

East Central College — Missouri S&T

Applied Mathematics BS Transfer Guide

Effective as of Fall 2017

East Central College

Missouri S&T

Communication Skills (Take all courses)

| | | | | | |
|-------------|---|---|--------------|--|---|
| ENG 101 | English Composition I | 3 | ENGLISH 1120 | Exposition and Argumentation | 3 |
| ENG 102 | English Composition II | 3 | ENGLISH 1160 | Writing and Research | 3 |
| COM 110 | Public Speaking (Required for AA Degree) | 3 | SPMS 1185 | Principles of Speech (Will apply to B.S. degree as free elective) | 3 |
| Total Hours | | | Total Hours | | |
| 9 | | | 9 | | |

Mathematics and Science (Take all courses)

| | | | | | |
|--------------|------------------------------------|---|--------------|-------------------------------------|---|
| MTH 190 | Analytic Geometry & Calculus I | 5 | MATH 1214 | Calculus for Engineers I | 4 |
| MTH 210 | Analytic Geometry & Calculus II | 5 | MATH 1215 | Calculus for Engineers II | 4 |
| MTH 220 | Analytical Geometry & Calculus III | 5 | MATH 2222 | Calculus with Analytic Geometry III | 4 |
| PHY 211, 212 | General Physics I and Lab | 5 | PHYSICS 1135 | Engineering Physics I | 4 |
| PHY 221, 222 | General Physics II and Lab | 5 | PHYSICS 2135 | Engineering Physics II | 4 |
| Total Hours | | | Total Hours | | |
| 25 | | | 20 | | |

Social Sciences (Take all courses)

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|---|---|---|---|--|---|
| CIV 202 or HST 101 or HST 102 or PSC 102 | European Civilization II or US History to 1865 or US History 1865-1945 or US Government National and State | 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 102 or ECO 101 | Principles of Microeconomics or Principles of Macroeconomics <i>See your advisor for course options</i> | 3 | ECON 1100 or ECON 1200 | Principles of Microeconomics or Principles of Macroeconomics Other economics, history, political science, sociology, psychology elective | 3 |
| Total Hours | | | Total Hours | | |
| 6 | | | 9 | | |

Humanities (Take all courses)

| | | | | |
|--|--|---|--|---|
| <i>See your advisor for course options</i> | | 3 | Literature Elective | 3 |
| Foreign Language (2 semesters of same language) | | 6 | Foreign Language (2 semesters of same language) | 6 |
| Total Hours | | | Total Hours | |
| 9 | | | 9 | |

Additional Degree Requirements (Select up to 17 hours)

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|-----------------------|---|---|--|---|---|
| MTH 245 | Differential Equations | 3 | MATH 3304 | Elementary Differential Equations | 3 |
| MTH 241 | Linear Algebra | 3 | MATH 3108 | Linear Algebra | 3 |
| MTH 242 | Engineering Statistics | 3 | STAT 3115 | Engineering Statistics | 3 |
| CHM 111 or BIO 111 | General Chemistry I and Lab or General Biology I and Lab | 5 | CHEM 1310, 1319 or BIO SCI 1113, 1219 | General Chemistry I and Lab or General Biology and Lab | 5 |
| EGR 221, 222 | C++ Program Engineers | 3 | CS 1570, 1580 | Intro to Programming | 3 |
| Total Hours | | | Total Hours | | |
| 17 | | | 17 | | |

Maximum credit hours to be transferred to Missouri S&T degree requirements.

72

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.