

# ELECTRICITY

## Electrical Engineering Technology Major

### TECHNOLOGY & WORKFORCE DEVELOPMENT DIVISION

#### Program of Study

The Electrical Engineering Technology major is a transfer degree designed to fulfill most of the requirements for the first two years of a baccalaureate degree at four-year colleges and universities. This Associate of Science degree is appropriate for students who plan to transfer to a Bachelor of Science or related program in an electrical engineering area. It is composed of both technical and general educational courses which will prepare students to become engineering technicians in the area of design, manufacturing, sales, installation, repair, and service of electrical and electronic equipment.

The faculty has identified the following Learning Outcomes for all graduates:

- Understand and troubleshoot basic electrical Direct Current circuits.
- Understand and troubleshoot basic electrical Alternating Current circuits.
- Demonstrate the proper use of electronic test equipment.
- Demonstrate skill in both analytical and laboratory procedures of electrical engineering technology.
- Demonstrate skill in basic science, mathematics, and communications.
- Analyze and troubleshoot basic digital and analog circuits.
- Demonstrate an understanding of the architecture, programming, interfacing and use of microprocessors.

#### POTENTIAL OCCUPATIONS

- Electronic Technician
- Electrical Technician
- Field Service Technician
- Electrical/Electronic Sales Technician
- Instrumentation Technician
- Research and Development Technician

#### Associate of Applied Science

##### TECHNICAL CONCENTRATION

		Credit Hrs.
CAD 1110	CAD I . . . . .	3
CIT 1090	Computer Fundamentals . . . . .	3
EET 1700	DC Circuits . . . . .	3
EET 1710	AC Circuits . . . . .	3
EET 1720	Electronics . . . . .	4
EET 2730	Digital Circuits . . . . .	4
EET 2440	Programmable Controllers I . . . . .	4
EET 1630	Graphic Interface . . . . .	3
EET 2740	Microprocessors . . . . .	4
	<b>Total Technical Credit Hours . . . . .</b>	<b>31</b>

##### GENERAL EDUCATION AND RELATED COURSES

GEN 1000	First-Year Seminar . . . . .	1
ENG 1050	College Composition I . . . . .	3
ENG 1060	College Composition II . . . . .	3
MFG 1020	Safety . . . . .	1
MTH 2310	College Algebra . . . . .	3
MTH 2320	College Trigonometry . . . . .	3
PHY 1310	General Physics I . . . . .	4
PHY 1315	General Physics Lab I . . . . .	1
PHY 1320	General Physics II . . . . .	4
PHY 1325	General Physics Lab II . . . . .	1
SPE 2010	Effective Speaking . . . . .	3
	*Social Science Elective . . . . .	3
	*Humanities Elective . . . . .	3
	<b>Total General Education &amp; Related Credit Hours . . . . .</b>	<b>33</b>

**TOTAL CREDIT HOURS** **64**

- \* See page 95 for a listing of specific electives.  
See your advisor for appropriate course selection.

For available Certificate Program options, see catalog pages 97–103.

- \*\* All students graduating from Terra State Community College with an Associate degree of any kind will be functionally proficient in common computer operations and applications. Please see your academic advisor or academic division office for further details.

To determine when courses are scheduled, see program curriculum sheet which is available from the Enrollment Services office in Building A/Room 100, from the Technology and Workforce Development Division office, Building E, Room 107 or on the web at [www.terra.edu](http://www.terra.edu).