

राष्ट्रीय इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी संस्थान, गोरखपुर  
National Institute of Electronics & Information Technology, Gorakhpur  
(Ministry of Electronics & Information Technology, Government of India)

<http://www.nielit.gov.in/gorakhpur/index.php>

<https://regn.nielitvte.edu.in>

## Data Analytics using Spreadsheets

Medium of Instruction: Hindi & English

### About the Course

This course will make a learner to perform Data Analytics using spreadsheets like excel or libre spreadsheet. The course has been designed to prepare a learner for meaningful opportunities in the future with respect to Data Analytics.

The course starts with learning of basic like formulas Sum, Average, Minimum, Maximum, Count, Basic Charts, Filter & Sorting, then it will cover the Advance formula, Subtotal, Text Function, Vlookup, Hlookup, Pivot, Data Validation, Conditional Formatting, Simple IF, Advance If, D Sum, D Max, D Min, D Count, D Count A, Data Visualization and many more. The learners will learn the easiest way to work with lakhs of data with statistical & Mathematical functions that can save hours of time. The course contains all the necessary topics which are most demanded in Government sector/ Academics/ Corporate Industry.

### What do you learn in Data Analytics using Spreadsheets?

- Data Cleaning
- Sorting
- Filtering
- LOOKUP function
- Conditional formatting
- Data Validation
- Pivot tables and slicers
- Data Visualization
- Working with Multiple Sheets
- Formula Auditing
- Analytics functions
- Financial Analysis
- Scenario manager tool
- Data Consolidation
- Solver tool
- Goal seek tool

### Who should learn Data Analytics using Spreadsheets?

- Data Analysts
- Banking Executive
- Insurance Executive
- Junior Data Scientists
- Analytics Professionals
- Business Intelligence and Reporting Professionals
- Students
- Marketing/ Sales Executive
- Logistics Executive
- Ecommerce Executive
- Project Managers

### How to Apply?

Visit the Online Registration Portal (ORP) to register in the course (<https://regn.nielitvte.edu.in>).

or Scan the QR code



### Certification

Certificate will be provided to the participants, based on minimum 75% attendance and on performance (minimum 50% marks) in the online test, conducted at the end of the course.

### Course Fees

Rs 1000/- (Inclusive of GST and other taxes)

### Eligibility

Open to All (The candidate should have basic knowledge of computer.

### Duration

20 Hours/ 02 Weeks (02 hours per day)

### Prerequisite [In case registered for online course]

- Candidate must have computer/laptop with spreadsheets software installed on it.
- Internet connection with good speed (preferably 2 Mbps or higher)

## Data Analytics using Spreadsheets

### Day wise Contents

Days	Topics
Day 01	Introduction to Spreadsheet Applications
Day 02	Understanding data and Formatting
Day 03	Data Handling - I
Day 04	Data Handling - II
Day 05	Chart Design
Day 06	Functions in Spreadsheet
Day 07	Functions in Spreadsheet
Day 08	PivotTables
Day 09	Financial arithmetic, Investment Appraisal
Day 10	Data View and Security, Miscellaneous

### Get In Touch

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# Data Analytics using Spreadsheets

## Day wise Contents

### 1. Introduction to Spreadsheet

#### Applications

- 1.1. What is Spreadsheet?
- 1.2. Terminologies and navigation of Spreadsheet Applications
  - 1.2.1. Ribbon
  - 1.2.2. Row
  - 1.2.3. Column
  - 1.2.4. Cell
  - 1.2.5. Worksheet
  - 1.2.6. Workbook
  - 1.2.7. Cell Address
  - 1.2.8. Data range
  - 1.2.9. Formula
  - 1.2.10. Chart
- 1.3. Selecting an area of the worksheet
- 1.4. Saving, closing and opening files
- 1.5. Copying data
- 1.6. Creating and using named cells
- 1.7. Inserting or deleting rows or columns
- 1.8. Working with multiple sheets
- 1.9. Avoiding errors and mistakes

### 2. Understanding data

- 2.1. What are data?
- 2.2. Quantitative data
  - 2.2.1. Discrete data
  - 2.2.2. Continuous data
- 2.3. Qualitative data
  - 2.3.1. Categorical data
  - 2.3.2. Ordinal data

### 3. Formatting

- 3.1. Cell, Sheet data Formatting
- 3.2. Conditional Formatting
- 3.3. Format as Table
- 3.4. Cell Styles

### 4. Data Handling

- 4.1. Find and select
  - 4.1.1. Find
  - 4.1.2. Replace
  - 4.1.3. Go To
  - 4.1.4. Go To Special

### 4.2. Cell Referencing

- 4.2.1. Relative, Absolute and Mixed

### 4.3. Sorting data

- 4.3.1. Quick Sorting
- 4.3.2. Sorting by Multiple Criteria

### 4.4. Filtering data

- 4.4.1. Quick Filtering
- 4.4.2. Filtering by Multiple Criteria
- 4.4.3. Performing Calculations on Filtered Data

### 4.5. Get External Data

- 4.5.1. From Access
- 4.5.2. From web
- 4.5.3. From text
- 4.5.4. From other sources

### 4.6. Parsing data

### 4.7. Text to column

### 4.8. Remove Duplicates

### 4.9. Data Validation

### 4.10. Consolidate

### 4.11. What-if Analysis

- 4.11.1. Scenario Manager
- 4.11.2. Goal Seek
- 4.11.3. Data Table

### 4.12. Grouping

- 4.12.1. Group
- 4.12.2. Ungroup
- 4.12.3. Subtotal

### 5. Chart Design

- 5.1. Ribbon of Chart Tools
- 5.2. Chart Type
- 5.3. Quick Layout
- 5.4. Change Colors
- 5.5. Chart Styles
- 5.6. Switch Row / Column
- 5.7. Select Data
- 5.8. Change Chart Type
- 5.9. Move Chart

### 6. Functions in Excel

- 6.1. Date and Time Functions
- 6.2. Financial Functions
- 6.3. Logical Functions

## Data Analytics using Spreadsheets

- 6.4. Lookup and Reference Functions
- 6.5. Math and Trigonometry Functions
- 6.6. Statistical Functions
- 6.7. Text Functions

### 7. Pivot Tables

- 7.1. Introduction to PivotTable
- 7.2. Basic PivotTable Data
- 7.3. Inserting a Pivot Table
- 7.4. PivotTable Geography
- 7.5. Building a PivotTable Report
  - 7.5.1. Adding row labels
  - 7.5.2. Adding column data
  - 7.5.3. Changing formulas in columns
  - 7.5.4. Changing headers & number formats
  - 7.5.5. Adding multiple row labels
  - 7.5.6. Collapsing and expanding
  - 7.5.7. Drill down to data
  - 7.5.8. Sorting, & refreshing
  - 7.5.9. Grouping by dates,
  - 7.5.10. Grouping by ranges,
  - 7.5.11. Show items with no detail
  - 7.5.12. Show values in empty cells
  - 7.5.13. Grouping across columns
  - 7.5.14. User defined groups, adding/removing subtotals
  - 7.5.15. Using formulas on pivoted data
  - 7.5.16. Displaying multiple row labels in columns, or tabular form
- 7.6. Other things to do with a Pivot Table
  - 7.6.1. Report Filters
  - 7.6.2. Report Slicers
  - 7.6.3. Expanding Filter Results to Individual Tabs
- 7.7. Formatting as a Table

### 8. Financial Arithmetic

- 8.1. Introduction
- 8.2. Simple interest
- 8.3. Compound interest
- 8.4. Fractional years

- 8.5. Variations in the compounding period
- 8.6. Continuous compounding
- 8.7. The equivalent annual rate
- 8.8. Growth rate calculations
- 8.9. Annuities
- 8.10. Sinking funds
- 8.11. Debt repayments

### 9. Investment Appraisal

- 9.1. Present value
- 9.2. Discounting multiple amounts
- 9.3. Variations in the discounting period
- 9.4. Net present value
- 9.5. The internal rate of return
- 9.6. The annual percentage rate

### 10. Data View and Security

- 10.1. Hide and Show row, column and sheet
- 10.2. Protect Sheet
- 10.3. Protect Workbook
- 10.4. Share Workbook
- 10.5. Allow Users to Edit Ranges

### 11. Miscellaneous

- 11.1. Page Setup and Printing
  - 11.1.1. Margins
  - 11.1.2. Orientation
  - 11.1.3. Size
  - 11.1.4. Breaks
  - 11.1.5. Print Area
  - 11.1.6. Background
  - 11.1.7. Print Titles
  - 11.1.8. Scale to fit

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