



*"I studied turbulence and its interaction with tidal stream turbines. We were working toward **making tidal energy a viable form of renewable power** by streamlining the turbine blade design and the overall process. I love the idea of innovation. I love studying uncharted waters—and that's what this research is. **Lehigh is an exceptional place to follow your passions.** The people here want you to succeed, and I felt that support from the very beginning."*

Christopher Ruhl '16 '17G '24 PhD
Thermal Science Associate, Exponent, Inc.

MECHANICAL Engineering & Mechanics

Graduate Degree Programs

Degrees offered

- MS, Mechanical Engineering
- PhD, Mechanical Engineering

Lehigh's Department of Mechanical Engineering and Mechanics (MEM) equips graduate students with sound physical reasoning and advanced technical skills to address complex engineering challenges. Our programs prepare graduates to lead in industries such as aerospace, electronics, energy, medical devices, and transportation.

Doctoral students work closely with our distinguished faculty to conduct cutting-edge research on campus and with partners at leading universities and research centers worldwide. Students have the opportunity to publish their research in top-tier journals and present at conferences.

Master's students learn from our faculty in an individualized, small-classroom environment, and they can choose the right pace and path for their personal and professional interests (including full- and part-time degrees). Students can customize their own unique coursework degree programs with our Interdisciplinary Engineering track or pursue a thesis- or project-based degree.

MEM graduate programs combine the best of Lehigh's small-university experience with the professional advancement and impact expected of larger research institutions.

Research

- Sustainable energy (marine, nuclear fusion, solar, wind)
- Engineering for health (biomedical flows and mechanical behavior of biological systems)
- Materials discovery and manufacturing innovation
- Control systems and robotics
- Bio-inspired engineering

Mechanical engineering research at Lehigh is supported by an array of public and private sponsors, including the U.S. Department of Energy, National Institutes of Health, Office of Naval Research, Air Force Office of Scientific Research, and National Science Foundation.

Graduate Placement

- | | | |
|-----------------------------------|---------------------------|---------------------------|
| • AO Research Institute | • Google | • Northeastern University |
| • Boeing | • Joby Aviation | • SpaceX |
| • DIII-D National Fusion Facility | • Los Alamos National Lab | • MIT |

Connect with Us

Visit engineering.lehigh.edu/mem or scan the code to download the complete Mechanical Engineering & Mechanics Graduate Degree Programs guide.



Highlights

- **>\$5.6M** in annual research expenditures
- **60%** of core faculty hold NSF CAREER awards
- **20%** of core mechanical engineering faculty are women (national average: 14.8%)
- **108** journal articles/conference papers published in 2021 (82% with graduate students)



About Lehigh University

Recognized among the nation's premier research universities, Lehigh provides an academically rigorous experience to a community of more than 7,000 students.

Our small size, ideal student-to-faculty ratio, and vibrant campus allow students to collaborate on projects in and out of the classroom. Lehigh offers a "friendly community-oriented atmosphere on a hilly campus that is beyond beautiful," according to *The Princeton Review*.



engineering.lehigh.edu/mem

To learn more, please contact:

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