# Computer Systems and Programming

Course Code:	CS-102	Credit Hrs: 2-1

## **Text and Reference Books:**

- C++ How to Program, Harvey M. Deitel, Paul J. Deitel, 10th Edition, Prentice Hall. 2000
- Object-Oriented Programming in C++, Robert Lafore, Fourth Edition,
  Sams Publishers,

#### 2001

- Richard P. Halpern: C for Yourself, Oxford University Press, 1996
- B.J. Holmes: Programming with ANSI C, 1996, DP Publications
- Turbo C Programming for the PC Robert Lafore

#### **Course Outline:**

Basics of Computer Software and Hardware: Computers & Applications,
 History of

Computing, Introduction to Hardware and Software, Peripheral Devices, Data

Representation, Number Systems, Conversion Methods, ASCII / Unicode, Microprocessors,

Memory, Storage Devices.

 Basic Computer Programming: Algorithms, Flowcharts & Pseudocode, Assignment

Operators, If Selection Statement, If... Else Selection Statement, Nested Control Structures,

switch Multiple-Selection Statement, Passing Arrays to Functions, Searching Arrays,

Pointers, Library Functions and Header Files

### Lab Practical:

Programs related to the above mentioned course outlines will be part of the lab.

#### Assessment

Assignments, Quizzes, Lab Work, Lab Report, Lab Viva/Exam, Mid Term, Final