



# TAKE THE NEXT STEPS FOR YOUR SUCCESS

### Visit Discovery Park

[engineerthefuture.unt.edu/tour](http://engineerthefuture.unt.edu/tour)  
or 940-565-4300

### Apply for admission

[engineerthefuture.unt.edu/apply](http://engineerthefuture.unt.edu/apply)

### For more information on the College of Engineering:

940-565-4300

 Join us on Facebook!  
[facebook.com/northtexas](https://facebook.com/northtexas)

### About UNT

Established in 1890, UNT is one of the nation's largest public research universities with 38,000 students. As a catalyst for creativity, UNT fuels progress, innovation and entrepreneurship for the North Texas region and beyond. Our programs are internationally recognized with research and scholarship spanning all disciplines. We offer 101 bachelor's, 82 master's and 38 doctoral degree programs.

[engineerthefuture.unt.edu](http://engineerthefuture.unt.edu)

**UNT**  
EST. 1890



## UNIVERSITY OF NORTH TEXAS

# COLLEGE OF ENGINEERING

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**UNT** COLLEGE OF ENGINEERING  
EST. 1890

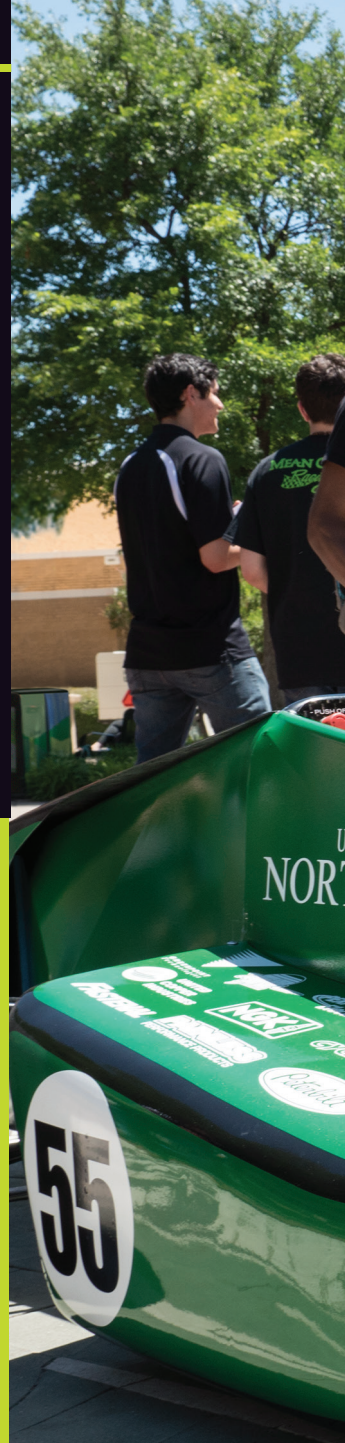
The University of North Texas System is firmly committed to equal opportunity and does not permit — and takes actions to prevent — discrimination, harassment (including sexual violence) and retaliation on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity or expression, age, disability, family status, genetic information, citizenship or veteran status in its application and admission processes, educational programs and activities, facilities and employment practices. The University of North Texas System immediately investigates and takes remedial action when appropriate. The University of North Texas System also takes actions to prevent retaliation against individuals who oppose a discriminatory practice, file a charge, or testify, assist or participate in an investigative proceeding or hearing. Direct questions or concerns to the equal opportunity office, 940-565-2759, or the dean of students, 940-565-2648. TTY access is available at 940-369-8652. AA/EOE/ADA

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# REAL WORLD IMPACT

At the University of North Texas, our student-focused philosophy, world class faculty and exceptional research facilities will give you the freedom to pursue and achieve your goals. With state-of-the-art labs and equipment housed in our 300-acre Discovery Park — about five miles north of UNT's main campus in Denton — the College of Engineering offers you a unique environment to learn, conduct research and connect with your peers and faculty mentors.

The College of Engineering offers 10 bachelor's, seven master's and four doctoral degree programs that will provide you with hands-on, project-based study, preparing you to make a difference in the real world.



## UNT's College of Engineering offers:

### UNIQUENESS

The Department of Mechanical and Energy Engineering, the first of its kind in the nation, offers an opportunity to create a more sustainable and energy-efficient future.

### SPECIAL STUDY

You may choose from specializations and certificates in the areas of cybersecurity, game programming, manufacturing and nuclear engineering.

### CONNECTIONS

You can become involved in active network of more than 18 engineering student organizations.

### RESOURCES

While still an undergraduate, you'll have access to research grant funding and opportunities to begin research.

### LEGACY

The Department of Computer Science and Engineering is one of the oldest in the country, with more than 45 years of excellence.



Engineering technology students build a car each year to compete in a Society of Automotive Engineers competition.

#### INNOVATION

Learn in extraordinary lab facilities such as the Computational Epidemiology Research Laboratory, the Laboratory for Recreational Computing, and the B3 Lab, which includes a 3-D printer that prints artificial tissue through the use of specialized inks and cell cultures.

#### CONVENIENCE

With valid UNT IDs, students may use the free bus service between Discovery Park and UNT's main campus, which runs up to 15 hours a day.

"Having our own campus at Discovery Park reinforces a sense of community in the college. The professors care a lot about you and want you to be comfortable asking for their help."

— Madeline DeVega  
Biomedical  
Engineering student



# UNDERGRADUATE



## B.S. programs:

- Biomedical Engineering
- Computer Engineering
- Computer Science
- Electrical Engineering
- Materials Science and Engineering
- Mechanical and Energy Engineering

## B.S.E.T. programs:

- Construction Engineering Technology
- Electrical Engineering Technology
- Mechanical Engineering Technology

## B.A. program:

- Information Technology

# TE PROGRAMS



For your bachelor's degree, you may choose from 10 majors offered from six departments. No matter the major, you'll gain hands-on experience and valuable access to research opportunities in your field that will set you apart from the competition.

Our students also work with corporate partners on their senior design capstone projects, applying their knowledge in professional settings and working with leaders in their intended careers.

## Department of Biomedical Engineering

Our **Biomedical Engineering** students learn to develop computer programs, devices and materials that improve the lives of medical professionals and their patients.

## Department of Computer Science and Engineering

Graduates of our **Computer Engineering, Computer Science** and **Information Technology** degree programs become computer programmers, manage IT systems and design computer hardware.

## Department of Electrical Engineering

Our **Electrical Engineering** students design, develop and improve electronic devices and systems like cell phones, circuits, drones and telecommunication systems.

## Department of Engineering Technology

**Construction Engineering** students develop technical knowledge and skills that focus on the management and technical aspects of the construction industry.

**Electrical Engineering** students develop skills in communication systems, control systems, digital electronics, linear electronics and network analysis.

**Mechanical Engineering** students learn to design and manufacture machines, products and tools.

## Department of Materials Science and Engineering

Our **Materials Science and Engineering** students learn to develop and engineer new ceramics, metals, plastics and semiconductors for every industry.

## Department of Mechanical and Energy Engineering

**Mechanical and Energy Engineering** students learn to create, design, test and improve mechanical and energy devices, materials, processes and systems.

# GRADUATE PROGRAMS

The College of Engineering offers seven master's and four doctoral degree programs. Our engineering graduate students work with multidisciplinary faculty researchers who pioneer ideas that benefit the global community. Researchers use cutting-edge technologies, including 3-D printing and computational systems, to address challenges in energy, the environment, health care, infrastructure and security.

## M.S. programs

- Biomedical Engineering
- Computer Engineering
- Computer Science
- Electrical Engineering
- Engineering Technology
- Materials Science and Engineering
- Mechanical and Energy Engineering

## Ph.D. programs

- Computer Science and Engineering
- Electrical Engineering
- Materials Science and Engineering\*
- Mechanical and Energy Engineering\*

\*Concentration in Biomedical Engineering



"I came to UNT because it offered Mechanical Engineering with a strong emphasis on energy conservation. The projects I am working on right now focus on ways to reduce the amount of plastic pollution in the planet as well as bio-based polymers that can potentially replace the current petroleum-based polymers."

— Mariela Alvarez  
Mechanical and Energy  
Engineering student



# CARING FACULTY

# EXCITING RESEARCH

College of Engineering faculty advance the frontiers of knowledge and improve the quality of our lives through their research. Highly esteemed in their fields, our professors also are very approachable, as teachers and mentors.

You'll have an opportunity to conduct research alongside our renowned faculty, including:

## **Dr. Gayatri Mehta**

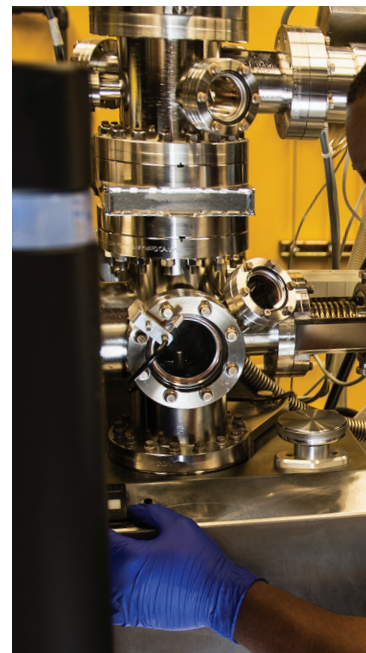
Dr. Mehta is the director of the Reconfigurable Computer Laboratory in the Department of Electrical Engineering. One of her primary research projects is "UNTANGLED," funded by the National Science Foundation. This mapping placement game discovers mapping algorithms by using human ability and intuition to recognize patterns and opportunities even in complex problems.

## **Dr. Armin Mikler**

Dr. Mikler leads the Computational Epidemiology Research Laboratory in the Department of Computer Science and Engineering. The center focuses on disease outbreak modeling, visualization of complex data, geospatial analysis and crisis response plan design.

## **Dr. Vijay Vaidyanathan**

Dr. Vaidyanathan is the founding chair of the Department of Biomedical Engineering, one of the college's newest programs. He conducts research on biomedical instrumentation, biomedical optics, EEG-based epilepsy studies and exoskeletons.







## Other laboratories include:

### **AMMPI**

The Advanced Materials and Manufacturing Processes Institute brings together a diverse group of faculty members who focus on advanced manufacturing processes, computational equipment, functional materials and structural materials.

### **Autonomous System Laboratory and Communications and Signal Processing Laboratory**

These two labs provide opportunities to research new ways of helping first responders in times of crisis. Through cellular networks or wi-fi, both labs use drones as a method of establishing connectivity and offer students an inside look at one of today's modern technologies.

# YOUR HOME AWAY FROM HOME

UNT is located in Denton, a progressive city of about 134,000 people that is just 36 miles north of Dallas and Fort Worth. The location provides a wealth of job opportunities and internships for College of Engineering students and graduates. Denton was named one of the Top Ten Best College Towns in the nation by *Livability.com*

## Student activities

As a College of Engineering student, you'll make friends in class and also have plenty of opportunities to connect at Discovery Park. The Center for Student Affairs and the Discovery Park Student Advisory Board plan events such as Geek Week, Homecoming Week, National Engineers Week, hackathons, movie screenings and many more activities. The Nest offers gaming activities in team environments.

## Ensuring your success

Engineering students have access to free one-on-one tutoring at Discovery Park, with no appointments necessary. Academic advisors will help you plan your degree.

Participating in an engineering student organization will help you gain experience in leadership. Students in many of these organizations participate in challenging engineering competitions and professional development experiences around the world.





Discovery Perk, the coffee shop at Discovery Park, is a popular gathering place for students.



“Being in the National Society of Black Engineers has allowed me to network with students and faculty and unlocked my ability to plan, organize and execute events that involve others on campus. As the president, I want us to have a better impact on campus.”

— Shelton Childress  
Information Technology student



# PREPARING FO

Employers prefer to hire college graduates with hands-on experience. Denton's location in the Dallas-Fort Worth area, which has the fourth highest concentration of Fortune 500 companies in the U.S., makes it easier for you to score the internship you need.

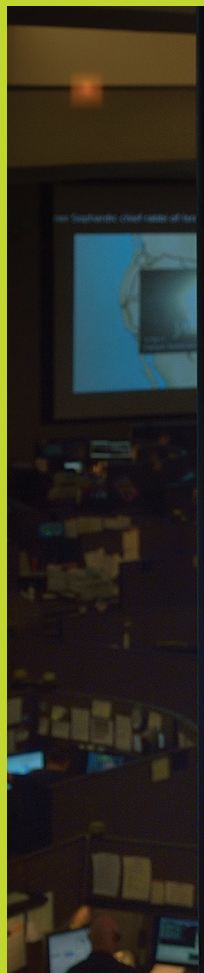
The College of Engineering has extensive relationships with industry partners that open doors for internships and full-time employment after graduation. Each semester, the Engineering and Computer Science Internship and Career Fair gives students and alumni an opportunity to interview with more than 90 companies, including GE Transportation, Google, L3 Technologies, Peterbilt and Stryker.

The College of Engineering has more than 6,000 alumni, most of whom are in the North Texas region. Alumni also live in Atlanta, Denver, the greater Los Angeles area, the San Francisco Bay area and Seattle.

## Notable alumni:

- **Nelson Cichitto ('89)**, chairman and CEO, Avatier Corporation
- **Kino Coursey ('09 Ph.D.)**, chief scientist, Daxtron Laboratories
- **Ranette Halverson ('93 Ph.D.)**, chair, Department of Computer Science, Midwestern State University
- **Fazeen Issadeen ('14 Ph.D.)**, senior data scientist, Armor Defense
- **Jason Lillard ('91)**, president and principal, Ridgemont Commerical Construction
- **Mike Maneshian ('11 Ph.D.)**, senior quality engineer, Tesla
- **David Morse ('97)**, chairman and CEO, Multicam Holdings and president, Growth Paradigm
- **Elaine Pettit ('95 Ph.D.)**, engineering fellow, Raytheon
- **Cesar Stastny ('04)**, director of development, Activision
- **Hakan Seylan ('12 Ph.D.)**, senior research engineer, Netflix
- **Marc Whitten ('96)**, vice president and general manager, Amazon

Visit [engineerthefuture.unt.edu/alumni](http://engineerthefuture.unt.edu/alumni) for more notable College of Engineering alumni.



# R THE FUTURE



Lettie Haynes ('82), assistant vice president of technology services, Burlington Northern Santa Fe Railway



Jay Chenault ('84), president and CEO, Custom Computer Cables of America



Larry Sullivan ('92), partner group engineering manager, Azure IoT-Things that move, Microsoft

You must be admitted to the University of North Texas before you can be admitted to the College of Engineering as an undergraduate student.

Undergraduates apply online to UNT through Apply Texas ([www.applytexas.org](http://www.applytexas.org)) or The Common Application ([commonapp.org](http://commonapp.org)). Your high school class rank and math and total SAT or ACT scores will determine your admission to most of our programs. If you're applying to our Construction, Electrical or Mechanical Engineering Technology programs, only your math SAT or ACT score will be considered. More specific information is at [engineerthefuture.unt.edu/admissions](http://engineerthefuture.unt.edu/admissions).

If you're applying as a transfer student, you'll be admitted to the College of Engineering after completing Pre-Calculus with a grade of C or higher, and if the average GPA of your math, science and engineering courses is 2.0 or greater.

If you're applying as a graduate student, check the admissions requirements for your master's or doctoral degree program at [engineerthefuture.unt.edu/admissions](http://engineerthefuture.unt.edu/admissions).



## Above the rest for thousands less

UNT's popular Eagle Express Tuition Plan lets you lock in your academic costs for four years, earn your bachelor's degree sooner and save up to \$3,000 when you graduate on time. No other Texas university offers a more innovative solution to rising college costs.

## By the numbers

About 75 percent of UNT students receive scholarships and financial aid totaling more than \$350 million annually. To receive first consideration for awards, submit the FAFSA (Free Application for Federal Student Aid) in the fall.



# MISSIONS AND FINANCIAL AID