The MS in Telecommunications Engineering program prepares students for leadership roles in research, development and design positions that require the use of skillful and imaginative solutions to engineering problems. Students who have earned a BS degree may apply to the MS in Telecommunications Engineering program. The TE curriculum calls for a balanced knowledge in software and hardware of telecommunications, network theory and technology.

Courses and research are offered in a variety of subfields of telecommunications engineering, including: fault-tolerant computing, digital signal processing, digital communications, modulation and coding, electromagnetic-wave propagation, fiber and integrated optics, lasers, wireless communications, mobile IP, wireless multimedia, DWDM networks, QoS assurance protocols, network design and optimization, telecommunications software, performance of systems, ad-hoc and PCS wireless networks, network security and high speed protocols.

The university maintains a large network of computer facilities, including PCs, Unix work stations and specialized computers for research within the program and faculty laboratories. The Jonsson School has developed a state-of-the-art information infrastructure consisting of a wireless network in all buildings and an extensive fiber-optic Ethernet.

**Career Opportunities**

Graduates of the program seek positions such as: Telecommunications Software Engineer; Software Test Engineer and Telecommunications Network Engineer for public and private sectors. TE graduates find employment in local, national and international enterprises.

**Program Description**

The MS in Telecommunications Engineering requires the completion of a minimum of 33 semester credit hours. Both thesis and non-thesis options are available and can be pursued in full-time or part-time basis.

Various financial supports are available to qualified MS students, including Teaching and Research Assistantships, fellowships and scholarships. MS students who have been offered teaching or research assistantship are expected to pursue the thesis option under a faculty's guidance.

The Jonsson School operates one of the largest internship and cooperative education program of its kind, averaging more than 1,200 undergraduate and graduate placements a year at high-technology companies including Texas Instruments, Verizon, Cisco, AT&T, Alcatel, Qualcomm, Ericsson, Amazon, Apple and Google. A large number of MS students apply and work in companies as an intern after two semesters in their MS program.

For complete admission and degree requirements, view the Graduate Catalog at [catalog.utdallas.edu](http://catalog.utdallas.edu).

** 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