

# ELC 127 Software for Technicians

## **COURSE DESCRIPTION:**

Prerequisites: None

Corequisites: None

This course introduces computer software which can be used to solve electrical/electronics problems. Topics include electrical/electronics calculations and applications. Upon completion, students should be able to utilize a personal computer for electrical/electronics- related applications.

Course Hours per Week: Class, 1. Lab, 3. Semester Hours Credit, 2

## **LEARNING OUTCOMES:**

Upon completing requirements for this course, the student will be able to:

- a) Use computer programs to write, edit, execute, and debug computer code.
- b) Write programs to solve algebraic formulas.
- c) Write programs to perform algorithms.
- d) Create and interpret flow charts for programs.
- e) Compile programs.
- f) Understand the process of debugging programs.

## **OUTLINE OF INSTRUCTION:**

1. Introduction to C Programming
  - a. Print
  - b. Scanf
2. Integers
  - a. Integer Variables
  - b. Integer Calculations – Addition, Subtraction, Multiplication, and Division
3. Array and Loops
  - a. Character Array
  - b. FOR Loop
  - c. FOR Loop with Array
  - d. WHILE Loop
4. IF Statements
  - a. IF Else

## **REQUIRED TEXTBOOK AND MATERIAL:**

None