



Data Analytics Programme

Data Analytics programme empowers learners with essential skills and knowledge to excel in data analysis. Data analytics involves systematically analysing, interpreting, and visualising data to optimise processes, enhance customer experiences, and achieve strategic goals for organisations.



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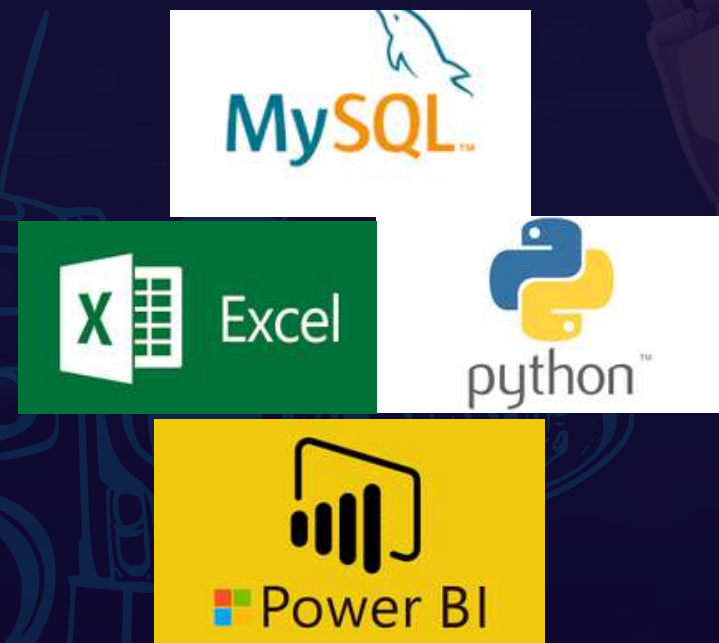


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Why Data Analytics

Becoming a Data Analyst grants you the power to enhance efficiency and elevate company performance by deciphering data patterns. You'll navigate complex datasets, advance programming skills, and utilise them for data manipulation, analysis, and exploration



Programme Objectives

- Master data analysis techniques, Software like Excel, PowerBI and tools like SQL and Python.
- Explore ethical considerations in data analytics and ensure compliance with industry standards.
- Gain hands-on experience through projects, Receive personalised career support for securing rewarding data analytics roles.
- Stay updated on emerging trends through ongoing professional development.



Fundamental of Data Analytics

Introduction to Data Analysis

- 1.1 Learning Objectives
- 1.2 What is Data Science?
- 1.3 How to be a Data Scientist?
- 1.4 What Should You Learn
- 1.5 Data Science Process
- 1.6 Laboratory Session
- 1.7 Introduction to Data Science Quiz

Statistics Concepts in Data

- 2.1 Learning Objectives
- 2.2 Statistics for Data Science
- 2.3 Quantitative Analysis
- 2.4 Qualitative Data Analysis
- 2.5 Categories of Statistics
- 2.6 Descriptive Statistics
- 2.7 Inferential Statistics
- 2.8 Measures of Central Tendency
- 2.9 Measures of Dispersion

Google Sheet Data Preparation

- 3.1 Source of Data
- 3.2 Introduction to Spreadsheet
- 3.3 Intro to Spreadsheet Interface
- 3.4 Importing Data in Google
- 3.5 Importing Data into Google Sheet
- 3.6 Intro to Data Governance, Legislation, and Ethics
- 3.7 Data Types & Selecting Data
- 3.8 Practical Data Types
- 3.9 Data Visibility in Google Sheet
- 3.10 Formula in Google Sheet
- 3.11 Useful Formula and Applications
- 3.12 Row Calculations
- 3.13 Column Calculations

Google Sheet Data Analysis

- 4.1 Data Aggregations
- 4.2 Pivot Tables
- 4.3 Intro to Data Visualization
- 4.4 Data Formatting
- 4.5 Data Cleaning
- 4.6 Spreadsheet Functions



Structure Query Language (MySQL)

Basics SQL

1. Installation of MySQL
2. Importing csv Data in MySQL
3. Introduction to SQL
4. Map of SQL Content
5. How Databases Store Data
6. SELECT & FROM
7. Formatting Best Practices
8. LIMIT & ORDER BY
9. Basic SQL Queries (Ex)
10. ORDER BY Part II
11. WHERE
12. SELECT and WHERE
13. Arithmetic Operators
14. Introduction to Logical Operators & LIKE
15. IN & NOT
16. AND and BETWEEN & OR

SQL JOINS

1. Why SQL Motivation
2. Introduction to JOINS
3. ERD Reminder
4. Alias (Naming)
5. Aliasing and commenting in SQL
6. JOIN Questions Part I
7. Motivation for Other JOINS

SQL Aggregations

1. Introduction to Aggregation
2. First Aggregation - COUNT
3. SUM, and GROUP BY
4. GROUP BY Part II
5. Filtering and Analyzing Sum Statistic Report
6. DISTINCT, and HAVING
7. DATE Functions
8. CASE Statements



Python Programming

Basics Python

1. Introduction to Python
2. Farm management code challenge
3. Python variables and data types
4. Casting Variables to Different Data Types
5. Mathematical Operators
6. Introduction to Strings
7. String Manipulation Techniques
8. Data Types and Operators Exercise
9. Streamline Your Print Statements
10. Data Structures in Python
11. Tuples examples
12. Lists examples
13. Sets examples
14. Dictionaries examples

Python Intermediate

1. Introduction to Condition Execution
2. Conditional Execution
3. Basic Python loops examples
4. Python Functions
5. Introduction to Numpy
6. Introduction to Pandas

Visualisation with Matplotlib

1. Visualisation with Matplotlib
2. Introduction to Data Visualization
3. Introduction to Data Visualization example
4. Advanced Visualisations in Python
5. Interactive Visualisation in Python examples
6. Visualisation with Matplotlib



Data Visualization With PowerBI

Communicating Our Findings

- 2.1 Overview of communicating
- 2.3 Crafting experiences through data stories
- 2.4 Having EPIC conversations
- 2.5 Crafting our own data stories

Impactful Communication

- 3.1 Design for impactful communication
- 3.2 Four Pillars of Effective Data Communication
- 3.3 An introduction to design
- 3.4 Visual perception and accessibility
- 3.5 Presentation design principles
- 3.6 Layout and composition

Dashboards and Reports

- 4.1 An introduction to dashboards and reports
- 4.2 Power BI as a dashboarding tool and more

- 4.3 Installing Microsoft Power BI on Windows
- 4.4 Getting data into Power BI
- 4.5 Importing Data Into Power BI
- 4.6 Sharing insights with Power BI

Creating Visuals in Power BI

- 5.1 Creating Visuals in Power BI
- 5.2 Comparison in Power BI - Line Charts
- 5.3 Comparison in Power BI - Column Charts
- 5.4 Compositions
- 5.5 Relationship - Scatter and Bubble Plots
- 5.6 Maps in Power BI

Formatting Visuals in Power BI

- 6.1 Formatting in Power BI
- 6.2 Basics Formatting
- 6.3 Communicating Additional Information
- 6.4 Colors, Fonts, and Themes
- 6.5 Conditional Formatting



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Data Analytics with Excel Programme

The Data Analytics with Excel for Professionals course enhances Excel skills from basic to advanced levels. Designed for data analysts and Financial enthusiasts, and other that work with data. it covers key functions, and pivot tables. Through hands-on projects, you'll learn to transform raw data into actionable insights, improving decision-making and driving organizational growth.



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Programme Objectives

- Master data analysis techniques, Software like Excel , PowerQuery, Pivot Tables and so on.
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Fundamentals of Data Analysis in Excel

Analyze Data

- 3.1 Learning Objectives
- 3.2 Introduction
- 3.3 Sorting and Filtering
- 3.4 Conditional Formatting
- 3.5 Conditional Logic - IF() & SWITCH()
- 3.6 Conditional Logic - IF() & IFS()
- 3.7 SUMPRODUCT() Function
- 3.8 Defining Variables - LET()
- 3.9 Defining Names - Name Manager
- 3.10 Defining Functions - LAMBDA()
- 3.11 Review

Transform Data

- 4.1 Intro Data Transform
- 4.2 Text to Columns
- 4.3 Removing Duplicate Values
- 4.4 String Functions for Text Values
- 4.5 Working with Date Values

- 4.6 Looking Up Data - VLOOKUP()
- 4.7 Using HLOOKUP() with VLOOKUP()
- 4.8 Looking Up Data - INDEX() & MATCH()
- 4.9 Dealing with Errors - IFNA() & IFERROR()
- 4.10 Chapter Review - Transform Data in Excel

Excel Tables

- 5.1 Class Objectives
- 5.2 Excel Tables
- 5.3 Calculated Columns in Excel Tables
- 5.4 Special Item Specifiers in Excel Tables
- 5.5 Power Query - Introduction
- 5.6 Power Query - Filtered Table
- 5.7 Power Query - Group & Aggregate Data
- 5.8 Linked Data Types
- 5.9 Expand Power Query Data with Linked Data Types
- 5.10 Linked Data Types as a Power Query Source
- 5.11 Chapter Review - Excel Tables



Fundamentals of Data Analysis in Excel

Dynamic Arrays

- 6.1 Class Objectives
- 6.2 Introduction - Dynamic Arrays
- 6.3 Dynamic Array Formulas
- 6.4 Dynamic Array Functions
- 6.5 Combining Dynamic Arrays & Excel Functions
- 6.6 XLOOKUP()
- 6.7 Chapter Review - Dynamic Arrays

Pivot Tables

- 7.1 Objectives
- 7.2 Introduction - Pivot Tables
- 7.3 Summarize Data with a PivotTable
- 7.4 Update & Sort a PivotTable
- 7.5 PivotTable Analyze Options
- 7.6 PivotTable Design Options

- 7.7 Filtering with Slicers & Timelines
- 7.8 Pivot Charts
- 7.9 Analyze Data - Ideas in Excel
- 7.10 Power Pivot
- 7.11 Chapter Review - Pivot Tables

Visualize Data

- 8.1 Objectives
- 8.2 Introduction - Visualize Data in Excel
- 8.3 Excel Visuals
- 8.5 Dashboard Preview
- 8.6 Net Earnings Waterfall
- 8.7 Combo Chart - Cash Flow & Cash Balance
- 8.8 Bullet Chart - Introduction
- 8.9 Creating Bullet Chart
- 8.10 Formatting Bullet Chart
- 8.11 Setting up Data Table for Bullet Chart
- 8.12 Excel vs Dashboard Tools
- 8.13 Review - Visualize Data in Excel



Data Analysis with Power Query Fundamental

Getting Started

- 1.10.1 Introduction
- 2.10.2 Introduction to Power Query
- 3.10.3 Outlines
- 4.10.4 Download PowerQuery
- 5.10.5 Overview of Course Files
- 6.10.6 Download the Learners Files

Basics Transformations

- 1.11.1 Module Introduction
- 2.11.2 Exercise 1a: A Basic CSV Unpivot
- 3.11.3 Exercise 1b: CSV import N columns
- 4.11.4 Exercise 1c: Filter No-Dates
- 5.11.5 Exercise 1d: Grouped Row Headers
- 6.11.6 Exercises

Extracting Information

- 1.12.1 Module Introduction
- 2.12.2 Exercise 2a - Better Filters
- 3.12.3 Exercise 2b - Import Basic Excel Files
- 4.12.4 Exercise 2c - Splitting Columns
- 5.12.5 Exercise 2d - Splitting Columns into Rows

Consolidating Data

- 1.13.1 Show Learning Objectives
- 2.13.2 Module Introduction
- 3.13.3 Exercise 3a - Grouping Data
- 4.13.4 Exercise 3b - Merging Tables
- 5.13.5 Exercise 3c - Combining Identical Files
- 6.13.6 Exercise 3z - Week 3 Exercise



Power Pivot Fundamentals

Dealing With Errors

- 1.14.2 Learning Objectives
- 2.14.3 Module Introduction
- 3.14.4 Exercise 4a - Basic Errors
- 4.14.5 Exercise 4b - Errors with Date Locales
- 5.14.6 Exercise 4c - Dealing with Exceptions
- 6.14.7 Exercise 4d - Errors with File Locations
- 7.14.8 Exercise 4z - Students
- 8.14.9 Course Summary
- 9. Part 3: Power Pivot Fundamentals

Course Orientation

- 1.16.1 Learning Objectives
- 2.16.2 Introduction to Power Pivot
- 3.16.3 Course Objectives
- 4.16.4 Downloadable files
- 5.16.5 Download
- 6.16.6 Install Power Pivot

Basic Data Model

- 1.17.1 Learning Objectives
- 2.17.2 Module Introduction
- 3.17.3 Data in Our Data Model
- 4.17.4 Database Normalization
- 5.17.5 Fact and Dimension Recap
- 6.17.6 Opening the Starter File
- 7.17.7 Importing Data into Power Pivot
- 8.17.8 PowerPivot Overview
- 9.17.9 Create a Basic Pivot Table
- 10.17.10 Create Relationships in Power Pivot
- 11.17.11 Types of Relationships
- 12.17.12 Power Pivot Table Review
- 13.17.13 Insert Slicer



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Power Pivot Fundamentals

Basic Measures

- 18.1 Learning Objectives
- 18.2 Chapter Introduction - Basic DAX Measures
- 18.3 Opening and Refreshing the Partially Completed Course File
- 18.4 Two Common Problems When Refreshing Data
- 18.5 Creating an Explicit Measure
- 18.6 Hiding Columns from the Excel View
- 18.7 Creating a Calculated Column for Store Size
- 18.8 Updating the Dashboard and Slicer
- 18.9 Calculating Margin Dollars
- 18.10 Calculating Sales with SUMX
- 18.11 Comparing Methods of Creating Measures
- 18.12 Calculating Margin %
- 18.13 A Closer Look at DAX
- 18.14 More Examples of Context

Working with a Star Schema

- 19.1 Learning Objectives
- 19.2 Chapter Intro - Working with a Star Schema
- 19.3 The Star Schema
- 19.4 Copy a Pivot Table
- 19.5 Adding the Product Dimension
- 19.6 Add a Pivot Table for Brands
- 19.7 Format Measures
- 19.8 Managing Multiple Slicer Connections
- 19.9 The Datetime Dimension
- 19.10 Tidying the Diagram View
- 19.11 Creating a Pivot Chart
- 19.12 Creating a Slicer to Chart Connections
- 19.13 Removing Autosizing Based on Slicer Selections



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Power Pivot Fundamentals

Working with a Star Schema

- 19.14 Chart Formatting Overview
- 19.15 Changing the Sort Order of Months
- 19.16 Adding a Timeline
- 19.17 Basics of the Store Performance Dashboard
- 19.18 Linking Slicers Between Report Pages
- 19.19 The Manager Dimension - Dealing with Duplicates
- 19.20 Load and Transform Data in Power Query
- 19.21 Load data from Power Query to Data Model
- 19.22 Setting up the Manager Pivot Table

From Number to Narratives

- 20.1 Learning Objectives
- 20.2 From Numbers to Narratives
- 20.3 DAX % of Total
- 20.4 Best Practice for Naming Metrics
- 20.5 Measuring Engagement & Unique Visitors
- 20.6 Calculating First & Last Visits
- 20.7 DAX in Business Reports
- 20.8 Adding Total Visitors
- 20.9 Summarizing Store Sales
- 20.10 Managing Multiple Measures
- 20.11 Building the Final Dashboard
- 20.12 Course Review



Global Nexus Institute Education Philosophy

Global Nexus Institute's teaching philosophy centers on student-centered learning, fostering practical skills for the job market in fields practical, every part of the course have real-life practical exercises. we emphasizes inclusivity, offering opportunities to graduates and working professional groups include women and people with disabilities.

The institute combines online and in-person learning to balance flexibility and hands-on experience. Ethical technology use and critical thinking are key principles, encouraging responsible innovation. Collaboration and lifelong learning are also prioritized, preparing students to adapt to evolving challenges while promoting a supportive, inclusive learning environment for all.





Thank You!

Get in touch with us



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