

ELECTRICAL (ECAL)

ECAL 101 Electrical Fundamentals I (3 credits)

This course will introduce the student to the various electrical properties and the equipment which produces those properties. Basic circuitry will be examined, utilizing algebraic skills to perform the calculations.

ECAL 102 Electrical Fundamentals II (3 credits)

This course will introduce the student to alternating current. The electrical properties and their effects on the circuit will be examined. Basic trigonometric skills will be utilized to perform calculations for analyzing various electrical circuits.

ECAL 103 Electrical Code Study (3 credits)

A preliminary study of the National Electrical Code. Wiring design and protection, wiring methods and materials, and equipment for general use are covered.

ECAL 104 Electrical Trades Math (2 credits)

This course will cover basic technical math skills required for students preparing for apprenticeship.

ECAL 106 Electrical Practicum I (4 credits)

This course will provide the student with practical experience in the Electrical field and finishing projects according to industry standards. This course will allow them to put into practice the electrical fundamentals and electrical code learned in previous or concurrent classes. Laboratory required.

ECAL 132 Commercial & Agricultural Wiring (3 credits)

Consists of lectures giving an introduction to basic electricity, basic wiring circuits, electric motors, materials and tools used, and wiring methods. Students also perform practicum work with actual circuit layout and installation of various raceways, as well as connecting of special equipment used in commercial and industrial applications, in accordance with the rules and regulations of the National Electrical Code.

ECAL 133 Residential Wiring (2 credits)

Consists of lectures giving an introduction to basic wiring circuits, materials and tools used and wiring methods in accordance with the rules and regulations of the National Electrical Code.

ECAL 206 Electrical Practicum II (4 credits)

This course will provide the student with practical experience in the Electrical field and finishing projects according to industry standards. This course will allow them to put into practice the electrical fundamentals and electrical code learned in previous or concurrent classes.