Our baccalaureate degree programs include electrical engineering and mechanical engineering. In addition to the regular program, electrical engineering has the option of a computer engineering concentration. The mechanical engineering program emphasizes electromechanical systems and properties of materials. The transfer program enables students to begin here and transfer elsewhere for programs we don't offer at USM, or to start taking engineering classes before choosing one of our degree options, if undecided or short of meeting engineering degree admission requirements.

We believe engineering programs at USM are an outstanding value. The engineering department is committed to maximizing the student’s potential to achieve her or his academic goals. Our classes are small and taught by engineering faculty. Our facilities are new or recently renovated. We have extensive contact with local industry, with opportunities for internships and cooperative education as well as employment upon graduation.

Our program is designed so that students gain knowledge and abilities to prepare them to:

1) function as engineers in technologically-intensive firms, 2) succeed in post-baccalaureate study, 3) transfer their engineering skills to different environments, and 4) contribute to society as broadly educated, articulate, and ethical professionals and citizens.

**Program Objectives**

Degrees & Concentrations Offered

**Graduation Planner:** [usm.maine.edu/advising/degreeplanning](http://usm.maine.edu/advising/degreeplanning)

**Degree Offered:** Bachelor of Science

**Majors Offered:** Electrical Engineering, Mechanical Engineering

**Concentrations Offered:** Computer Engineering

**Minors Offered:** Electrical Engineering, Mechanical Engineering

**Career Possibilities**

- Aerospace Engineering
- Aircraft Mechanics and Service Technicians
- Automotive Engineering Technicians
- Construction and Building Inspectors
- Electro-Mechanical Technicians
- Electronics Engineering Technicians
- Engineering Teachers
- Industrial Engineering Technicians
- Marine Engineers
- Mechanical Drafters
- Mechanical Engineer Technicians
- Mechanical Engineering Technologists
- Mechanical Engineers
- Mechatronics Engineers
- Nanotechnology Engineering Technology
- Petroleum Engineers
- Sales Engineer

*Additional education, training or experience may be required.

**Acquired Transferable Skills**

- Active Learning
- Active Listening
- Complex Problem Solving
- Critical Thinking
- Judgment & Decision Making
- Mathematics
- Monitoring
- Operations Analysis
- Reading Comprehension

For more information on transferable skills go to: [usm.maine.edu/community-engagement-career-development/career-tools](http://usm.maine.edu/community-engagement-career-development/career-tools)

Web Address: [usm.maine.edu/engineering](http://usm.maine.edu/engineering)
## What can I do with this major?*

<table>
<thead>
<tr>
<th>AREA</th>
<th>EMPLOYERS</th>
<th>INFORMATION/STRATEGIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MACHINE &amp; SYSTEMS DESIGN</strong></td>
<td>Industries include: Automotive, aerospace, electronics, chemical products, petroleum, textiles, industrial equipment, heating and air conditioning systems</td>
<td>• Learn computer-aided design (CAD) and computer-aided manufacturing (CAM).</td>
</tr>
<tr>
<td><strong>TRANSPORTATION &amp; ENVIRONMENTAL IMPACT</strong></td>
<td>Utility companies</td>
<td>• Obtain related experience through engineering internships, co-ops or part-time jobs.</td>
</tr>
<tr>
<td><strong>MANUFACTURING &amp; PRODUCTION ENERGY</strong></td>
<td>National laboratories</td>
<td>• Develop strong interpersonal and communication skills; consider a class in public speaking to enhance presentation skills. Plan to collaborate with other types of engineers and with those in industry.</td>
</tr>
<tr>
<td><strong>CONSERVATION &amp; RESOURCES</strong></td>
<td>Federal government: Department of Energy Department of Defense Federal Aviation Administration National Aeronautics and Space Administration</td>
<td>• Join student chapter of American Society of Mechanical Engineers to take advantage of mentorship programs, learn more about specialties in the field and participate in design competitions.</td>
</tr>
</tbody>
</table>

*To learn about these areas and much more visit: [whatcanidowiththismajor.com/major](http://whatcanidowiththismajor.com/major) • © 2011 What Can I Do With This Major

### Enrichment Opportunities

- **Internships**
  For more information contact the Department of Engineering. [usm.maine.edu/community-engagement-career-development/internships](http://usm.maine.edu/community-engagement-career-development/internships)

- **Study Abroad**
  For more information contact the USM Office of International Programs. [usm.maine.edu/international/study-abroad](http://usm.maine.edu/international/study-abroad)

- **Clubs & Organizations**
  For more information contact the Electrical Engineering Department. For a complete list of student organizations: [webapp.usm.maine.edu/pathways/list](http://webapp.usm.maine.edu/pathways/list)

- **USM Corporate Partners**
  The USM Corporate Partners are over 350 business people, from nearly 100 companies. [usm.maine.edu/corporatepartners](http://usm.maine.edu/corporatepartners)

### Helpful Career Links

- **USMCareerConnections**: USM’s career network for job and internship searches. [usm.maine.edu/community-engagement-career-development/usmcareerconnections](http://usm.maine.edu/community-engagement-career-development/usmcareerconnections)

- **O*NET OnLine**: Learn more about a career opportunity by researching it with O*NET. [onetonline.org](http://onetonline.org)

- **Occupational Outlook Handbook**: Learn more about a career opportunity by researching it with OOH. [bls.gov/ooh](http://bls.gov/ooh)

- **PROFESSIONAL ASSOCIATIONS** To name a few...
  - TSA – Technology Student Association
  - American Society of Mechanical Engineers
  - National Society of Professional Engineers
  - Society of Petroleum Engineers
  - Association for Women in Science
  - Society of Women Engineers
  - NAE – National Academy of Engineering
  - EWB-USA – Engineers Without Borders USA