

## Mechanical Engineering Electives

### Science Electives

BLY 121: General Biology I (3 cr)	ST 315: Applied Probability-Statistics (3 cr)
CH 132: General Chemistry II (3 cr)	MA 316: Linear Algebra II (3 cr)
GY 111: Physical Geology (3 cr)	MA 354: Computer Assisted Mathematical Modeling (3 cr)
PH 303: Modern Physics (4 cr)	MA 437: Complex Variables (3 cr)

### ME Electives [asterisks (\*) are the potential courses to be offered within a 2-year cycle; Italic (*italic*) courses to be offered on demand]

ME 411* - Thermal System Design	<i>ME 453 - IC Engines</i>
<i>ME 419 - Computer Aided Design and Manufacturing</i>	ME 460 – Marine Engineering
ME 421* - Mechanical Systems Design	ME 466* - Aerospace Propulsion
<i>ME 422 - Gas Turbines</i>	ME 467* - Intro to Biomedical Engineering
ME 431* - Gas Dynamics	ME 468* - Principles of Aircraft Design
ME 432* - Advanced Thermodynamics	ME 469*-Aircraft Stability and Control
ME 438* - Finite Element Analysis	ME 470* – Aircraft Structural Analysis
<i>ME 441 - Microprocessors for Mechanical Engineers</i>	<i>ME 490 - Special Topics</i>
ME 450* - Heat Vent and Air Conditioning	<i>ME 494 - Directed Independent Study</i>
<i>ME 451 - Refrigeration Systems</i>	

### Technical Electives

BLY 122: General Biology II (3 cr)	ST: 320: Applied Statistical Analysis (3 cr)
CH 201: Organic Chemistry I (3 cr)	MA 316: Linear Algebra II (3 cr)
CH 202: Organic Chemistry II (3 cr)	MA 332: Differential Equations II (3 cr)
GY305: Geophysics (4 cr)	MA 334: Advance Calculus I (3 cr)
GY 310: Environmental Earth Sciences (3 cr)	MA 335: Advanced Calculus II (3 cr)
PH 303: Modern Physics (4 cr)	MA 354: Computer Assisted Math Modeling (3 cr)
EG 480: Principles of Eng Man and Leadership (3 cr)	MA 436: Numerical Analysis (3 cr)
ST 315: Applied Probability-Statistics (3 cr)	MA 437: Complex Variables (3 cr)

### Students must choose 4 electives:

One course from Science Electives

One course from ME Electives

Two additional courses from either ME Electives or Technical Electives