

### Module 1: Fundamentals of Computers

- Introduction to computers: history, generations, applications
- Hardware components (CPU, RAM, storage, input/output devices)
- Software types (system software, application software)
- Operating systems basics (Windows, Linux overview)
- Computer security and safe practices

### Module 2: Office Productivity Tools

- MS Word / Google Docs
  - o Document creation, formatting, tables, styles
  - Mail merge and templates

# MS Excel / Google Sheets

- o Formulas, functions, charts, pivot tables
- Data analysis basics

### • MS PowerPoint / Google Slides

- o Slide creation, design, transitions, animations
- Presentation skills

## Module 3: Internet & Web Applications

- Basics of the Internet and web browsers
- Email creation and management
- Search engines and online research techniques
- Cloud storage and collaboration tools (Google Drive, OneDrive)
- · Social media and digital communication basics

## Module 4: Programming Fundamentals

- Introduction to programming concepts
- Basics of C / Python (depending on institution)
- Variables, operators, control structures
- Simple programs and problem-solving exercises

#### Module 5: Database Management

- Introduction to databases
- Data storage concepts
- SQL basics (create, insert, update, delete, select)
- Practical with MS Access / MySQL

### **Module 6: Networking & IT Concepts**

- Basics of computer networks (LAN, WAN, Internet)
- Network devices (routers, switches, hubs)
- IP addressing and configuration basics
- Cybersecurity fundamentals (firewalls, antivirus, safe practices)

#### Module 7: Practical Projects & Assessment

- · Create a formatted report in Word
- Build a spreadsheet with charts and formulas
- Design a presentation with animations
- Develop a simple database project
- Final project: Mini website or IT application

#### **Learning Outcomes**

By the end of the CIT course, students will:

- Understand computer fundamentals and applications
- · Use office productivity tools effectively
- Browse, communicate, and collaborate online
- Write simple programs and manage databases
- Understand networking and cybersecurity basics
- Apply IT skills in real-world projects