



UNIVERSITY OF NORTH TEXAS

Graduate Programs in Mechanical Engineering

Master of Science (M.S.)

- Mechanical & Energy Engineering
- Engineering Management

Doctor of Philosophy (Ph.D.)

- Mechanical & Energy Engineering

Preparing Globally Competitive Engineers and Future Leaders

Gain opportunities to explore diverse fields such as:

- Advanced Manufacturing
- Autonomous Systems
- Solid Mechanics & Controls
- Construction Engineering
- Thermal-Fluid Sciences
- Energy & Environmental Engineering
- Corrosion Engineering
- Bio-based Sustainable Products
- Renewable & Clean Energy

**Strong
Industry
Connections**

**Innovative
and
Impactful
Research**

**Tier 1
Research
University**

MEET OUR FACULTY

Dr. Xinyi Xiao

Assistant Professor

Research Areas

- Computational Modeling for Advanced Manufacturing
- Design and Manufacturing Optimization
- Human-Robot Interactive AM



**Explore all our
faculty and their
research!**

engineering.unt.edu/me/people

Dr. Jiho Lee

Assistant Professor

Research Areas

- Smart Manufacturing Systems
- Physics-Informed AI in Manufacturing
- Robotic Autonomous Systems
- Cyber-Physical Systems (CPS)

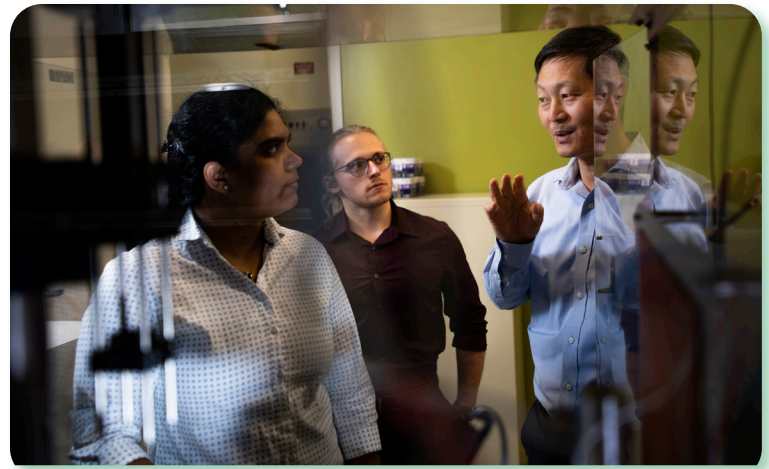


Current Research

Discover the impact of a fundamental engineering discipline driving technological innovation and addressing today's grand challenges—from energy and health to manufacturing and sustainability. Here at UNT, Mechanical Engineering faculty and graduate students pursue exciting research projects:

- Next-generation sensors for extreme environments
- Cellular level thermal characterization
- Nanoscale heat transfer phenomena
- Numerical methods for computational fluid dynamics
- Supercritical Fluids
- Thermal management of electronics
- Smart manufacturing
- Human-robot interaction
- Air quality modeling and environmental monitoring
- Manufacturing of composite and engineered materials
- Photonics micro-devices
- Characterization of high-performance structural material

Our graduate programs give students hands-on opportunities in research and project-based learning.



Need to Know

Applicants without a B.S. in Mechanical Engineering will be required to take leveling course based upon their experience.

Financial Assistance Available

- UNT and College of Engineering Scholarships
Fall application deadline March 1
- Teaching & Research Assistantships
Stipend, in-state tuition, and possible tuition & fee support

Application Checklist

- ☐ Official Transcript
International Applicants
- ☐ TOEFL, IELTS, or Duolingo Scores

Ph.D. Additional Documents

- ☐ Resume
- ☐ Statement of Purpose
- ☐ Contact Information for 3 Recommenders

APPLY &
LEARN MORE



me.unt.edu

INDUSTRY EMPLOYERS



Raytheon



Halliburton

Schneider Electric



Texas Instruments

Program Descriptions

Ph.D. Program

Discover where your passions can lead you under the guiding force of our stellar faculty. With a wide variety of research within our department, students enrolled in the Mechanical & Energy Ph.D. program have the opportunity to diversify their experience while focusing their research to their individual goals.

M.S. Programs

Join our next cohort of mechanical & energy engineers and engineering managers to build upon your solid knowledge base. Discover how to impact the future of industry and lead your peers toward change.

STUDENT SPOTLIGHT



A PhD student and teaching fellow at the University of North Texas, James Koonce's research has primarily focused on advanced manufacturing techniques and mechanical property testing.

He chose UNT as the school for continuing his education because of the excellent staff, as well as the opportunities to give back to the community.

Koonce provided his updated perspective, stating "I continue to look forward to every day of teaching and research as I am driven by supporting and mentoring students that come after me, while learning from those that came before me."