## Engineering Degree Requirements: Take all Courses

| MTH 180 | Calculus I | 5 | MATH 1214 | Calculus for Engineers I | 4 |
| MTH 185 | Calculus II | 5 | MATH 1215 | Calculus for Engineers II | 4 |
| MTH 201 | Calculus III | 5 | MATH 2222 | Calculus with Analytic Geometry III | 4 |
| MTH 205 | Differential Equations | 3 | MATH 3304 | Elementary Differential Equations | 3 |
| PHY 224*** | General Physics I | 4 | PHYSICS 1135 | Engineering Physics I | 4 |
| PHY 225*** | General Physics II | 4 | PHYSICS 2135 | Engineering Physics II | 4 |
| CHM 111 | General Chemistry I | 5 | CHEM 1310, 1319 | General Chemistry I and Lab | 5 |
| EGR 101**** | Computer Aided Engineering Design | 4 | MECH ENG 1720 | Engineering Design with Computer Appl. | 3 |
| EGR 101 | English Composition I | 3 | ENGLISH 1120 | Exposition and Argumentation | 3 |
| ECO 102 or ECO 101 | Microeconomics or Macroeconomics | 3 | ECON 1100 or ECON 1200 | Principles of Microeconomics or Principles of Macroeconomics | 3 |
| HIST 103 or HIST 104 | US History I or US History II | 3 | HISTORY 1300 or HISTORY 1310 | American History to 1877 | 3 |
| HIST 102 or HIST 105 | Renaissance to Early Modern Europe | 3 | HISTORY 1200 or HISTORY 1200 or POL SCI 1200 | American History since 1877 or Modern Western Civilization or American Government | 3 |
| PSC 102 | US and Missouri Govt. and Constitution | 3 | AMER GOVT 1200 | American Government | 3 |
| MUS 121 | Appreciation of Music | 3 | MUSIC 1150 | Music Understanding and Appreciation | 3 |
| SPD 120 | Intro to Theatre | 3 | THEATRE 1190 | Theatre Appreciation | 3 |
| PSY 101 | General Psychology | 3 | PSYCH 1101 | General Psychology | 3 |
| PHL 102 | Intro to Philosophy | 3 | PHILOS 1105 | Intro to Philosophy | 3 |

**Free Electives:** See Other Required Courses* on back. Free electives should be selected in consultation with your advisor. Free electives may not include remedial/deficiency courses, algebra, trigonometry, pre-calculus, or extra credits in required courses.

*** JC EGR 101 and PHY 223 must both be taken to receive credit for Missouri S&T MECH ENG 1720.

### Humanities and Social Sciences Electives: Select 2 Additional Courses from the Academic Areas Below*

- HIST 103 American History I
- HIST 104 American History II
- PSC 102 US and Missouri Govt. and Constitution
- MUS 121 Appreciation of Music
- SPD 120 Intro to Theatre
- PSY 101 General Psychology
- PHL 102 Intro to Philosophy

*See your advisor for course options.

### Humanities and Social Sciences Electives

- HIST 103 American History I
- HIST 104 American History II
- PSC 102 US and Missouri Govt. and Constitution
- MUS 121 Appreciation of Music
- SPD 120 Intro to Theatre
- PSY 101 General Psychology
- PHL 102 Intro to Philosophy

**Free Electives:** See Other Required Courses* on back.

### Additional Degree Requirements*

- ENG 102 Composition and Rhetoric II
- SPD 175 Public Speaking
- MTH 172 Linear Algebra
- CHM 112, 113 General Chemistry II and Lab
- CHM 200 Organic Chemistry I
- CHM 201 Organic Chemistry II
- CIS 152 Fortran Programming
- CIS 155 Intro to Computer Programming
- BIO 102 Concepts in Biology
- PHY 105 Physical Geology
- EGR 228 Engineering Mechanics - Statics
- EGR 250 Engineering Mechanics - Dynamics
- MTT 148 Intro to Metallurgy

### Additional Courses (See Back Page)

- ENGLISH 1160 Writing and Research
- SPMS 1185 Principles of Speech
- MATH 3108 Linear Algebra
- CHEM 1320, 1510 General Chemistry II and Qualitative Analysis
- CHEM 2210, 2219 Organic Chemistry I and Lab
- CHEM 2220, 2229 Organic Chemistry II and Lab
- CS 1970, 1980 Basic Scientific Programming (FORTRAN)
- CS 1570, 1580 Intro to Programming and Lab (C++)
- BIO SCI 1113 General Biology
- GEO 1111/GE 1150 Intro to Physical Geology
- EE 2800, 2100 Circuit Analysis I (Circuits I)**
- MECH ENG 2350 Engineering Mechanics-Dynamics
- MET ENG 2110 Metallurgy for Engineers

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

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*See notes for individual majors on second page.

*A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for EE 2100.