Mechanical Engineering Technology

Mechanical Engineering Technology is a professional career field involving design, testing, production and utilization of all types of mechanical equipment. Graduates are employed in a variety of technical fields including: product design, prototyping, product testing, automation/robotics, instrumentation, hydraulics, fluid systems, and manufacturing. Because of their wide range of specialties and capabilities, Mechanical Engineering Technologists are employable in numerous industries, and enjoy excellent starting salaries/ opportunities for career advancement.

Skills and Competencies

Mechanical Engineering Technologists perform a variety of important functions in industry and it is important for them to remain up-to-date in a number of areas. You must not only learn the current technology, you must become a self-directed learner to be able to keep up with the advancing technology. You will need a strong background in the basics and area specific advanced knowledge to be improve current processes and to be able to adapt to emerging technology .

Being able to work on teams to identify, analyze and solve technical problems in essential, as are effective communication skills. As an engineering professional, you need to be conscious of societal and global issues that affect your decisions.

Course Work

This degree includes the following courses as part of the program requirements, and specific major requirements along with general education courses and graduation requirements.

Core

MET211 Mechanics-Statics (4 cr.)
MET213 Materials Science I (3 cr.)
MET216 Materials Science II (3 cr.)
MET310 Mechanics-Dynamics (3 cr.)
MET311 Strength of Materials (4 cr.)
MET320 Mechanical Design (4 cr.)
MET410 Applied Thermodynamics (4 cr.)
MET420 Fluid Mechanics (3 cr.)
MET431 Senior Project I (1 cr.)
MET432 Senior Project II (1 cr.)

Other required courses

CH105 Chemical Principles (4 cr.)
DD100 Technical Drafting and Introduction to CAD (4 cr.)
DD202 Product Development and Design (4 cr.)
DD203 Industrial Drawing and Design (4 cr.)
ET110 Introduction to Electricity (4 cr.)
ET360 Process Control Systems (3 cr.)
ET410 Testing and Data Acquisition Techniques (3 cr.)
MA109 Intro. to Probability and Statistics (4 cr.)
MA115 Precalculus (4 cr.)
MA161 Calculus I (4 cr.)
MF134 Manufacturing Process (4 cr.)
PH201 College Physics I (5 cr.)
PH202 College Physics II (5 cr.)
TE351 Humanity and Technology (4 cr.)

Choose one concentration:

Advanced Mathematics
Alternative Energies
CNC Technology
Manufacturing Enineering Technology
Mechatronics
Mechanical Engineering Design

Detailed course descriptions can be found at www.nmu.edu/bulletin.

Career Development

You should begin the resume-building process as soon as you can. The Academic and Career Advisement Center can assist you with career planning, while Career Services will help you fine tune your resume and look for jobs related to your field. In the meantime, the more hands-on experience you have, the better the chances are that you will find a job. Becoming involved in a professional related internship is a way to develop your professional skills and gain experience. Your academic course work is important as well, so be sure to maintain a high grade point average.

Additional Considerations

It is necessary to have good communication skills, be organized and pay attention to detail. Some positions will require supervisory or management skills.
You must be able to keep up with rapid advances in technological applications.

Job Outlook

Mechanical Engineering Technology will grow more slowly than average, only expanding at a 6% rate. Salaries can range depending on location and exact duties.

Potential Careers

NMU's Mechanical Engineering Technology Program prepares students for employment in the following careers:

- *Design Engineer*
- *Dimensional Control Engineer*
- *Manufacturing Engineer*
- *Mechanical Engineer*
- *Process Engineer*
- *Product Designer*
- *Project Engineer*

Additional Resources and Information

For Career Planning and Opportunities:
Academic & Career Advisement Center
3302.1 C.B. Hedgcock
906-227-2971
www.nmu.edu/acac

Engineering Technology Department
123 Jacobetti Complex
906-227-2141
www.nmu.edu/engineering

For Job Search, Resume and Career Information:
Career Services
3302.3 C.B. Hedgcock
906-227-2800
www.nmu.edu/careers

For Information about NMU Student Organizations Associated with this Major Contact:
Center for Student Enrichment
1206 University Center
906-227-2439
www.nmu.edu/cse

Society of Automotive Engineers Baja Racing

Internet Resource Links:
www.careers.org
www.bls.gov

For Career Information with National Organizations:
www.asme.org -The American Society of Mechanical Engineers

NORTHERN MICHIGAN UNIVERSITY
MARQUETTE, MICHIGAN
The Academic & Career Advisement Center
2020

What to do with a major in...

Mechanical Engineering Technology