

# Snapshot

MECHANICAL  
ENGINEERING

BUILDING PEOPLE AND IDEAS FOR IMPACT



U.S. News  
Rankings 2022

UNDERGRADUATE: 15  
GRADUATE: 14

Enrollment

**850**

Undergraduate  
(third- and fourth-year students)

**224**

Master's and Ph.D.

**57**

Faculty

The Penn State Department of Mechanical Engineering (ME) embraces a culture of discovery, inclusion, and excellence. Our faculty, students, and alumni are innovating today what will impact tomorrow's solutions to meeting our energy needs, homeland security, biomedical devices, and transportation systems.

Our faculty are recognized as leaders in engineering education and actively conduct research to generate new knowledge that strengthens undergraduate and graduate experiences at Penn State. Our strength in developing and delivering a modern program is directly related to their accomplishments and dedication to the profession.

**Our Mission:** Create a diverse and inclusive community that empowers excellence in research, education, and service.

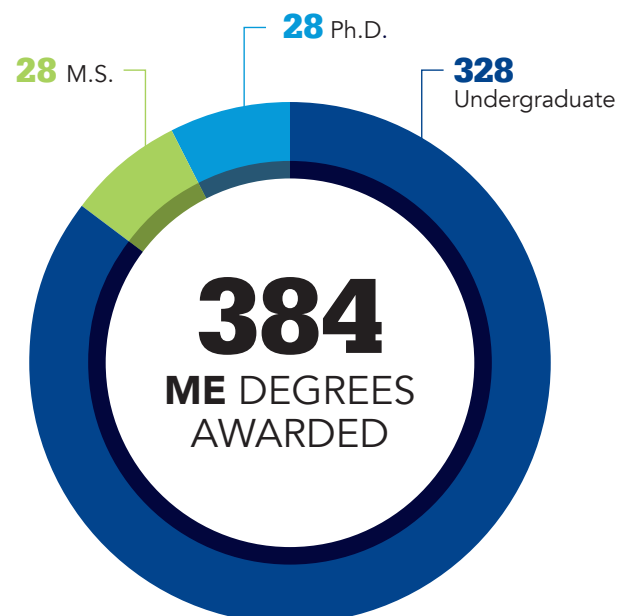
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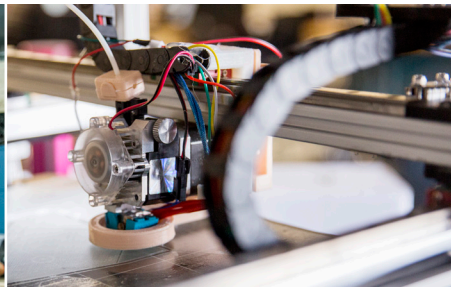
**2020-21 Research  
Expenditures**

Research expenditures include externally and internally funded projects and subcontracts.

## Degrees Awarded [ 2020-21 ]

Typically, the department has around **450 students** per undergraduate cohort, including those in pre-major coursework. Approximate degrees awarded annually:





## Notable Labs, Facilities, and Institutes

- Battery and Energy Storage Technology Center
- Biological & Robotic Intelligent Fluid Locomotion Lab
- Center for Biodevices
- Center for Gas Turbine Research, Education, and Outreach
- Convergence Center for Living Multifunctional Material Systems
- Engineering Design and Optimization Group
- Electroactive Materials Characterization Lab
- Experimental and Computational Convection Lab
- Intelligent Systems and Vehicles Laboratory
- Laboratory of Sound and Vibration Research
- Materials Research Institute
- Mechatronics Research Laboratory
- Penn State Center for Combustion, Power, and Propulsion
- Penn State Institute for Computational and Data Sciences
- Penn State Institutes of Energy and the Environment
- Precision Medical Instrument Laboratory
- Steady Thermal Aero Research Turbine Lab
- Wong Laboratory for Nature Inspired Engineering

## Student Organizations

- 3D Printing Club
- ASME Student Chapter
- Engineering Ambassadors
- Engineering Undergraduate Council
- Engineers Without Borders
- Graduate Student Association
- Human Powered Vehicle Team
- It's All About M.E.
- Lunar Lion
- Mechanical Engineering Graduate Student Council
- National Society of Black Engineers
- Penn State Advanced Vehicle Team
- Penn State Formula SAE – Penn State Racing
- Penn State Robotics Club
- Society of Hispanic Professional Engineers
- Unmanned Aerial Systems Club



## Research Areas

Biomedical Devices  
Combustion and Turbomachinery  
Controls and Optimization  
Design and Advanced Manufacturing  
Energy Systems and Storage  
Engineering Education  
Nature Inspired Engineering  
SMART Materials  
Robotics  
Transportation Systems



## Degrees Offered

Bachelor of Science (B.S.)  
  
Master of Science (M.S.), Resident  
  
Master of Science (M.S.), Penn State World Campus  
  
Doctor of Philosophy (Ph.D.)  
  
Master of Science (M.S.) in Additive Manufacturing and Design, Resident  
  
Master of Engineering (M.Eng.) in Additive Manufacturing and Design, Penn State World Campus



## ME Knowledge Lab

The Department of Mechanical Engineering reimagined its undergraduate lab experience by transforming the Reber Building basement into the ME Knowledge Lab. Completed in the fall of 2021, the Knowledge Lab is the epicenter of undergraduate student laboratory classes. The space provides students with cutting-edge experiences to explore fundamental mechanical engineering knowledge.



## Naren Gursahaney Family E-Knowledge Commons

Located on the first floor of the Reber Building, the home of mechanical engineering, the Naren Gursahaney Family E-Knowledge Commons is a student-centered space designed for peer-to-peer learning.

Equipped with individual and group study areas to foster collaboration, as well as private meeting rooms outfitted with state-of-the-art computer and video conferencing systems, the E-Knowledge Commons provides students with the advanced tools they need to learn and succeed in today's competitive global environment.

## Contact Information

Department of Mechanical Engineering  
137 Reber Building  
Penn State  
University Park, PA 16802  
Dr. Mary Frecker  
Department Head  
[mx36@psu.edu](mailto:mx36@psu.edu)

