# Mechanical Engineering

**FIRST YEAR**
- Begin your program sequence with MATH 3441 (or possibly 477).
- Begin your math sequence.
- Begin Discovery Program electives, including First Year Writing.
- Begin your chemistry and physics courses.

**SECOND YEAR**
- Continue your program sequence with your 500 level MIE & IAM courses.
- Continue your 500-level math sequence.
- Continue with your Discovery Program electives.
- Complete your chemistry and physics sequence.

**THIRD YEAR**
- Continue your program sequence with 600 & 700 level MIE courses.
- Continue your Discovery Program electives.
- Complete Introduction to Electrical Engineering.

**FOURTH YEAR**
- Complete your program sequence with 700 level MIE courses including Senior Design Project 1 & 11.
- Complete technical electives with the support of your program advisor.
- Complete Discovery Program electives.

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**PROFESSIONAL SUCCESS PATHWAY**

**WILDCAT WAY TO PROFESSIONAL SUCCESS**

### BUILD AWARENESS
- **Identify your interests, skills, and values**
  - Career and Professional Success staff can provide assessment tools to help with the exploration process
- **Learn about your field of interest: industry areas, job types/titles, growth projections**
  - Review O*NET, the Bureau of Labor Statistics, Potential Careers for your Major, pages, Vault, and Payscale
- **Map your skills to industry needs**
  - Search job descriptions, indeed.com, LinkedIn, and company-specific pages to learn what skills are in demand
- **Understand the career paths of fellow students and alumni**
  - Join Wildcat Connections, review alumni LinkedIn profiles, UNH Today, and college websites for alumni stories
- **Understand salary ranges for your industry**
  - Search salary.com, Glassdoor, O*NET, and the Bureau of Labor Statistics to find ranges for roles in your industry
- **Create and update career documents**
  - Including resumes, cover letters, and other professional correspondence
- **Create and practice your professional pitch**
  - Take part in the Career Storytelling Workshop series with the College of Liberal Arts CAPII team
- **Develop your LinkedIn profile**
  - Attend Career Express or CAPII Workshop Series to receive feedback and tips on optimizing your profile
- **Practice interviewing for your specific industry/field and professional goals**
  - Use InterviewStream website to record a practice interview, conduct a mock interview with a mentor/employer
- ** Cultivate your professional image**
  - Dress for success, learn industry-specific etiquettes, and review your digital presence (social media and web search results)

### ACADEMIC
- **Engage in research and field experience**
  - Take the Jackson Career Explorer, Skills Scan, or Value Card Sort (available through Careers and Professional Success)
- **Publish your research and papers**
  - Submit your research to psychology-specific journals
- **Present at professional conferences and competitions**
  - Take part in the Undergraduate Research Conference
- **Secure a Teaching Assistant, Lab Assistant, or tutoring position**
  - Take on a leadership or service position within your department to support your peers
- **Study away to build your national and global citizenship**
  - Find the right program for you with National Student Exchange, Semester in the City, Education Abroad, etc.
- **Consider submitting your research to appropriate engineering and science journals**
  - Take part in the Undergraduate Research Conference as well as any department poster sessions

### CO-CURRICULAR
- **Learn about all of the resources available on campus**
  - Explore the A-Z Resource Guide on unh.edu to see all UNH has to offer
- **Volunteer to support your local or global community**
  - UNH Civic and Community Engagement
- **Join and participate in clubs and/or student organizations**
  - Fund through the Office of Student Involvement and Leadership, academic organizations, and Campus Recreation
- **Pursue leadership positions**
  - Apply to be a Resident Assistant, take a leadership position in an organization, run for student government

### PROFESSIONAL
- **Shadow professionals and companies of interest**
  - Use Wildcat Connections or campus connections to build relationships and request job shadowing experiences
- **Secure at least one internship**
  - Search through Wildcat Careers, established Psychology internship opportunities, or other connections to find options
- **Get a part-time job to build other transferrable skills**
  - Attend the Local and On-Campus Student Job Fair, inquire with campus departments, or local businesses
- **Search through Wildcat Careers, Indeed.com, and pay attention to department and career weekly emails**

### BUILD EXPERIENCE
- **Build professional and personal networks**
  - Connect with alumni, faculty, staff, employers, supervisors, parents, friends, family and parents, etc. Create a profile on Wildcat Connections, join national associations, join national associations
- **Attend employer events on campus and in the community**
  - Resume Review Days, Career and Internship Fairs, employer tabling, information sessions, employer and alum panels
- **Conduct informational interviews**
  - Meet with a variety of professionals from desired industry/organizations to hear their career stories and advice
- **Secure 3-5 professional references**
  - Connect with a combination of appropriate employers, faculty, staff, and/or supervisors

### BUILD RELATIONSHIPS

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**PLEASE NOTE**: ACADEMIC COURSE SELECTION CHANGES RAPIDLY. MAKE SURE YOU ARE USING DEGREEWORKS AND MEETING WITH YOUR ACADEMIC ADVISOR REGULARLY.
Employment of mechanical engineers is projected to grow 9 percent from 2016 to 2026, as fast as the average for all occupations. Mechanical engineers can work in many industries and on many types of projects. As a result, their growth rate will differ by the industries that employ them. Mechanical engineers are projected to experience faster than average growth in engineering services as companies continue to contract work from these firms. Mechanical engineers will also remain involved in various manufacturing industries, particularly in automotive manufacturing. These engineers will play key roles in improving the range and performance of hybrid and electric cars.

Mechanical engineers often work on the newest industrial pursuits, particularly in automation and robotics. The fields of alternative energies and nanotechnology will also offer new opportunities for occupational growth. Mechanical engineers design production projects to harness developments in nanotechnology, which involves manipulating matter at the tiniest levels. Nanotechnology will result in improvements of technology in fields such as healthcare and in the design of more powerful computer chips. Potential careers include, but are not limited to:

- Mechanical Engineer I
- Manufacturing Engineer
- CAD Engineer I
- Mechanical Design Engineer
- Product Engineer
- R&D Engineer
- Application Engineer
- Process Engineer

At the University of New Hampshire, students develop personal and professional skills by following the Wildcat Way to Professional Success. This model is designed to provide guidance and recommended action steps throughout the UNH experience, equipping students with the knowledge and tools to thrive in an ever-changing future.