The college is composed of the following five academic departments.

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

**Research**

Research interests in the Department of Computer Science and Engineering include computer security, databases, image understanding, visualization, game programming, wired and wireless networks, information fusion, artificial intelligence, natural language processing, computer systems architecture, agent-based systems, collaborative learning, parallel and distributed processing, and numerical analysis.

The research areas in the Department of Electrical Engineering include signal processing, wireless communication, channel modeling and measurement, radar systems, VLSI design and testing, analog and mixed-signal IC design, nano-scale semiconductor device modeling and design, wireless sensor network design, radio-frequency identification (RFID) systems, sensor and sensor interface design, coding theory, bioinformatics, artificial intelligence, pattern recognition and multisensor fusion.

Research capabilities in the Department of Engineering Technology include small target visibility, noise cancellation, VLSI design of antenna array, logic circuit design, applications of technology to education, biomedical optics, pulse oximetry, telemedicine, liquid nitrogen automobiles, mechanical behavior of materials for structures and micro-mechanical systems, control systems, field emissions and corrosion engineering.

Research programs in the Department of Materials Science and Engineering emphasize hands-on research with modern equipment and facilities. Areas of research include polymers, nanocomposites, electronic materials and molecular electronics.

Research programs in the Department of Mechanical and Energy Engineering emphasize the fundamentals of energy production, management and distribution. Areas of research include advanced thermomechanical conversion, computational fluid dynamics and heat transfer; multiphase flow, mass transfer and combustion; heating, ventilation and air-conditioning; and advanced thermal manufacturing methods with lasers.

**Advising**

For general information, contact the Toulouse School of Graduate Studies. For specific requirements for graduate degrees, contact the appropriate department chair or graduate advisor.