Mechanical Engineering B.S. Curriculum: Flow Chart & Sample Schedule

**First-Year**
- **MATH 1910** Intro Calculus
- **MATH 1920** Multivariable Calculus
- **PHYS 1110** Mechanics & Heat
- **CHEM 2090** Eng. Gen. Chemistry
- **CS 111X** Intro to Comp. (CS 1112 Strongly Recommended)
- **Phys. Ed. 1**
- **Phys. Ed. 2**
- **First-Year Writing Seminar 1**
- **First-Year Writing Seminar 2**

16 credits

**Second-Year**
- **MATH 2910** Linear Algebra
- **MATH 1920** Multivariable Calculus
- **MAE 2030** Mechanics of Materials
- **MAE 2250** Mechanical Synthesis
- **MAE 2030** Dynamics
- **MAE 2250** Mechanical Synthesis
- **MAE 2230** Fluid Mech.
- **ENGRI 1xx0** Intro to ...
- **ENGRD 2020** Statics
- **ENGRD 2210** Thermo
- **PHYS 2213** Electricity & Magnetism
- **PHYS 2214** Waves

18 credits

**Junior**
- **MATH 2930** Differential Equations
- **MATH 2940** Linear Algebra
- **MAE 3230** Fluid Mech.
- **MAE 3260** System Dynamics
- **MAE 3260** System Dynamics
- **MAE 3670** Mechanics of Materials
- **MAE 3240** Heat Transfer
- **MAE 3260** System Dynamics
- **MAE 3260** System Dynamics
- **MAE 3780** Mechatronics or ECE 2100 or PHYS 3360
- **MAE 4XX1** Sr. Design

15 credits

**Senior**
- **MAE 4300** Engineers and Society
- **Advisor-approved Elective 1**
- **Advisor-approved Elective 2**
- **Advisor-approved Elective 3**
- **PHYS 2214** Phys 3 Waves
- **Math Elective 2**
- **Technical Elective**
- **Liberal Studies**
- **Liberal Studies**
- **Liberal Studies**
- **Liberal Studies**
- **Liberal Studies**

14 credits

Notes:
1: MAE 4272 satisfies the Engineering Communications requirement.
2: The Probability and Statistics requirement is satisfied by some (not all) Math Elective Courses. Consult mae.cornell.edu for a list of courses and more info.
3: Redundant and rarely relevant prerequisites are enforced but not shown on the flowchart. These include: MATH1920->ENGRD2210, MATH2930->MAE3780, MATH2930->MAE3260, MATH2940->MAE3260, MATH2930->MAE3230.