

## COURSE DESCRIPTIONS BY COURSE DISCIPLINE PREFIX

### ELC ELECTRICITY

ELC-113 Residential Wiring 4 (2-6) AND

Prerequisites: None

Corequisites: None

This course introduces the care/usage of tools and materials used in residential electrical installations and the requirements of the National Electrical Code. Topics include NEC, electrical safety, and electrical print reading planning, layout and installation of electrical distribution equipment lighting overcurrent protection conductors branch circuits and conduits. Upon completion, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with residential electrical installations.(2013 FA)

ELC-114 Commercial Wiring 4 (2-6) AND

Prerequisites: None

Corequisites: None

This course provides instruction in the application of electrical tools, materials, and test equipment associated with commercial electrical installations. Topics include the NEC safety electrical blueprints planning, layout, and installation of equipment and conduits and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with commercial electrical installations.(2013 FA)

ELC-115 Industrial Wiring 4 (2-6) AND

Prerequisites: None

Corequisites: None

This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment. (2013 FA)

ELC-117 Motors and Controls 4 (2-6) AND

Prerequisites: None

Corequisites: None

This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.(2013 FA)

ELC-128 Intro to PLC 3 (2-3) AND

Prerequisites: None

Corequisites: None

This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to understand basic PLC systems and create sila

