Introduction to Computers

Course Name: Introduction to Computers.
Course Code: CAS101
Credit Hours: 3
Knowledge Domain: Computer Architecture and System Software.
Prerequisite(s): None

Learning Objectives:

Upon completion of this course, the student will be able to:
1. Get an idea about history and evolution of computer systems.
2. Grasp the basic architecture and components, and main computer types.
3. Realize the impact of networking and embedded systems.
4. Grasp the basic concepts of peripherals.
5. Grasp the concept of operating systems.
6. Understand software development and applications.

Learning Outcomes

1. Grasp the basic architecture and components of a computer system and their operating systems.
2. Realize the impact of networking on computer systems.
3. Get an idea about different applications and the basic methodology for software developments.

Overview and Syllabus

History and evolution of computers. Basic architecture and organization. Computer types. Impact of networking. Embedded computer systems. Computer peripherals. Operating systems and system software. Computer applications. Software development methodology.

Course Outline

	Topic
1	**Module 01: Overview** Computer Definition and History Basic Concept Assessment

2	**Module 02 : Data**
	Text Data Representation
	Audio Data Representation
	Image Data Representation
	Video Data Representation
	Numbering Systems
	Assessment
3	**Module 03 : Hardware**
	Overview
	Central Processing Unit
	Memory
	Slots, Cards and Buses
	Ports
	Assessment
4	**Module 04 : Hardware II: Secondary Storage Devices**
	Types
	Floppy-Diskette Drive
	Hard-Disk Drive
	Types of Tape
	Compact-Disk Drives
	Digital-Versatile-Disk Drive
	Flash Secondary Storage Devices
	Assessment
5	**Module 05 : Hardware III: Computer Peripheral**
	Input / Output Devices
	Keyboards
	Mice
	Scanners and Monitors
	Printers and Plotters
	Speakers and Microphones
	Assessment
6	**Module 06 : Software I: System Software**
	Software Types
	Software Ownership Rights
	Operating System
	Basic Input/Output system
	Utility Programs
	Language Translators
	Assessment
7	**Module 07 : Software II: Application Software**

	Concepts and Categories Popular Productivity Software Software Development Lifecycle Programming Languages Information and Database Systems Assessment
8	**Module 08 : Networks and The Internet** Concepts and Categories Communication Characteristics, Protocols and Devices The Internet The World Wide Web Computer and Networking Issues Assessment