COURSE DESCRIPTIONS BY COURSE DISCIPLINE PREFIX

CIRCUIT ANALYSIS I

ELC-131 Circuit Analysis I 4 (3-3) Fall
Prerequisites:
Corequisites:
This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment. (2013 FA)

COMMERCIAL WIRING

ELC-114 Commercial Wiring 4 (2-6) Spring
Prerequisites:
Corequisites:
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.(2025 FA)

INTRO TO PLC

ELC-128 Intro to PLC 3 (2-3) AND
Prerequisites:
Corequisites:
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 simple programs. (2013 FA)

MOTORS AND CONTROLS

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