# Centre for Management Studies

## Dibrugarh University

**Course Code** : 10700
**Course Name** : Computer Applications in Management
**Course Type** : Core
**Prerequisites** : None
**Objective** : The course has been designed to develop an appreciation for the computer and the way it affects any business environment. It seeks to make the to-be manager confident in handling the computer and use it in his/her day-to-day activities effectively
**Credit** : 4 (3 – 0 – 1)
**Pedagogy** **:** Lectures, Presentations & Practical-s
**Evaluation** : *Internal assessment*: 40 marks (2 Sessional Examinations – 5 marks each totaling 10 marks, Practical – 15 marks, Seminar – 10 marks, Class Participation – 5 marks); *End Semester Examination*: 60 marks
**Instructor** : Himadri Barman (himadri@cmsdu.org)
**Web links** : http://himadri.cmsdu.org, https://clasroom.google.com

| Unit | Topics | No. of Lectures | No. of Tutorials | No. of Practical-s |
|---|---|---|---|---|
| 1 | Computer Systems – Number Systems, Computer History, Hardware and Software | 3 | 0 | 12 |
| 2 | Information Technology – Basic Concepts, Networks, Internet, Security | 14 | 0 | 2 |
| 3 | Business Data Processing & Business Systems | 8 | 0 | 2 |
| 4 | Latest Advancements in Technology, Ethics, Cyber Crime and Legislation | 2 | 0 | 0 |
| 5 | Introduction to Programming – flowcharting, algorithm development, program development | 8 | 0 | 10 |
| 6 | Elementary Data Structures – linear and non-linear data structures, searching, sorting | 7 | 0 | 2 |

Total Lectures : **42**
Total Tutorials : **0**
Total Practical-s : **28**

*Suggested Readings:*


1. Foundations of IT and Computers (2nd Edition) – Himadri Barman, Mahaveer Publications
2. Fundamentals of Computers – V Rajaraman, PHI
3. Introduction to Information Technology – ITL ESL, Pearson
4. DOEACC 'O' Level Course Books

## Detailed Course Outline

**Unit 1* (1 – 3):**
Introduction to the computer as an important business tool in terms of its three important functions – storage, processing and communication; Overview of the development of computers till date (3); Classifying the computer; Understanding the digital computer – role of number systems, von Neumann Architecture, Constituents of the Computer System – Hardware, Software and Users; Hardware and Software Classification;

**Unit 2:**
Introducing IT with relation to computers (4), Basics of Data Communication – data transmission modes, analog and digital signals, modulation, multiplexing, switching (5 – 9); Computer Networks – OSI Model, topologies, access methods, media, network types and devices (10 – 13); Internet – TCP/IP, services, netiquettes (14 – 16); Security – tools and techniques (17)

**Unit 3:**
Business Data Processing – functions, modes, business files and organizations, file processing (18 – 19); Information Systems (20 – 21); Internet enabled Business Systems – uses and benefits, Intranets and Extranets (22); E-business (23); M-business & Apps (24 - 25); Big Data (26)

**Unit 4* (27 – 28):**
Latest advancements in the field of computers with relation to business, Computer Ethics, Cyber Crimes and the IT Act 2000 / 2008

**Unit 5:**
Programming Fundamentals – flowcharts and algorithms, process and techniques (29 – 31); Development of simple programs to understand program development and logic [Programming Language to be decided / announced] (32 – 36)

**Unit 6:**
Understanding Elementary Data Structures – stacks, queues, arrays, linked lists, binary trees, strings and graphs (37 – 39); Searching – sequential and binary search (40); Sorting – selection, bubble, insertion (41 – 42)

**Practical:**
MS Office 2007/10 – Word and Excel. Simple Program development using any Programming Language

*Numbers in the brackets indicate session number. Session Numbers 10, 20, 28, 33, 40 and 48 will be review sessions.*

* These units are to be studied on their own by the students. Only a review will be done in the class.