MECHANICAL ENGINEERING - GENERAL CONCENTRATION

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME 326</td>
<td>Intermediate Dynamics</td>
<td>4</td>
</tr>
<tr>
<td>ME 418</td>
<td>Implementation of Mechanical Controls</td>
<td>4</td>
</tr>
<tr>
<td>or ME 419</td>
<td>Advanced Control Systems</td>
<td></td>
</tr>
<tr>
<td>ME 428</td>
<td>Senior Design Project I</td>
<td>2</td>
</tr>
<tr>
<td>ME 429</td>
<td>Senior Design Project II</td>
<td>2</td>
</tr>
<tr>
<td>ME 430</td>
<td>Senior Design Project III</td>
<td>2</td>
</tr>
</tbody>
</table>

**Technical Electives**

Select from the following: 11-12

Select 8-12 units from the following ME courses:

- ME 305 Introduction to Mechatronics
- ME 359 Fundamentals of HVAC Systems
- ME 401 Stress Analysis
- ME 402 Orthopedic Biomechanics
- ME/CE 404 Applied Finite Element Analysis
- ME 405 Mechatronics
- ME 410 Experimental Methods in Mechanical Design I
- ME 412 Composite Materials Analysis and Design
- ME 415 Energy Conversion
- ME 416 Ground Vehicle Dynamics and Design
- ME 423 Robotics: Fundamentals and Applications
- ME 431 Mechanical Design Techniques
- ME 434 Enhanced Oil Recovery
- ME 435 Drilling Engineering
- ME 436 Petroleum Production Engineering
- ME 437 Nuclear Energy Power Generation
- ME 438 Nuclear Power Plant Design
- ME 439 Nuclear Power Plant Operations
- ME 441 Single Track Vehicle Design
- ME 442 Design of Machinery
- ME 443 Turbomachinery
- ME 444 Combustion Engine Design
- ME 450 Solar Thermal Power Systems
- ME 453 Trends and Opportunities in HVAC&R
- ME 454 Benchmarking and Assessment of Building Energy Performance
- ME 455 Introduction to Building Energy Modeling
- ME 456 HVAC Air and Water Distribution System Design
- ME 457 Refrigeration Principles and Design
- ME 458 Building Heating and Cooling Loads
- ME 488 Wind Energy Engineering
- ME 501/CE 511 Continuum Mechanics and Elasticity
- ME 503/CE 513 Inelastic Stress Analysis
- ME/CE 504 Finite Element Analysis

Total units: 25-26

1 Consultation with advisor is recommended prior to selecting technical electives. Note that 300-level technical electives cannot be used for graduate credit in the blended BS + MS Mechanical Engineering program.

2 ME 470, ME 471, ME 570 and ME 571 are variable topics courses and may or may not count as ME electives. Please contact instructor for additional information. A course substitution form may be required.

3 ME 400 and ME 500 are independent study classes and may be acceptable for technical elective credit. A course substitution form is required.

4 ENGR 459, ENGR 460 and ENGR 461 (6) or ENGR 463, ENGR 464 and ENGR 465 (6) may substitute for ME 428, ME 429 and ME 430 (6).