

Mechanical Engineering Curriculum

(Option B: last Name begins with L-Z)

| SEMESTER 1 | | | SEMESTER 2 | | |
|-------------------------------|---|-------------|-------------------------------|--|-------------|
| Course | | Credits | Course | | Credits |
| FYS | First Year Seminar | 1 | CHEM 112 | Chemical Principles II | 3 |
| ENGL 015 | Rhetoric and Composition -or- | 3 | ECON 102/104 | Micro or Macro Economics (GS) | 3 |
| EDSGN 100 | Introduction to Engineering Design | 3 | Math 141 | <i>Calc with Analytic Geometry II</i> | 4 |
| AHS course | (GA, GH, or GS) | 3 | AHS course | (GA, GH, or GS) | 3 |
| <i>MATH 140</i> | <i>Calculus with Analytic Geometry I</i> | 4 | <i>PHYS 211</i> | <i>Mechanics</i> | 4 |
| <i>CHEM 110</i> | <i>Chemical Principles</i> | 3 | <i>MATH 141</i> | <i>Calc with Analytic Geometry II</i> | 4 |
| Total Semester Credits | | 17 | Total Semester Credits | | 17 |
| SEMESTER 3 | | | SEMESTER 4 | | |
| Course | | Credits | Course | | Credits |
| CMPS 200 | MATLAB | 3 | <i>E MCH 212</i> | <i>Dynamics</i> | 3 |
| CAS 100A/B | Effective Speech | 3 | <i>E MCH 213</i> | <i>Strength of Materials -or-</i> | 3 |
| <i>E MCH 211</i> | <i>Statics</i> | 3 | PHYS 214 | Wave Motion and Quantum Physics | 1.5 |
| <i>MATH 251</i> | <i>Ordinary and Partial Differential Eq.</i> | 4 | <i>M E 300</i> | <i>Engineering Thermodynamics I</i> | 3 |
| <i>PHYS 212</i> | <i>Electricity and Magnetism</i> | 4 | MATH 231 | Calculus of Several Variables | 2 |
| | | | MATH 220 | Matrices | 2 |
| | | | GHA | Health/Physical Activity | 2 |
| Total Semester Credits | | 17 | Total Semester Credits | | 16.5 |
| SEMESTER 5 | | | SEMESTER 6 | | |
| Course | | Credits | Course | | Credits |
| ETE | Engineering Technical Elective | 3 | E E 212 | Intro to Electronic Measuring Systems | 3 |
| E MCH 315 | Mechanical Response of Engr. Mat'l. | 2 | I E 312 | Product Design & Mfg Processes | 3 |
| <i>M E 340</i> | <i>Mech. Engr. Design Methodology</i> | 3 | MATSE 259 | Properties & Processing of Engr. Mat'l. | 3 |
| <i>M E 360</i> | <i>Mechanical Design</i> | 3 | <i>M E 370</i> | <i>Vibrations of Mechanical Systems</i> | 3 |
| <i>M E 320</i> | <i>Fluid Flow</i> | 3 | <i>M E 345</i> | <i>Inst. Measurements, and Statistics</i> | 4 |
| GHA | Health/Physical Activity | 1.5 | | | |
| Total Semester Credits | | 15.5 | Total Semester Credits | | 16 |
| SEMESTER 7 | | | SEMESTER 8 | | |
| Course | | Credits | Course | | Credits |
| ENGL 202C | Technical Writing | 3 | <i>M E 450</i> | <i>Modeling of Dynamic Systems</i> | 3 |
| <i>M E 410</i> | <i>Heat Transfer</i> | 3 | ETE | Engineering Technical Elective | 3 |
| AHS course | (GA, GH, or GS) | 3 | AHS course | (GA, GH, or GS) | 3 |
| METE | M E Technical Elective | 3 | AHS course | (GA, GH, or GS) | 3 |
| M E Lab | | 1 | GTE | General Technical Elective | 3 |
| M E 440 | Senior Capstone Project | 3 | M E Lab | Choose ME 315, 325, 355 or 375 | 1 |
| Total Semester Credits | | 16 | Total Semester Credits | | 16 |

- Courses listed in ***boldface italic type*** require a C or better for entrance to major.
- Students may substitute BIOL 141 for CHEM 112.
- Courses listed in ***boldface type*** require a C or better for graduation in this major.
- An Engineering Technical Elective is any three credit, 400-level engineering course NOT required for the major.
- To graduate, two of the following lab courses must be taken: ME 315, 325, 355 or 375 and EMCH 316.
- A Mechanical Engineering Technical Elective (METE) is any three-credit, 400-level ME or NUC E course that is not required for the major. ME 494 or ME 496 may not be used.
- Three credits of co-op may also be used for the GTE after completion of three co-op rotations, internships, or a combination of both
- Students must take 3 credits of United State Cultures (US) and 3 credits of International Cultures (IL)