

EE 160 : Programming for Engineers

Credits: 4

Class Hours: 3 lecture and 3 lab

Prerequisites: Qualified for MATH 241.

Description: This is an 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.

Semester Offered: Fall, Spring

Course Student Learning Outcomes (CSLOs):

1. Demonstrate structures and unions types.
2. Write algorithms and code in a top-down manner.
3. Write functions and use pointers.
4. Work with characters and strings.
5. Demonstrate arrays in searching and sorting applications.
6. Work in a text-based environment like UNIX.
7. Explain the steps involved in the programming process.
8. Use the fundamental techniques of selection, looping, assignment, input, and output to describe the steps the computer takes to solve a problem.
9. Write, test, and debug small programs.
10. Interface with text base using a GUI interface.
11. Solve simple problems and express those solutions as algorithms.