

ELECTRONICS (ELEC)

ELEC-110 BASIC ELECTRICITY

4 credit hours, 6 contact hours (6 Lab Hours Per Week)

Students are enrolling in an open entry open exit program and have one calendar year to complete coursework from the date of registration.

All modules must be completed with a 2.0 GPA minimum competency level. Students completing ELEC 110 will study basic electrical circuits, applied electrical math, electrical safety and fundamentals of electricity necessary to be safe and competent when working with electricity. *4 credit hours/6 billed contact hours*

ELEC-111 INTRO TO AC/DC CIRCUITS

4 credit hours, 6 contact hours (6 Lecture Hours Per Week)

This is an open entry open exit program student may register at anytime. Modules must be completed with minimum of 2.0 GPA for credit to be awarded. Students have one calendar year from registration date to complete the module. This class will provide the student with an introduction to AC and DC circuitry. Students will design, draw, build, test, and troubleshoot these circuits. *4 credit hours/6 billed contact hours*

Requisite(s): Must complete ELEC-110

Fee: \$10.00

ELEC-116 RESIDENTIAL TECHNOLOGY

4 credit hours, 6 contact hours (6 Lecture Hours Per Week)

Students are enrolling in an open entry open exit program and have two semesters to complete coursework from the date of registration. All modules must be completed with a 75% minimum competency level. Students completing ELEC 116 will study basic electrical residential circuits, installation procedures, and codes. The student will be safe and competent when working with electricity in a residential setting. Students will wire various switching circuits, GFCI's, AFCI's, panels, fuse boxes, luminaries, and low voltage wiring. Upon completion of this course, the student should have the knowledge and ability to wire a residence according to the National Electrical Code. *4 credit hours/6 billed contact hours*

Requisite(s): Students must successfully complete ELEC-119.

Fee: \$10.00

ELEC-117 INDUSTRIAL/COMMERCIAL ELECTRICAL WIRING

4 credit hours, 6 contact hours (3 Lab Hours Per Week)

This is an open entry/open exit class. Students may enroll at any time. Students have one calendar year from enrollment to complete the class. All modules must be completed with a minimum of 2.0 GPA unless otherwise stated for credit to be awarded. The course will prepare the students to have a basic knowledge of the components of a wiring distribution system. This will include topics of study including Raceways, Busways, Panelboards, Overcurrent protection, Low-voltage systems and Cable installation.

Requisite(s): Students must successfully complete ELEC-110, ELEC-111 and ELEC-119.

Fee: \$10.00

ELEC-119 INTRO TO THE NATIONAL ELECTRICAL CODE

4 credit hours, 6 contact hours (6 Lecture Hours Per Week)

This is an open entry open exit class students may enroll at anytime. Students have one calendar year from enrollment to complete the class. All modules must be completed with a minimum of 2.0 GPA unless otherwise stated for credit to be awarded. Students will work with e National Electrical Code a text that is updated every three years with several hundred changes. Students will learn to reference the NEC for answers to specific electrical questions and to back up why a special electrical job must be done using this information. *4 credit hours/6 billed contact hours*

Requisite(s): Must complete ELEC-111

ELEC-120 ELECTRICAL MOTOR CONTROLS I

4 credit hours, 6 contact hours (6 Lecture Hours Per Week)

This is an open entry open exit class students may enroll at any time. Students have one calendar year from enrollment to complete the class. All modules must be completed with a minimum of 2.0 GPA unless otherwise stated for credit to be awarded. Students will gain a basic understanding of motor controls. Students shall draw, build, and troubleshoot motor control circuits. *4 credit hours/6 billed contact hours*

Requisite(s): Must complete ELEC-119;

ELEC-122 INTRODUCTION TO MOTORS AND TRANSFORMERS

4 credit hours, 6 contact hours (6 Lecture Hours Per Week)

This is an open entry/open exit class. Students may enroll at any time. Students have one calendar year from enrollment to complete the class. All modules must be completed with a minimum of 2.0 GPA unless otherwise stated for credit to be awarded. This course will prepare the students to have a basic knowledge of the components of a wiring distribution system. This will include topics of study in transformers, generators, AC and DC motors.

Requisite(s): Must complete ELEC-119