

ETEC - ELECTRONICS TECHNOLOGY

ETEC 101 AC/DC Electronics I. 3 Credits

Term Typically Offered: Spring

3cr. Introduces safety rules, concepts, and operating characteristics of direct current (DC) and alternating current (AC) electrical circuits. Selection, inspection, use, and maintenance for common electrical test equipment are also covered.

Lecture Hours 3

Department: Transportation - COT

ETEC 103 AC/DC Electronics II. 3 Credits

Prerequisite(s): ETEC 101 or TRID 185 & TRID 186.

Expands the students' knowledge of AC/DC electronics. Safety rules, concepts, and operating characteristics of electrical circuits will be emphasized. Capacitors, inductors, low voltage power supplies, diodes, transistors, and triodes will be introduced and analyzed.

Lecture Hours 3

Department: Transportation - COT

ETEC 192 Fund Electrical Technicians I. 3 Credits

Term Typically Offered: Fall

Introduces students to the National Electrical Code, device boxes, hand bending, raceways and fittings, conductors and cables, basic electrical construction drawings, residential electrical services, and electrical test equipment.

Lecture Hours 3

Department: Transportation - COT

ETEC 193 Fund Electrical Technicians II. 3 Credits

Term Typically Offered: Spring

Expands on the content covered in Fundamentals of Electrical Technicians I. The course covers electrical lighting, conduit bending, pull and junction boxes, conduit installations, cable tray, conductor terminations and splices, grounding and bonding, and circuit breakers and fuses.

Lecture Hours 3

Department: Transportation - COT

ETEC 231 Electronic Drive Systems. 3 Credits

Prerequisite(s): ETEC 103.

Exposes students to advanced electronic drive systems used in industrial applications. Electronic control of DC and AC motors, transmission and solid-state controllers, and electronic control of power generation equipment will be discussed.

Lecture Hours 3

Department: Transportation - COT

ETEC 284 Digital Electronics. 4 Credits

Prerequisite(s): ETEC 103.

Introduces basic digital circuits and their use in microprocessors and other digital devices. Reading digital logic schematics and building, testing, and troubleshooting digital circuits are also covered.

Lecture Hours 4

Department: Transportation - COT