

EE 160 : Programming for Engineers

Introductory course on computer programming and modern computing environments with an emphasis on algorithm and program design, implementation and debugging. Designed for engineering students, this course includes a hands-on laboratory to develop and practice programming skills.

Credits 4

Lecture Hours 3

Recommended Preparation

ICS 101

Prerequisites

Credit for or registration in Math 140 or consent of instructor

Course Outcomes

- explain the steps involved in the programming process.
- solve simple problems and express those solutions as algorithms.
- use the fundamental techniques of selection, looping, assignment, input, and output to describe the steps the computer takes to solve a problem.
- write algorithms and code in a top-down manner.
- work with arrays in searching and sorting applications.
- work with structures and unions types.
- write, test, and debug small programs.
- write functions and use pointers.
- work with characters and strings.
- work in text based environment like UNIX.
- interface with text base using a GUI interface.