

# **Information Booklet cum Syllabus**

## **Of**

### **Advance Excel**



**July 2025**

**National Institute of Electronics and Information Technology**

An Autonomous Scientific Society under  
Ministry of Electronics and Information Technology, Government of India

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## 1. **About Course**

Advanced Excel course are designed for individuals and professional with the skills to effectively utilize advanced features and functions of Microsoft Excel for complex data analysis, reporting, and automation. It builds upon basic Excel knowledge, targeting those who want to enhance their professional capabilities in data management, finance, business analysis, and related fields. .

## 2. **NIELIT**

National Institute of Electronics and Information Technology, NIELIT, (Erstwhile DOEACC Society) is an autonomous scientific society of the Ministry of Electronics & Information Technology, Government of India. The Society is registered under the Societies Registration Act, 1860. NIELIT was set up to carry out Human Resource Development and related activities in the area of Information, Electronics & Communications Technology (IECT). NIELIT is engaged both in Formal & Non-Formal Education in the areas of IECT besides development of industry oriented quality education and training program in the state-of-the-art areas. NIELIT has endeavored to establish standards to be the country's premier institution for Examination and Certification in the field of IECT. It is also one of the National Examination Body, which accredits institutes/organizations for conducting courses in IT and Electronics in the non-formal sector.

## 3. **Objective of Course**

The objectives of this course the learner will learn various advanced and basic feature of excel like Import data from External resources, advanced Filter, Ulti column Sorting Pivot table, Slicing and what if analysis Various types of excel function which is used by individual or professional to solve problem.

- Data Creation/manipulation
- Adjusting Row/Column
- Formula/Function
- Sorting Filter/Advance Filter
- Import/Export data
- What if Analysis
- Pivot Table and Slicing
- Data Validation/Data Consolidate/Data Subtotal
- Sheet Protection etc

#### 4. Job Roles of Course

After successful completion of the qualification the candidates shall be employed in the industries for following occupations:

- Data Analyst
- Business Analyst
- Excel Expert

#### 5. Eligibility

10<sup>th</sup> Pass,.

#### 6. Total duration of the Course

30 Hours (Theory: 10 Hrs, Practical: 20 Hrs)

#### 7. Course Details:

##### **Day Wise Syllabus: Microsoft Excel**

| S. No. | Day    | Topics  |
|--------|--------|---|
| 1.     | Day 01 | <ul style="list-style-type: none"> <li>❖ What is Spreadsheet?</li> <li>❖ Terminologies and navigation of Spreadsheet Applications <ul style="list-style-type: none"> <li>• Ribbon</li> <li>• Row</li> <li>• Column</li> <li>• Cell</li> <li>• Cell Address</li> <li>• Data range</li> <li>• Worksheet</li> <li>• Workbook</li> <li>• Formula</li> </ul> </li> <li>❖ Creating, Saving, closing &amp; opening files</li> <li>❖ Selecting an area of the worksheet</li> <li>❖ Copying data</li> <li>❖ Creating and using named cells</li> <li>❖ Inserting or deleting rows or columns</li> <li>❖ Working with multiple sheets</li> <li>❖ Avoiding errors and mistakes</li> </ul> |
| 2.     | Day 02 | <ul style="list-style-type: none"> <li>❖ Modifying / Editing Cell Content (Cut Copy &amp; Paste Special).</li> <li>❖ Formatting (Sheet, Cell, &amp; Data),</li> </ul>   |

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|----|--------|---|
|    |        | <ul style="list-style-type: none"> <li>❖ Conditional Formatting,</li> <li>❖ Data Type(Format),</li> <li>❖ Managing Row &amp; Column (Height, Width)</li> <li>❖ Find and Select <ul style="list-style-type: none"> <li>▪ Find</li> <li>▪ Replace</li> <li>▪ Go To</li> </ul> </li> <li>❖ Auto save Excel File (Automatic).</li> <li>❖ Set File save Location (Automatic).</li> <li>❖ Cell Referencing(Relative, Absolute &amp; Mixed)</li> <li>❖ Custom List</li> <li>❖ Get External Data From: <ul style="list-style-type: none"> <li>▪ Access</li> <li>▪ web</li> <li>▪ text</li> <li>▪ other sources</li> </ul> </li> </ul> |
| 3. | Day 03 | <ul style="list-style-type: none"> <li>❖ Sorting data <ul style="list-style-type: none"> <li>▪ Quick Sorting</li> <li>▪ Multilevel Sorting</li> </ul> </li> <li>❖ Filtering data <ul style="list-style-type: none"> <li>▪ Quick Filtering</li> <li>▪ Filtering by Multiple Criteria</li> <li>▪ Advanced Filter</li> </ul> </li> </ul>   |
| 4. | Day 04 | <ul style="list-style-type: none"> <li>❖ Formula &amp; Function</li> <li>❖ Difference Between Formula &amp; Function</li> <li>❖ Types of Function</li> <li>❖ Text functions</li> <li>❖ Logical functions</li> <li>❖ Math functions</li> <li>❖ Statistical functions</li> <li>❖ Lookup and reference functions</li> <li>❖ Financial functions</li> <li>❖ Date &amp; Time functions</li> <li>❖ Example: <ul style="list-style-type: none"> <li>▪ Text Function :<br/>concatenate(),upper(),lower(),proper(),char(),code(),dollar(),mid(),</li> </ul> </li> </ul>  |

|    |        |  |
|----|--------|--|
|    |        | rept(),exact()   |
| 5. | Day 05 | <p>Types of Function-II</p> <ul style="list-style-type: none"> <li>❖ Logical Function: and (), or (), not (), if ()</li> <li>❖ Math Function:<br/>sum(),sumif(),power(),int(),abs(),round(),fact(),log(),log10(),mod(),rand()</li> <li>❖ Statistical functions:<br/>average(),averageif(),count(),counta(),countblank(),countif(),max(),min()</li> <li>❖ Lookup and reference functions: vlookup(), hlookup()</li> <li>❖ Financial functions: pmt(),pv(),fv()</li> <li>❖ Date &amp; Time functions: now(),today(),data(),time(),day()</li> </ul> |
| 6. | Day 06 | <ul style="list-style-type: none"> <li>❖ Chart Design <ul style="list-style-type: none"> <li>▪ Ribbon of Chart Tools</li> <li>▪ Chart Type</li> <li>▪ Quick Layout</li> <li>▪ Change Colors</li> <li>▪ Chart Styles</li> <li>▪ Switch Row / Column</li> <li>▪ Select Data</li> <li>▪ Change Chart Type</li> <li>▪ Move Chart</li> </ul> </li> <li>❖ Parsing data <ul style="list-style-type: none"> <li>▪ Text to column</li> <li>▪ Remove Duplicates</li> </ul> </li> </ul>   |
| 7. | Day 07 | <ul style="list-style-type: none"> <li>❖ Data Validation</li> <li>❖ Data Consolidate</li> <li>❖ Data Subtotal</li> <li>❖ What-if Analysis <ul style="list-style-type: none"> <li>▪ Scenario Manager</li> <li>▪ Goal Seek</li> <li>▪ Data Table</li> </ul> </li> <li>❖ Grouping <ul style="list-style-type: none"> <li>▪ Group</li> <li>▪ Ungroup</li> </ul> </li> </ul>  |
| 8. | Day 08 | <ul style="list-style-type: none"> <li>❖ Pivot table</li> <li>❖ Report Slicer</li> <li>❖ Table</li> <li>❖ Insert Picture &amp; Clip Art</li> <li>❖ Hyperlink</li> </ul>  |
| 9. | Day 09 | <ul style="list-style-type: none"> <li>❖ Data View and Security <ul style="list-style-type: none"> <li>▪ Hide and Show row, column and sheet</li> </ul> </li> </ul>  |

|     |        |   |
|-----|--------|---|
|     |        | <ul style="list-style-type: none"> <li>▪ Protect Sheet</li> <li>▪ Protect Workbook</li> <li>▪ Share Workbook</li> <li>▪ Allow Users to Edit Ranges</li> </ul>   |
| 10. | Day 10 | <ul style="list-style-type: none"> <li>❖ Header Footer <ul style="list-style-type: none"> <li>▪ Custom Header &amp; Custom Footer</li> </ul> </li> <li>❖ Page Setup and Printing <ul style="list-style-type: none"> <li>▪ Margins</li> <li>▪ Orientation</li> <li>▪ Size</li> <li>▪ Breaks</li> <li>▪ Print Area</li> <li>▪ Background</li> <li>▪ Print Titles</li> <li>▪ Scale to fit</li> </ul> </li> </ul> |