#### **Certificate Course in Advanced Excel**

#### **Course Duration**

2 Months (Part-Time / Regular)

#### **Course Overview**

The Certificate Course in Advanced Excel is designed to provide students and professionals with the skills required to manage, analyze, and present data effectively. The course focuses on advanced Excel tools and functions such as formulas, data validation, PivotTables, charts, dashboards, macros, and automation techniques.

Learners will gain practical knowledge that can be applied in business, finance, education, data analysis, and office administration. This course is ideal for students, job seekers, entrepreneurs, accountants, and professionals who want to enhance their data handling and decision-making skills.

# **Course Objectives**

By the end of this course, learners will be able to:

- 1. Apply advanced formulas and functions for complex calculations.
- 2. Use data tools (validation, conditional formatting, sorting, filtering) effectively.
- Create and analyze PivotTables and PivotCharts for reporting.
- 4. Design **professional dashboards** for business insights.
- 5. Automate repetitive tasks using macros and introduction to VBA.
- 6. Improve productivity in data analysis, reporting, and visualization.

## **Course Syllabus (Module-Wise)**

# Module 1: Excel Refresher & Advanced Formatting

- Excel interface & shortcuts (quick review)
- Cell formatting, custom number formatting
- Conditional formatting with advanced rules
- Working with multiple sheets and workbooks

#### **Module 2: Advanced Formulas & Functions**

- Logical functions: IF, Nested IF, AND, OR
- Lookup functions: VLOOKUP, HLOOKUP, XLOOKUP, INDEX, MATCH
- Text functions: LEFT, RIGHT, MID, TRIM, CONCAT, TEXTJOIN
- Date & time functions: TODAY, NOW, DATEDIF, EOMONTH
- Error handling functions: IFERROR, ISERROR

### Module 3: Data Tools & Data Analysis

- Sorting, filtering, and advanced filters
- Data validation (drop-down lists, custom rules)
- What-If Analysis: Goal Seek, Scenario Manager, Data Tables
- Removing duplicates & text-to-columns
- Flash Fill and advanced data cleaning techniques

### Module 4: PivotTables & PivotCharts

- Creating and formatting PivotTables
- Grouping, filtering, and calculated fields
- Creating PivotCharts
- Using slicers and timelines for interactive reports
- Building dynamic summary reports

#### **Module 5: Charts & Dashboards**

- Advanced chart types (combo charts, waterfall, sparklines)
- Dynamic charts with named ranges
- Designing dashboards (KPIs, charts, slicers)
- Linking PivotTables and charts into dashboards
- Dashboard formatting best practices

### Module 6: Macros & Introduction to VBA

- Recording and running macros
- Using relative & absolute references in macros
- Assigning macros to buttons
- Introduction to VBA editor (basic concepts)
- Writing simple VBA codes for automation

## Module 7: Project Work & Final Assessment

- Hands-on Project (examples):
  - Sales/Finance Dashboard
  - HR Employee Database with Reports
  - o Inventory & Stock Management System