



# College of Engineering MECHANICAL ENGINEERING

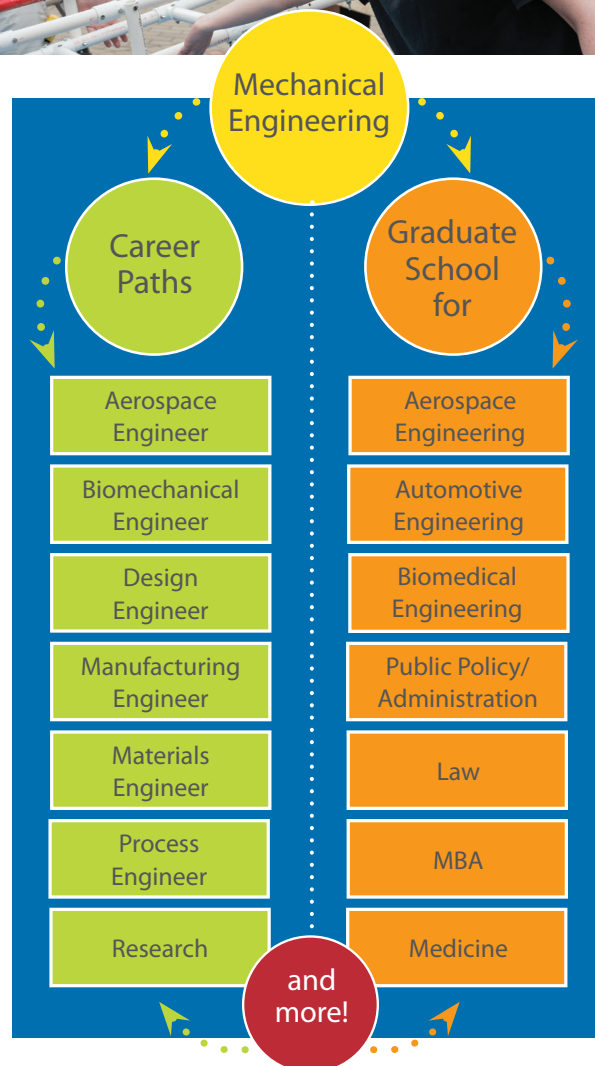


## We Build Engineers

Mechanical engineering is one of the broadest engineering disciplines and gives our graduates a wide range of career opportunities. A particular focus of UD's mechanical engineering program is on developing hands-on engineering and design skills. Our 5,500-square-foot Design Studio combines state-of-the-art facilities, such as 3-D printers and computer-aided design software, with collaborative areas where students work together in teams.

Our internationally-recognized faculty conduct research in multi-disciplinary areas of Biomechanics, Clean Energy and Environment, Composites and Advanced Materials, Nanotechnology, and Robotics. Students are encouraged to work directly with faculty on state-of-the-art research projects.

With a degree in mechanical engineering, you will find work in many industries such as aerospace, automotive, biomedical engineering, consulting, manufacturing, petroleum engineering, structural engineering, or thermal and mechanical design. Because mechanical engineers have such broad exposure to fundamental engineering science and design, they are also frequently drawn into business, finance or law. Mechanical engineering graduates at UD are prepared to face any challenge they encounter - no matter which path they choose.





College of Engineering  
**MECHANICAL ENGINEERING**

**Additional Opportunities**

Active research ensures that the content of the undergraduate program is constantly renewed and maintained at a challenging technical level that integrates discovery learning into the program. Opportunities abound for mechanical engineering undergraduates to work with faculty and graduate students as research assistants, either for pay or independent study credit.

Well-qualified Mechanical Engineering majors may apply to the 4+1 program which would culminate in the student earning a bachelor's degree in Mechanical Engineering (BME) and a Master of Mechanical Engineering (MEM) degree within five years.

**Course topics you will explore:**

- Aerospace
- Biomechanical
- Composites
- Design
- Energy
- Fluids
- Robotics
- and more!

**Contact us:**  
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**Mechanical Engineering Curriculum:**

To earn a bachelor's degree, students must complete 123 credits and meet specific requirements as outlined in the online catalog. See UD Catalog for additional details.

**FIRST YEAR**

**FALL**

- EGGG 101 - Introduction to Engineering (FYE)
- CHEM 103 - General Chemistry
- MATH 241 - Analytic Geometry & Calculus A
- CISC 106 - General Computer Science for Engineers
- Breadth Requirement Elective 1

**SPRING**

- MEEG 112 - Statics
- PHYS 207 - Fundamentals of Physics I
- MATH 242 - Analytic Geometry & Calculus B
- ENGL 110 - Seminar in Composition

**SECOND YEAR**

**FALL**

- MEEG 211 - Dynamics
- MEEG 215 - Mechanics of Solids
- MEEG 216 - Mechanics of Solids Lab
- MATH 243 - Analytic Geometry & Calculus C
- MATH 351 - Engineering Mathematics I
- Breadth Requirement Elective 2

**SPRING**

- MEEG 202 - Computer-Aided Engineering Design
- MSEG 302 - Materials Science for Engineers
- MATH 352 - Engineering Mathematics II
- MATH 353 - Engineering Mathematics III
- PHYS 245 - Introduction to Electricity and Electronics

**THIRD YEAR**

**FALL**

- MEEG 301 - Machine Design - Kinematics and Kinetics
- MEEG 311 - Vibration and Control
- MEEG 312 - Vibration and Control Lab
- MEEG 321 - Materials Engineering
- MEEG 331 - Fluid Mechanics I
- MEEG 333 - Fluid Mechanics I Lab
- MEEG 341 - Thermodynamics

**SPRING**

- MEEG 304 - Machine Design - Elements
- MEEG 332 - Fluid Mechanics II
- MEEG 342 - Heat Transfer
- MEEG 346 - Thermal Lab
- Basic Science Elective
- Breadth Requirement Elective 3

**FOURTH YEAR**

**FALL**

- MEEG 401 - Senior Design (DLE) (or)
- MEEG 402 - Senior Design FSAE (DLE)
- Technical Elective 1
- Technical Elective 2
- Breadth Requirement Elective 4

**SPRING**

- Technical Elective 3
- Technical Elective 4
- Breadth Requirement Elective 5
- Breadth Requirement Elective 6