



COLLEGE OF ENGINEERING  
Department of  
Mechanical Engineering



# UNIVERSITY OF NORTH TEXAS<sup>®</sup> Mechanical Engineering

## Top 5 Things to Know about Us

1. We have over 20 active research faculty advisors who are nationally recognized and hold fellowships in many professional organizations.
2. We aim to provide a high-quality education to our diverse student population through excellence and innovation in teaching and research in order to serve the scientific and engineering needs of the state of Texas and the nation.
3. Our alumni can be found in key positions in some of the leading companies in Texas and around the world in fields like aerospace, manufacturing, construction, defense, academia, energy, and more.
4. Our students work on projects sponsored by DoD, DoE, NSF, and industry.
5. We offer opportunities for students to research and learn in our 19 excellent laboratories that house state-of-the-art instruments.



We have **over 20** research-active faculty members in the department.

**95%**

of Ph.D. graduates are employed in academia, industry, and research



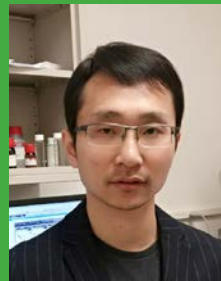
UNT is a **Tier One** research university located in Denton, TX.

## Faculty Spotlight



Dr. Maurizio Manzo is an Assistant Professor of Mechanical Engineering. He is the Director of the Photonics, Micro-Devices Fabrication Lab, and his research interests include sensor development, instrumentation and flow diagnostics, and biomedical micro-devices.

## Alumni Spotlight



"I learned how to do research at UNT, and with this foundation, I have learned how to write research funding applications and how to guide graduate students."

- Changlei Xia  
Ph. D. 2016  
Professor  
Nanjing Forestry University

## Our Programs

The department offers two master's degrees and one doctoral degree that allow students to explore the fields of mechanical engineering, management, and energy. Our programs include:

- Master of Science in Mechanical and Energy Engineering, requiring 30 hours with thesis and 33 hours without thesis.
- Master of Science in Engineering Management, requiring 33 hours. Concentrations include Construction Management, Energy, and General Engineering Management.
- Doctor of Philosophy in Mechanical and Energy Engineering, requiring 42 hours beyond MS and 72 hours beyond BS.
- Graduate Academic Certificate in Energy, requiring 15 credit hours.

## Admission

Our graduate programs are open to high-achieving students from relevant engineering backgrounds. Successful applicants to our programs should:

- Apply through [www.applytexas.org](http://www.applytexas.org).
- Submit transcripts demonstrating a GPA of at least 3.0 on previous university coursework if applying for MS or to PhD with bachelor's degree only and 3.5 in graduate coursework if applying for PhD with an MS degree.
- Submit competitive GRE scores. Successful applicants typically score 155+ on the Quantitative section and 146+ on the Verbal section. GRE may be waived for applicants that hold an ABET-accredited bachelor's degree.
- Submit proof of English language proficiency (international students only). Acceptable scores are 79 on TOEFL and 6.0 on IELTS.
- Submit three letters of recommendation, a statement of purpose, and a resume for Master's and PhD program in Mechanical and Energy Engineering.
- Take appropriate leveling courses if they have degrees outside of engineering.

*\* The department does not require GRE scores from UNT graduates for admission to its program. However, student who apply for financial assistance are strongly encouraged to take the GRE.*

## Contact Us

[me.unt.edu](http://me.unt.edu) | [mechanicalgraduate@unt.edu](mailto:mechanicalgraduate@unt.edu) | (940) 565-2400

## Funding Opportunities

Teaching and research assistantships provide support for many graduate students. In addition to a monthly stipend, assistantships also qualify students for in-state tuition rates, and many students receive tuition and fee support.

Scholarships are available to graduate students as well. The general scholarship deadline is March 1 of each year. The department also offers scholarships to qualified students throughout the year.

## Research Opportunities

Faculty members work actively with graduate and undergraduate students to develop both a broad and in-depth knowledge for solving contemporary needs in the field of mechanical engineering. You'll explore topics in the following fields:

- Materials, manufacturing, and mechanics
- Thermo-fluids
- Dynamics & controls
- Energy, environment, and sustainability

Research is conducted with faculty members in laboratories containing the most modern equipment in the nation. Among our facilities is the Zero Energy Laboratory where various energy technologies aimed at achieving net-zero consumption of energy are tested. Other facilities include:

- Computational Fluid Dynamics Laboratory
- Digital Manufacturing Laboratory
- Nanoscale Energy Transport Laboratory
- Smart Materials Laboratory
- Polymer and Composites Performance Laboratory
- Structural Testing Laboratory
- Thermal Management Laboratory
- Materials Technology Laboratory
- Photonics Micro-Devices Fabrication Laboratory

More information is available online at [mechanical.engineering.unt.edu/research](http://mechanical.engineering.unt.edu/research).

