

(Building Futures Through Digital Knowledge and Innovation)

Diploma in Computer Applications (DCA) 6 Months

Syllabus

1. Introduction to Computers

- ✓ Fundamentals of Computer
- ✓ Computer hardware and software
- ✓ Computer networks and the Internet
- ✓ Operating systems and their functions
- ✓ Basics of computer security and data privacy

2. Office Productivity Tools

- ✓ Microsoft **Paint**
- ✓ Microsoft **Notepad**
- ✓ Microsoft **WordPad**
- ✓ Microsoft Office **Word**
- ✓ Microsoft Office **Excel**
- ✓ Microsoft Office **PowerPoint**
- ✓ Microsoft Office **Access**
- ✓ Microsoft Office **Outlook**
- ✓ Microsoft **Copilot & ChatGPT**

3. Programming Fundamentals

- ✓ Introduction to programming languages **Python**
- ✓ Variables, data types, and operators
- ✓ Control structures: loops and conditional statements
- ✓ Functions and basic debugging techniques

4. Web Development Basics

- ✓ **HTML** and **CSS** fundamentals for creating web pages
- ✓ Creating interactive web forms and validating user input
- ✓ Introduction to web hosting and domain management

5. Introduction to Artificial Intelligence (AI)

- ✓ What is AI? Overview and real-world applications
- ✓ Types of AI: Narrow AI, General AI, and Super AI
- ✓ Machine learning vs. traditional programming
- ✓ Overview of popular AI tools and frameworks
- ✓ Using AI in daily productivity (ChatGPT, Copilot, DeepSeek, etc.)
- ✓ Ethical considerations and future of AI

6. Final Project and Practical Applications

- ✓ Integrating concepts learned into a comprehensive project
- ✓ Developing a small-scale software application or website
- ✓ Presentation of projects and peer evaluation