

Erik Jonsson School of Engineering and Computer Science

Master of Science in Telecommunications Engineering



Program Description

The Master of Science in Telecommunications Engineering program prepares students to take on leadership roles in a wide variety of industries and to tackle challenging in research, development and design that require complex and innovative problem solving. Designed by world-class faculty, the Telecommunications Engineering curriculum teaches students advanced concepts related to software and hardware telecommunications, network theory and established and emerging technologies.



The program offers courses and research are offered in a variety of telecommunications engineering subfields, including:

- Fault-tolerant computing
- Digital signal processing and digital communications
- Modulation and coding
- Electromagnetic-wave propagation
- Fiber and integrated optics and lasers
- Wireless communications, mobile IP and wireless multimedia
- DWDM networks
- QoS assurance protocols
- Network design and optimization
- Telecommunications software
- Systems performance
- Ad-hoc and PCS wireless networks
- Network security and high-speed protocols

Benefits

- *World-Class Faculty:* The program is led by faculty of the Erik Jonsson School of Engineering and Computer Science who are widely cited experts in their respective fields, many of whom also have professional industry experience.
- *Comprehensive Curriculum:* Courses in the Telecommunications Engineering master's program will introduce students to new ideas, technologies, and competencies while also teaching them the skills they'll need to thrive in competitive, ever-changing industries.
- *Specialized Subfields:* Students have the opportunity to study numerous subfields based on their particular interests and career aspirations.
- *Facilities and Infrastructure:* UT Dallas maintains a large network of computer facilities, including faculty laboratories and specialized computers for research within the Telecommunications Engineering program.
- *Convenience:* With both daytime and evening classes, the program provides flexible coursework options for everyone, including students employed on a full-time basis.
- *Location:* Situated in the greater Dallas region—recently rated by *Forbes* magazine as the #1 “Best City for Jobs”—UT Dallas provides students with easy access to employers and internship opportunities, not to mention a large and supportive alumni population.

Career Opportunities

Graduates of the Telecommunications Engineering master's program have gone on to pursue careers with local, national and international employers. Some of the most popular professional positions include:

Contact Information

Jeong Bong (JB) Lee ECE Graduate Program Head

Email: jblee@utdallas.edu
Phone: 972-883-2893
Office: ECSN 2.716B

Graduate Program Information

Email: ecegradprogram@utdallas.edu
Phone: 972-883-2139
Office: ECSN 2.7 Suite

ece.utdallas.edu

- Telecommunications Software Engineering
- Software Test Engineering
- Telecommunications Network Engineering

Marketable Skills

Upon successful completion of the MS in Telecommunications Engineering, graduates will be able to enter the workforce with the following skills:

- Broad understanding of Telecommunication Engineering
- Expertise in current technology of Telecommunication Engineering
- Ability to design, conduct, analyze and communicate Telecommunication Engineering experiments
- Ability to create effective solutions to modern Telecommunication Engineering problems

Application Deadlines and Requirements

Please take note of all application deadlines and visit the Apply Now webpage to begin the application process. See the Telecommunications Engineering degree program webpage for additional information.

Applicants to the Telecommunications Engineering master's degree program should have:

- An undergraduate preparation equivalent to a baccalaureate in telecommunications or electrical engineering from an accredited engineering program. Students from other engineering disciplines or from other science and math areas may be considered for admission to the program on a case-by-case basis; however, some additional coursework may be necessary before starting the master's program.
- A grade point average (GPA) in upper-division quantitative coursework of 3.0 or better on a 4.0-point scale.
- GRE Test Scores: GRE revised scores of 154 (verbal), 156 (quantitative), and 4 (analytical writing components) are advisable based on the program's student success outcomes.
- Letters of Recommendation: Applicants must submit three letters of recommendation from individuals able to judge the candidate's potential for success in the master's degree program.
- Admissions Essay: Applicants must submit an essay outlining the candidate's background, education, and professional goals.
- International applicants must submit a TOEFL score of at least 80 on the internet-based test. Scores must be less than two years old. See the Graduate Catalog for additional information regarding English proficiency requirements for international applicants.

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The University of Texas at Dallas
800 W. Campbell Rd., ECW 41
Richardson, TX 75080-3021
engineering.utdallas.edu

utdallas.edu