Skill Enhancement Course

Based on NEP2020 for UG Programs (UP Higher Education Council)
Course: Computer Fundamentals
Course Code: (SEC2301)

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Prerequisite

Basic knowledge of high school-level mathematics and English comprehension.

Course Outcomes

CO1	Understanding the fundamentals of Computers.
CO2	Operating System Software and File Management.
CO3	Use and applications of basic tools.
CO4	Understanding the software and its uses for Productivity.
CO5	Recognize the Role of Computers in Society.

Unit	Contents	No. of Lectures
Unit 1	Definition of Computer and its characteristics, basic application of computers, digital and analog computer, Generation of computers, Storage devices: primary and secondary storage devices, Input and output devices (keyboard, mouse, light pen, joystick, scanner, monitor, printers etc.)	**10**
Unit 2	Software and its types (System Software, Application Software, Firmware Software) Computer Languages and its types. Introduction to the operating system and its functions, types of operating system, fundamentals of DOS, internal and external commands. Windows fundamentals: Anatomy of Windows, desktop elements, managing files and folders, installing software.	**12**
Unit 3	Spreadsheet and its features, Entering Information in Worksheets, Editing Cell Entry, Moving and Copying Data, deleting or Inserting Cells, Rows, and Columns, Custom Numeric Formats, Using Formulas and functions, and Creating charts.	**10**
Unit 4	Word Processor and its features, Editing of Text, Find and Replace, Bullets and Numbering, Spell Checker, Grammar Checker, AutoCorrect, AutoComplete, Auto Text, Header and footer, tables, mail merge, border and shading, page setup, printing. Presentation Software and its uses, steps for creating PowerPoint Presentation, PowerPoint Views, Assigning Slide Transitions, Using Preset Animations, Hiding Slides, Slide Show, Controlling the Slide Show with a Keyboard, Setting Slide Show Timings.	**13**
	Total Teaching Hours	**45**

Reference/Text Book:

1. Suresh K. Basandra, Computer Systems Today, Galgotia Publications.
4. V. Rajaraman, Fundamentals of Computers,EEE.
5. Peter Nortan, Introduction to Computers, Tata Mcgraw Hill
6. Joyce Coax , Joan Preppernau,,Steve Lambert and Curtis Frye, 2007 Microsoft Office. System step by step, Microsoft Press.
7. R.K. Taxali, PC Software for Windows.

Expected Outcomes

By the end of the course, students are expected to understand the fundamentals of computers, including hardware, software, and peripheral devices. They will be able to operate system software, manage files efficiently, and use basic productivity tools such as word processors, spreadsheets, and presentation software. Students will also gain practical knowledge of software applications to enhance productivity and perform everyday computing tasks. Additionally, they will recognize the significant role of computers in various sectors and understand associated ethical, social, and cybersecurity issues.