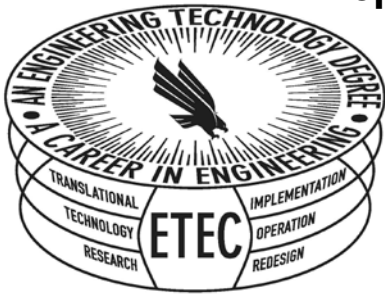# A New Minor in
Electronics Offered by the
Department of Engineering Technology

To sign up or for further information please e-mail Dr. Leticia Anaya at Lanaya@unt.edu with the subject line: Minor in Electronics

The Department of Engineering Technology emphasizes the application of concepts using coordinated laboratories and other experiential activities. Since the 1980s, microprocessors, microcontrollers and other digital technologies have made their way into virtually every conceivable engineered system in consumer electronics, instrumentation, and home appliances, and in advanced electronics applications covering many fields including biomedical, communications, energy, manufacturing, military, and transportation.

The Minor in General Engineering Technology – Electronics is intended to give you the fundamental background to enter the exciting and challenging field of electronics applications. The Minor requires a minimum of 18 semester hours. When a Minor required course (or equivalent) is also part of your Major degree plan, please consult with the ETEC department to select an appropriate substitute course. The Minor also allows for a course substitution with permission of the Coordinator for Electrical Engineering Technology and the Engineering Technology Department Chair. All classes are taught at Discovery Park, and the Minor is designed so you may start taking courses as a freshman or sophomore, and complete the requirements during your junior and senior years.

CORE: required 15 hours   * New course Fall 2013

- **ELET 1720 Introduction to Electronics*** – 3 hours (2;3) A survey of topics fundamental to the electronics industry. Introduction to the hardware and software tools used in industry. Emphasis is on experiential learning through laboratory experiences. Open to anyone interested in learning the fundamentals of electricity, digital logic, and semiconductors.
- **ENGR 2720/2730 Logic Design** – 4 hours (3;3) Digital computers and digital information processing systems; Boolean algebra, principles and methodology of logic design; machine language programming; register transfer logic; microprocessor hardware, software and interfacing; fundamentals of circuits and systems; computer organization and control; memory systems, arithmetic unit design.
- **ENGR 2750 Introduction to Microprocessors** – 4 hours (3;3) The fundamentals of microprocessor hardware and assembly language interaction are studied in detail. Emphasis is on the use of the processor to control external systems and devices.
- **ELET 3750 Digital Systems** – 4 hours (3;3) The use of microcomputers in control and instrumentation systems, including interfacing in real time. Data communications, multiplexing, digitizing and sampling techniques are covered.

ELECTIVE: take one course from this list – 3 or 4 hour course.   * New course Fall 2013

> **ELET 3220 Introduction to Power Systems***
> **ELET 3760 Design of DSP Systems**
> **ELET 3980 Digital Controls of Industrial Processes**
> **ELET 4300 Embedded Systems Organization***
> **ELET 4340 Digital Logic Design Techniques***