

Advanced Excel

Cortex Skills Institute

Duration:
2–3 Months (40–60 Hours)

Course Fee: ₹8,000

Course Objective

Learn advanced Excel tools, formulas, automation, data analysis, dashboards, MIS reporting, and VBA Macros to improve productivity and business decision-making skills.

Module 1: Excel Fundamentals

Revision

Topics Covered

- Workbook & Worksheet Management
- Cell Referencing (Relative, Absolute, Mixed)
- Formatting Techniques
- Data Entry Best Practices
- Excel Tables
- Named Ranges
- Keyboard Shortcuts

Practical

- Employee Database
- Sales Data Sheet
- Attendance Register

Module 2: Advanced Formulas & Functions

Mathematical Functions

- SUM
- SUMIF
- SUMIFS
- ROUND
- ABS
- MOD

Statistical Functions

- AVERAGE
- COUNT
- COUNTIF
- COUNTIFS
- MAX
- MIN

Logical Functions

- IF
- Nested IF
- IFS

- AND
- OR
- NOT

Text Functions

- LEFT
- RIGHT
- MID
- LEN
- CONCAT
- TEXTJOIN
- TRIM
- UPPER
- LOWER
- PROPER

Date & Time Functions

- TODAY
- NOW
- DATE
- DATEDIF
- EDATE
- EOMONTH
- NETWORKDAYS

Practical

- Salary Sheet
- Student Result System
- Attendance Management

Module 3: Lookup & Reference Functions

Topics Covered

- VLOOKUP
- HLOOKUP
- XLOOKUP
- INDEX
- MATCH
- INDEX + MATCH
- CHOOSE
- OFFSET

Practical

- Employee Information System
- Product Inventory Lookup
- Customer Database

Module 4: Data Validation & Data Cleaning

Topics Covered

- Data Validation

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- Drop-Down Lists
- Error Alerts
- Remove Duplicates
- Flash Fill
- Text to Columns
- Find & Replace
- Conditional Formatting

Practical

- Admission Form Automation
- Employee Entry Form

Module 5: Advanced Data Analysis

Topics Covered

- Sorting
- Multi-Level Sorting
- Filtering
- Advanced Filters
- Subtotal
- Grouping & Ungrouping
- Consolidation

Practical

- Sales Analysis
- Student Performance Analysis

Module 6: Pivot Tables & Pivot Charts

Topics Covered

- Creating Pivot Tables
- Pivot Table Calculations
- Grouping Data
- Slicers
- Timelines
- Pivot Charts
- Interactive Reports

Practical

- Sales Dashboard
- Student Analysis Report
- HR Reports

Module 7: Financial Functions

Topics Covered

- PMT
- IPMT
- PPMT
- NPV
- IRR
- FV

- PV
- RATE
- EMI Calculator

Practical

- Loan EMI Calculator
- Investment Analysis
- Profit & Loss Report
- Business Budget Planning

Module 8: MIS Reporting

Topics Covered

- Management Information System (MIS)
- Dynamic Reports
- Monthly Reports
- Sales Reports
- HR Reports
- Performance Tracking Reports

Practical

- Daily MIS
- Weekly MIS
- Monthly MIS Dashboard

Module 9: Dashboard Design & Visualization

Topics Covered

- Dashboard Planning
- KPI Reports
- Dynamic Charts
- Interactive Charts
- Slicers
- Conditional Formatting
- Sparklines
- Gauge Charts
- Dynamic Reporting

Practical Projects

- Sales Dashboard
- Student Management Dashboard
- Institute Dashboard
- Employee Performance Dashboard

Module 10: Power Query

Topics Covered

- Importing Data
- Data Transformation

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- Merge Queries
- Append Queries
- Cleaning Large Data Sets
- Refreshing Data

Practical

- Combining Multiple Excel Files
- Automated Data Cleaning

Project 2

Student Management System

Project 3

HR & Payroll Management System

Project 4

Loan & EMI Calculator

Project 5

Institute MIS Dashboard

Module 11: Power Pivot

Topics Covered

- Data Model Creation
- Relationships
- Calculated Fields
- DAX Basics
- Data Analysis

Practical

- Business Reporting Model
- Multi-Sheet Analysis

Assessment

Theory Examination

- Excel Concepts
- Functions & Formulas
- Data Analysis
- VBA Concepts

Practical Examination

- Dashboard Creation
- Pivot Reports
- Lookup Functions
- Macro Development

Module 12: VBA Macros & Automation

VBA Basics

- Introduction to VBA
- Macro Recorder
- VBA Editor
- Modules
- Procedures

Macro Development

- Variables
- Loops
- Conditions
- Input Box
- Message Box

Automation Projects

- Auto Report Generator
- Attendance Automation
- Invoice Generator
- Certificate Generator
- Bulk Data Processing

Practical

- Create and Run Macros
- Automate Repetitive Tasks
- Build User Forms

Module 13: Advanced Excel Projects

Project 1

Sales Analysis Dashboard