

# **Course in Computer Applications**

#### **Duration- 3months**

# **Module 1: Basics of Computer**

#### **Introduction to Computers**

Includes definitions, types of computers such as desktops, laptops and servers and their basic components, focusing on understanding hardware and software.

# **Operating Systems**

Details features, file management and user interface navigation for Windows, macOS and Linux.

### File Management

Teaches how to organize files and folders, work with drives and extensions and use compression formats like ZIP and RAR.

# Module 2: Notepad & WordPad

#### **Notepad Basics**

Covers its introduction, interface and text editing capabilities, including using plain text, opening and saving files and utilizing editing shortcuts.

#### **Notepad Advanced**

Delves into encoding types like UTF-8 and ANSI, find and replace functions and log functionality, particularly for coding purposes.

## **WordPad Basics**

Introduces its interface and rich text formatting options, such as inserting images and objects.

# WordPad Advanced

Extends to page setup, printing options and saving in various formats like RTF, DOCX or PDF, including adjusting margins, headers and footers.

### Module 3: MS Word

#### Introduction to MS Word

Covers an overview of word processing, the interface, ribbon and tabs, including the Quick Access Toolbar and Navigation Pane.

# **Basic Document Formatting**

Teaches font styles, sizes, colors, paragraph alignment, line spacing, bullets, numbering and indentation customization.

# Page Layout & Printing

Includes setting margins, orientation, headers, footers, page numbers, using print preview and adding section breaks.

#### Tables & Columns

Explains creating and formatting tables, merging and splitting cells, managing column layouts, and converting text to tables and vice versa.

#### Advanced Features

Covers mail merge for letters and labels, generating tables of contents, adding footnotes and endnotes, tracking changes and adding comments.

#### Templates & Macros

Focuses on using and modifying templates, creating and running macros to automate tasks.

# Collaboration & Security

Discusses sharing documents, protecting them with passwords, restricting editing and enabling cloud collaboration.

#### Module 4: MS PowerPoint

#### Introduction to MS PowerPoint

Explains the interface, ribbon and slide layouts, including slide masters, themes and placeholders.

# **Creating Presentations**

Involves adding and editing slides, formatting text and choosing appropriate layouts and styles.

# **Design & Aesthetics**

Covers applying themes, templates, backgrounds and transitions to enhance visual appeal.

# **Multimedia Integration**

Teaches inserting images, audio, video and charts with tips on optimizing performance.

#### **Animations & Effects**

Includes adding slide animations, motion paths and timings for entry, exit and emphasis effects.

# **Presentation Delivery**

Focuses on using slide show mode, presenter view and printing handouts, along with speaker notes and navigation.

# **Collaboration & Sharing**

Addresses creating online presentations and sharing via cloud platforms, enabling teamwork.

# Module 5: MS Excel

#### Introduction to MS Excel

Covers the Excel interface, worksheets, rows, columns and the formula bar.

### **Data Entry & Formatting**

Includes cell formatting, conditional formatting and data validation, such as applying number formats and creating conditional rules.

#### **Basic Formulas & Functions**

Introduces SUM, AVERAGE, IF, COUNT, VLOOKUP, and HLOOKUP for basic and logical operations.

#### **Intermediate & Advanced Formulas**

Covers TEXT, CONCATENATE, LEFT, RIGHT, MID, LEN, TRIM, PROPER, SEARCH, FIND, and REPLACE for advanced data manipulation.

### **Logical & Statistical Functions**

Includes AND, OR, NOT, COUNTIF, SUMIF and AVERAGEIF for logical and statistical calculations.

#### **Charts & Graphs**

Teaches creating and formatting various chart types and customizing options.

# **Pivot Tables & Data Analysis**

Focuses on creating pivot tables, applying filters, sorting and analyzing large datasets for dynamic reporting.

#### **Advanced Features**

Includes using macros, data protection and importing/exporting data.

# **Collaboration & Integration**

Covers real-time editing and cloud sharing, including integration with Google Sheets.

# **Module 6: Google Apps** explores Google's productivity suite.

**Google Drive** – Introduction to Cloud Storage, Uploading & Organizing Files, Sharing & Permission Settings, Integration with Google Apps.

**Google Docs** – Document Creation & Formatting, Collaboration & Real-Time Editing, Templates & Add-ons, Exporting & Printing Documents.

**Google Sheets** – Spreadsheet Basics, Formulas & Functions, Data Visualization (Charts & Graphs), Pivot Tables & Automation (Macros, Scripts).

**Google Slides** – Creating Presentations, Designing with Themes & Templates, Animation & Transitions, Sharing & Presenting Online.

**Gmail** – Email Management & Customization, Filters, Labels & Folders, Security & Spam Protection, Integrating with Google Calendar & Tasks.

**Google Calendar** – Creating & Managing Events, Sharing Calendars, Setting Reminders & Notifications, Google Meet Integration.

**Google Meet** – Setting Up Video Meetings, Screen Sharing & Captions, Recording & Live Streaming, Security & Privacy Settings.

**Google Chat & Spaces** – Instant Messaging & Group Chats, File & Document Sharing, Integrating with Google Drive, Creating & Managing Spaces.

**Google Search** – Search Operators & Advanced Search, Reverse Image Search, Google Lens & Al-powered Search, Google Scholar & Books.

**Google Assistant** – Voice Commands & Automation, Smart Home Integration, Google Actions & Al Responses, Privacy & Data Control.

**Google Bard & Gemini (Al Chatbots)** – Introduction to Al-powered Chatbots, Text & Image Processing, Al-based Content Creation, Ethical Use of Al in Research.

Google Messages & Google Duo – RCS Messaging & SMS, Video Calling Features, Cross-Device Compatibility.

**YouTube** – Creating & Managing a Channel, Video SEO & Monetization, Live Streaming & Shorts, YouTube Studio Analytics.

**Google Photos** – Cloud Storage & Auto Backup, Al-powered Photo Editing, Creating Albums & Sharing, Google Lens Integration.

**Google Classroom** – Setting Up Virtual Classrooms, Assignments & Grading System, Collaboration with Google Docs & Drive, Classroom Analytics & Reports.

**Google Forms** – Creating Surveys & Quizzes, Response Collection & Data Analysis, Conditional Logic & Automation, Integration with Sheets & Drive.

**Google Scholar** – Finding Academic Papers, Citation & Bibliography Tools, Research Alerts & Recommendations.

**Module 7: Al-Apps** introduces artificial intelligence applications.

**ChatGPT** covers its overview, text generation capabilities, use cases, limitations and API usage for enhancing productivity.

**Grok.ai** details its features, Al-powered assistance and differences from ChatGPT, highlighting its unique capabilities. Microsoft Copilot focuses on its integration with Office apps, offering Al-powered productivity tools like document editing, summarization and coding automation.

**Google Canvas** explores Al-generated art, sketching and collaborative drawing with smart suggestions for illustrations.

**Bolt.new** emphasizes quick Al-powered document creation, its features and applications for efficient drafting.