Maximum credit hours to be transferred to Missouri S&T degree requirements. 60 CHEM 1310, 1319 or General Chemistry I and Lab or General Biology and Lab Total Hours 30 Additional Degree Requirements Fechnical electives in biology, chemistry, computer science, economics, engineering, geology, mechanics, or physics approved by advisor. Maximum Free Electives 14 Maximum Free Electives 14 Maximum Free Electives 16 Maximum Credit hours to be transferred to Missouri S&T degree requirements. 60 | | , | 3 | 11110100 2100 | Engineering Friyotos II | • |
| BIO 112 or Biology I with Lab (5) or Biology | CIS 155 | Programming in C# | 3 | CS 1500 | Computational Problem Solving | 3 |
| 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 Maximum Free Electives Additional Degree Requirements Technical electives in biology, chemistry, computer science, economics, engineering, geology, mechanics, or physics approved by advisor. Maximum Free Electives 14 Maximum Free Electives 60 | BIO 112 or | Intro to Biology with Lab (5) or | 5 | | | 4 |
| 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 Maximum credit hours to be transferred to Missouri S&T degree requirements. Technical electives in biology, chemistry, computer science, economics, engineering, geology, mechanics, or physics approved by advisor. Maximum Free Electives 14 Maximum Free Electives 60 | | Total Hours | 36 | | Total Hours | 30 |
| 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 Maximum credit hours to be transferred to Missouri S&T degree requirements. Technical electives in biology, chemistry, computer science, economics, engineering, geology, mechanics, or physics approved by advisor. Maximum Free Electives 14 Maximum Free Electives 60 | | Addit | ional C | Degree Requirements | | |
| computer science, economics, engineering, geology, mechanics, or physics approved by advisor. Maximum Free Electives Maximum credit hours to be transferred to Missouri S&T degree requirements. Technical electives in biology, chemistry, computer science, economics, engineering, geology, mechanics, or physics approved by advisor. Maximum Free Electives 14 Maximum Free Electives 60 | | | | | credit hours shown below. | |
| Maximum credit hours to be transferred to Missouri S&T degree requirements. 60 | | computer science, economics, engineering, geology, mechanics, or physics approved by | 3 | | science, economics, engineering, geology, | 3 |
| | | Maximum Free Electives | 14 | | Maximum Free Electives | 14 |
| | | Maximum credit hours to be tra | nsferre | ed to Missouri S&T deg | gree 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. | | Missouri S&T residency requirements: The I Students must receive special permission from Missouri S& | ast 60 hou T to apply | urs of any Missouri S&T degree m more than the maximum credit he | nust be completed at Missouri S&T. ours listed above toward the Missouri S&T degree. | |

This transfer guide is published by Missouri University of Science and Technology and is in effect as of Fall 2023. Further information or updates are available from Missouri S&T Transfer Admissions at transfer.mst.edu, transfer@mst.edu, or 800-522-0938.