

**NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY
ELE 127 – RESIDENTIAL WIRING METHODS (3 CR.)**

Course Description

Studies wiring methods and standards used for residential dwellings. Provides practical experience in design, layout, construction, and testing of residential wiring systems by use of scaled mock-ups. Lecture 2 hour. Laboratory 2 hours. Total 4 hours per week. 3 credits

General Course Purpose

This course is designed to provide students with a basic understanding of residential wiring methods.

Course Prerequisites/Co-requisites

None

Course Objectives

Upon completing the course, the student will be able to:

- Demonstrate basic safety procedures
- Identify symbols used in electrical blueprints
- Understand NEC requirements for installing outlets in residential wiring
- Demonstrate correct wiring methods for residential applications
- Perform box fill calculations
- Determine the correct application and install various electrical splices
- Apply Local and National Electrical Codes in the residential wiring process
- Provide practical hand-on wiring experiences

Major Topics to be Included

- Safety procedures and methods
- Electrical blueprints
- Introduction to the National Electric Code
- Basic residential wiring techniques
- Basic electrical theory
- Wiring devices
- Lighting circuits
- Tools of the trade