



We Build Engineers

Mechanical engineering is one of the most diverse branches of engineering, and it involves the design and analysis of machines, structures, and materials by applying the principles of physics and materials science. Mechanical engineers can do it all, from designing cars, airplanes, and robots, to developing renewable energy systems, medical devices, and stronger and lighter composite materials.

One particular focus of UD's mechanical engineering program is the development of hands-on engineering and design skills. Our 5,500-square-foot Design Studio combines state-of-the-art facilities, such as 3D 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 can 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. UD mechanical engineering graduates are prepared to face any challenge they encounter - no matter which path they choose.

CAREER PATHS:

Aerospace Engineer
Automotive Engineer
Biomechanical Engineer
Design Engineer
Manufacturing Engineer
Materials Engineer
Process Engineer
Research **and more!**

GRADUATE SCHOOL FOR:

Acoustics
Advanced Materials
Biomechanics
Combustion
Computational Engineering
Dynamics
Electromechanical Systems
Energy and Sustainability
Micro and Nano Engineering

Robotics and Controls
Theoretical and Applied Mechanics
Thermofluid Sciences
Public Policy/Administration
Law
MBA
Medicine **and more!**

ME.UDEL.EDU



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:

Department of Mechanical Engineering
126 Spencer Lab
Newark, DE 19716
Phone: 302-831-2421
Email: me-info@udel.edu
Web: me.udel.edu

Mechanical Engineering Curriculum:

To earn a bachelor's degree, students must complete 125 credits and meet specific requirements as outlined in the online catalog. See UD Catalog for additional details.

FIRST YEAR

FALL	Credits	SPRING	Credits
EGGG 101 - Introduction to Engineering (FYE)	2	MEEG 102 - Mechanical EG Computer-Aided Design	3
CHEM 103 - General Chemistry	4	MEEG 104 - Analysis & Communication of Technical Information	2
MATH 241 - Analytic Geometry & Calculus A	4	PHYS 207 - Fundamentals of Physics I	4
CISC 106 - General Computer Science for Engineers	3	MATH 242 - Analytic Geometry & Calculus B	4
ENGL 110 - Seminar in Composition	3	Breadth Requirement Elective 1	3
Total Credits: 16		Total Credits: 16	

SECOND YEAR

FALL	Credits	SPRING	Credits
MEEG 210 - Statics	3	MEEG 211 - Dynamics	3
MEEG 241 - Thermodynamics	3	MEEG 215 - Mechanics of Solids	3
MATH 243 - Analytic Geometry & Calculus C	4	MEEG 216 - Solid Mechanics Lab	1
MATH 351 - Engineering Mathematics I	3	MSEG 302 - Materials Science for Engineers	3
PHYS 245 - Introduction to Electricity & Electronics	4	MATH 352 - Engineering Mathematics II	3
Total Credits: 17		MATH 353 - Engineering Mathematics III	3
		Total Credits: 16	

THIRD YEAR

FALL	Credits	SPRING	Credits
MEEG 301 - Machine Design - Kinematics and Kinetics	3	MEEG 304 - Machine Design - Elements	3
MEEG 311 - Vibration and Control	3	MEEG 332 - Fluid Mechanics II	3
MEEG 312 - Vibration and Control Lab	1	MEEG 342 - Heat Transfer	3
MEEG 321 - Materials Engineering	3	MEEG 346 - Thermal Lab	1
MEEG 331 - Fluid Mechanics I	3	Technical Elective 1 (Science)	3
MEEG 333 - Fluid Mechanics I Lab	1	Breadth Requirement Elective 3	3
Breadth Requirement Elective 2	3	Total Credits: 16	
Total Credits: 17			

FOURTH YEAR

FALL	Credits	SPRING	Credits
MEEG 401 - Senior Design (DLE & Capstone) (or)	3	Technical Elective 4	3
MEEG 402 - Senior Design FSAE (DLE & Capstone)	6	Technical Elective 5	3
Technical Elective 2	3	Breadth Requirement Elective 5	3
Technical Elective 3	3	Breadth Requirement Elective 6	3
Breadth Requirement Elective 4	3	Total Credits: 12	
Total Credits: 15			