Through the **Wireless Track**, you will learn about wireless hardware, software and protocols along with the policy and business strategies guiding wireless industry activities.

### BE A LEADER IN WIRELESS

CU-Boulder’s Interdisciplinary Telecom Program (ITP) master’s degree from the Wireless Track provides you with the knowledge and skills to lead within the fast moving wireless communication industry. The Wireless Track uses a hands-on approach to learning wireless concepts using both industry standard wireless test equipment along with actively programming unique wireless devices using Software Defined Radio (SDR). Classes include test, measurement and analysis as part of the learning environment. Concepts taught include 4G and 5G wireless protocols, capacity planning, antennas and propagation, unlicensed wireless system operation, spectrum sharing techniques, wireless policy and regulation, link budgets, modulation methods and coding fundamentals, medium access control operation along with measurement and trouble-shooting techniques for both indoor and outdoor wireless systems. With your training and course-work in our program, you’ll learn both how wireless works and also the policy and business strategies guiding wireless industry activities.

A **DEGREE IN TELECOM** PREPARES YOU FOR CAREERS IN

- RF NETWORK DESIGN
- WIRELESS NETWORK PERFORMANCE
- MEMBER TECHNICAL STAFF

After graduation, you’ll have the skills needed to:

- Design, build and operate wireless broadband networks
- Understand data networks, standards, and regulatory policies impacting the wireless industry
- Understand and utilize Wi-Fi wireless networking standards and Long Term Evolution (LTE) Technologies
- Software programming to develop, operate, and manage wireless systems
Wireless Track students engage in classes that allow them to program and build custom radio frequency test equipment, transmitters, receivers, antennas, and wireless communication systems using SDR.

**REQUIRED COURSES**
/// Wireless Systems and Lab
/// Wireless LANs
/// Wireless and Cellular Communications
/// Advanced Wireless Lab

**ADMISSION REQUIREMENTS**
We accept students from varied backgrounds. In making admission decisions, we review all elements of the application packet. Applicants must meet the following criteria:

/// A bachelor’s degree from a four-year college or university of recognized standing

/// A GPA of at least 3.0

/// GRE, GMAT, or LSAT cumulative scores

/// TOEFL or IELTS scores for applicants whose native language is not English

/// An aptitude for working with technology, and strong written and oral English skills

**FACULTY SPOTLIGHT**
Ken Baker is a Scholar in Residence in the program where he teaches wireless courses and provides guidance to students in thesis and dissertation research. He has held various positions related to RF network planning and new product research and development at both Nortel and Qualcomm Inc. In addition he has participated in the rollout and optimization of cellular networks worldwide. He holds 16 patents in wireless mobile communication system technology.

**DEGREES OFFERED**
/// MS
/// PhD

**DID YOU KNOW?**
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