

02.Certificate in Advance Computer Application. (Duration 06 Months.)

Advanced Computer Applications

Course Duration: 6 Months

Month 1-2: Advanced Microsoft Office Applications

Module 1: Advanced Microsoft Word

- Mastering styles and formatting
- Document automation with templates
- Advanced collaboration features

Module 2: Advanced Microsoft Excel

- Advanced formulas and functions
- Data analysis using pivot tables
- Macros and automation

Module 3: Advanced Microsoft PowerPoint

- Multimedia and animations
- Advanced presentation techniques
- Customizing slide shows

Month 3-4: Web Development Basics

Module 4: HTML and CSS

- Building and styling web pages
- Introduction to responsive design
- Basic web page optimization

Module 5: Introduction to JavaScript

- Basics of programming with JavaScript
- Interactivity and dynamic content on web pages
- Introduction to popular JavaScript libraries

Module 6: Basics of Web Development Tools

- Using code editors (e.g., Visual Studio Code)
- Version control
- Introduction to web development frameworks (e.g., Bootstrap)

Month 5-6: Database Management and Advanced Programming

Module 7: Relational Databases and SQL

- Designing and managing databases
- Writing complex SQL queries
- Database normalization and optimization

Module 8: Advanced Programming Concepts

- Object-oriented programming (OOP)
- Advanced data structures and algorithms
- Introduction to a high-level programming language (e.g., Java, C#)

Module 9: Software Development Lifecycle

- Understanding the software development process

- ⌚ Basics of software testing and debugging
- ⌚ Collaboration tools for software development

Month 7-8: Advanced Web Development and Cloud Computing

⌚ Module 10: Advanced Web Development

- ⌚ Server-side scripting (e.g., Node.js)
- ⌚ Building dynamic web applications
- ⌚ REST full API development

⌚ Module 11: Cloud Computing Basics

- ⌚ Introduction to cloud platforms (e.g., AWS, Azure)
- ⌚ Cloud storage and services
- ⌚ Deploying applications on the cloud

⌚ Module 12: Final Project

- ⌚ Individual or group project leveraging advanced skills learned
- ⌚ Application development, web development, or database management project
- ⌚ Project presentation and feedback

