Graduate Programs @
The Jonsson School
Who are we?

Degree Programs
- Biomedical Engineering
- Computer Engineering
- Computer Science
- Electrical Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Software Engineering
- Systems Engineering and Mgmt
- Telecommunications Engineering

Research
- 43% Increase in Research Expenditures Over Past 10 Years
- 466 Grant Awards in 2020
- $50M 2020 Research Expenditures
- 45%+ of Total Research Grants Across UT Dallas

Major Accolades
- 73 Professional Fellows
- 34 National Science Foundation CAREER Awards
- 12 Young Investigator Program Awards

Within the Past 5 Years
- 420,000 ft²+ New Construction
- 40.9% Increase in BS Enrollment
- 25.3% Increase in PhD Enrollment

Driving Innovation
- 16 Business Incubations
- 28 Patents in 2020
- 34 Invention Disclosures in 2020
- $66M Endowments
- 924 Student Internships

THE UNIVERSITY OF TEXAS AT DALLAS
1986 Year Founded

THE JONSSON SCHOOL
ERIK JONSSON SCHOOL OF ENGINEERING AND COMPUTER SCIENCE
Why Jonsson School?

#1 in the country for total job growth over the past decade, Dallas Regional Chamber

$101,800 average starting salary (MS)

$103,500 average starting salary (PhD)

1,463 master’s students

599 doctoral students

150+ tenured and tenure-track faculty

$43 million in research expenditures (2021)

Top 20% R&D expenditures in engineering (National Science Foundation)

16 business incubations

Top Employers of Jonsson School Alumni

- Amazon
- Microsoft
- Texas Instruments Inc.
- Intel Corp.
- Apple
- Google
- Raytheon
- IBM
- Qualcomm
- Facebook
Student experiences

“As a Dallas native, UT Dallas has always been regarded as one of the best in the area. I’ve experienced firsthand the amazing faculty and staff, innovative research and graduate student community that confirm the university’s great reputation. I couldn’t have picked a better institution to complete my graduate studies.”
- Benjamin Jessie, PhD student

“I chose UT Dallas for a specific program. Little did I know I would be working with many professors who are renowned in their fields. I have been given many valuable opportunities to grow professionally while contributing to valuable research that advances next generation technology.”
- Oscar Medina, PhD student

“The Jonsson School welcomes student feedback to make the graduate experience better. The Department of Bioengineering has allowed me to grow as a scientist, professional and leader. I am happy to have such a great university in my hometown!”
- Dominique James, PhD student
Bioengineering Professor Elected to AIMBE
College of Fellows

Dr. Shalini Prasad, professor and head of bioengineering at The University of Texas at Dallas, was elected a fellow of the American Institute for Medical and Biological Engineering (AIMBE) for wearable and portable medical technology.

“Dr. Prasad is an amazing, world-class bioengineer with an incredible passion for bringing technology to the bedside and making the world a better place for people around the world,” said Dr. Sheng-Wen Wang, provost and executive vice president for academic affairs.

Jonsson School Professor Earns ASME Award for Bioengineering Work

Dr. Zhenpeng Qin, associate professor at The University of Texas at Dallas, the 2022 Y.C. Fung Early Career Award of the American Society of Mechanical Engineers for outstanding bioengineering investigators, was named the fellowship recipient.

Qin, who joined the Erik Jonsson School of Engineering and Computer Science in 2011, focuses on the understanding of biotransformative nano-engineering and for revolutionizing precision medicine.

“I am honored and humbled after the bioengineering fellowship support from UTD, collaborator, and many colleagues,” said Dr. Qin.

Mechanical Engineering Associate Department Head Named ASME Fellow

The American Society of Mechanical Engineers (ASME) recently named Dr. Dong Qian a fellow, an honor attained by just over 3% of the organization’s more than 90,000 members worldwide.

Qian is a professor of mechanical engineering and an associate department head over the mechanical engineering graduate program who researches the mechanics of materials over time. He has been an active member of ASME for more than 10 years and enjoys mentoring students through the organization. His
UT Dallas - Department Research Thrusts

Bioengineering
- https://be.utdallas.edu/research/
- Bioimaging
- Biomaterials
- Biomechanics
- Biosensors/Bioelectronics
- Neural Engineering
- Systems Biology

Computer Science
- https://cs.utdallas.edu/research/research-areas/
- Cyber Security
- Computing Theory
- Computer Systems
- Artificial Intelligence
- Machine Learning
- Software Engineering
- Networks

Electrical and Computer Engineering
- https://ece.utdallas.edu/research/
- Hardware Cyber Security
- Applied Machine Learning
- Electronic Devices/Mfg
- Analog Circuits/Design
- RF and Microwave Circuits
- Power Electronics/Machines
- Next Generation Communications
- Signal Processing for Speech, Hearing, Images etc.

Materials Science and Engineering
- https://mse.utdallas.edu/research/
- Micro/Nano Electronics
- AI and VR for Education
- Biomedical
- Catalysis
- Energy Conversion/Storage
- Flexible Electronics
- Sensors
- Synthesis/Characterization of Nanomaterials
- Theory and Modeling

Mechanical Engineering
- https://me.utdallas.edu/research/
- Fluid and Thermal Systems
- Advanced Manufacturing
- Sustainable Energy and Energy Efficiency
- Control Systems and Robotics
- Experimental Mechanics and Nano-Mechanics
- Bio/Nano Technology Engineering Education

Systems Engineering
- https://syse.utdallas.edu/research/
- Control, energy and mechatronic systems
- Computational cancer biology
- Compressed sensing
- Cyber-physical system security
- Network control
- Robotics
- Systems design and development
Why graduate school?

It will cost me more money…
  • MYTH #1

It will limit my options…
  • MYTH #2

It is only for students with top grades…
  • MYTH #3

It is just more school…
  • MYTH #4

The Myths of Graduate School by
Dr. Joshua Summers
ME Department Head
UT Dallas
Myth 1 Demystified: Funding Options

- **Fellowships**
  - Funded by NSF, DOE, DOD, etc.
  - Requires excellent grades, provides stipend + tuition, allows you to go anywhere
  - Fellowship and scholarship can be found on university websites

- **Research Assistantships (RAs)**
  - Funded by Faculty
  - Work on research projects (industry, government), provides stipend + tuition, tied to a specific faculty member

- **Teaching Assistantships (TAs)**
  - Funded by Department
  - Experience in teaching labs and classes, provides stipend + tuition, often independent of specific faculty member

- **Unfunded**
Myth 2: Options with advanced degree

Lockheed Martin
Associate Mbr Eng Staff
Entry Level (BS in Engineering)

The tasks for this position generally comprise software or limited hardware design, basic development, and testing of a portion of a concept development prototype as a part of a development team. The candidate will conduct applied research in robotics & autonomy for both internal and external projects, working in collaboration with LM ATL colleagues and world-class academic researchers, national labs and other advanced technology organizations.

- Lockheed Martin
- Sr Member Eng Stf
- 5 years experience OR advanced degree
- Candidate will be a key contributor to the Human Systems and Autonomy research area within Lockheed Martin Advanced Technology Laboratories, will communicate with Lockheed Martin internal and external customers to define needs and execute on research to address these needs in both the short and long term.

Work within a distributed team of scientists and engineers at ATL, other Lockheed Martin facilities, outside companies, and universities to perform research in human systems integration, human performance augmentation, and human-machine teaming, with a focus on designing and executing large-n studies of human behavior in diverse environments.

Applicants are expected to have ideas for research and have a desire to see these research concepts funded.

Research will focus on generating approaches that can be used to enhance Lockheed Martin’s goal of enabling human-system teaming and to making leaps ahead in human-system effectiveness. R&D could take place in the areas of human-systems integration, human-robot interaction, performance monitoring, or adaptive training.

Applicants selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information.
Myth 3: Ideal Students Are…

Faculty define the ideal student as:
• Inquisitive
• Hard working
• Persistent
• Passionate
• Open minded

Students are evaluated for potential to succeed in graduate school
• GRE – Writing, Verbal
• Last few semesters demonstrated success
• Research/Job experience
• A real purpose to go to graduate school
Myth 4: Where change happens

MS non-thesis or MS ENGR (coursework only options)

- Companies do not distinguish between research/non-research degrees
- Focused on increasing your domain knowledge
- ~2 year; no funding support

MS Thesis

- Work closely with advisor (one-on-one mentoring) to learn how to research
- Focus is on research (problem defining, setting, executing, understanding)
- ~2 years; funding support (departmentally dependent)

PHD

- Work closely with advisor (one-on-one mentoring) to execute your own research
- Focus is on research and on professional development
- ~3 years (with a previous MS degree); ~5 years (direct without MS degree)
Options for applying

**UT Dallas Quick Admit**

Due to COVID-19, recent graduates face one of the most precarious economies and difficult hiring circumstances in over a decade. We have designed the Quick Admit process to facilitate an application to continue your education in a UT Dallas graduate program.

The Graduate Quick Admit application is only for students who are currently pursuing or have recently received an undergraduate degree at UT Dallas. The Graduate Quick Admit application offers two paths: Auto Admit or Expedited Review. Depending on the term you are applying for, eligible applicants must have recently received a bachelor’s degree from UT Dallas or plan to graduate with a bachelor’s degree from UT Dallas based on the term eligibility requirements below:

- Summer 2022: Eligible applicants must have received a bachelor’s degree from UT Dallas in Fall 2020 or later, or plan to graduate in Spring 2022.
- Fall 2022: Eligible applicants must have received a bachelor’s degree from UT Dallas in Spring 2021 or later, or plan to graduate in Summer 2022.
- Spring 2023: Eligible applicants must have received a bachelor’s degree from UT Dallas in Summer 2021 or later, or plan to graduate in Fall 2022.

Please note that an active NetID is required to apply through Quick Admit. Your Net ID allows you to access services such as Galaxy, e-Learning, etc. If your NetID is not active, please complete the reactivation request form. You should receive an email in two business days verifying your NetID is active. Once your NetID is active, you should have access to submit your Quick Admit application.

Application requirements vary by program, so please review the eligibility requirements below before you apply.

Apply Now for Quick Admit

**Auto Admit**

Depending on your desired graduate program, UT Dallas graduates with the appropriate undergraduate major and a 3.2 GPA in their major, may be eligible for automatic admission through the Quick Admit- Auto Admit path. See Auto Admit requirements for participating graduate programs.

Eligible UT Dallas graduates are exempt from the following requirements:

- Application fee
- Statement of Purpose
- Letters of Recommendation
- GMAT/GRE

All admission decisions are subject to program availability and capacity constraints and some programs may have additional requirements. Successful completion of an undergraduate degree is required for enrollment to any graduate program.

**Expedited Review**

Depending on the program you are applying to, UT Dallas graduates with the appropriate undergraduate major and a 3.0 GPA in their major, may be eligible for admission through the Quick Admit- Expedited Review path. See Expedited Review requirements for participating graduate programs.

Eligible UT Dallas graduates may be exempt from one or more the following requirements:

- Application fee
- Statement of Purpose
- Letters of Recommendation*
- GMAT/GRE*
Applying & Deadlines

- Application requirements are always spelled out online, you can find many of the UTD programs/requirements through this website: https://graduate-admissions.utdallas.edu/degrees/school/
- They will include:
  - Transcripts
  - GPA requirements
  - GRE Test scores
  - Letters of Recommendation
  - Resume
Applying & Deadlines

- Deadlines for Fall:
  - Early: January 15th
  - Regular: May 1st
  - Late: Prior to classes
Pursuing graduate education

Consider the following questions:
1. What area of engineering do I want to study?
2. What graduate schools would best fit my interests (faculty, research, opportunities, jobs)?
3. What are the application deadlines/dates?

ERIK JONSSON SCHOOL
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