

GE 209

Computer Programming

(Required for a BSCE degree)

Instructor : Prof. Abdullah I. Al-Mhaidib

Room # : 2A56

Phone # : 4677033

Prerequisite

GE 204 (Application of computer in Engineering)

Topics Covered

1. Introduction (1 hr)
2. Data types, constants, variables (3 hr)
3. Operations, functions, assignment statement (4 hr)
4. Simple input & output, formatted output (3 hr)
5. Program composition, type of errors (3 hr)
6. Algorithm (3 hr)
7. If constructs (3 hr)
8. Do loops (3 hr)
9. Data files (2 hr)
10. Arrays (5 hr)
11. Programming with functions (3 hr)
12. Programming with subroutines (4 hr)
13. Numerical applications (5 hr)

Course learning Objectives

- a- Design algorithm for and solving problems
- b- Write programs to solve engineering problems

Class/ tutorial Schedule

Class is held two times per week in 50-minute lecture session. Lab is held once per week in 110-minutes each session.

Computer Applications

Programming Language compilers are used during the course

Contribution of Course to Meeting the Professional Component

Students learn the principles of programming and solving various engineering problems

Textbook(s) and/or Other Required Material

Introduction to Fortran 90 for Engineers and Scientists. Larry R. Nyhoff and Sanford C. Leestma. Prentice-Hall, Inc., Upper Saddle River, New Jersey 07458, USA, 1997.

Grade Distribution

Mid-term Exam	30%
Assignments, quizzes and Attendance	15%
Lab. Assignments	15%
Final Exam	40%
Total	100%