

# ADVANCED DATA ANALYTICS TRAINING AND CERTIFICATION

As per International Standards



## UNICHROME

# Unichrone Training **Advantages**

- ✓ 4 Day Interactive Instructor –led Online/Classroom or Group Training
- ✓ Course study materials designed by subject matter experts
- ✓ Mock Tests to prepare in a best way
- ✓ Highly qualified, expert & accredited trainers with vast experience
- ✓ Enrich with Industry best practices and case studies and present trends
- ✓ Advanced Data Analytics training course adhered with International Standards
- ✓ End-to-end support via phone, mail, and chat
- ✓ Convenient Weekday/weekend Advanced Data Analytics training Training Course schedule



# About Unichrone

✓ We are a professional training institute with an extensive portfolio of professional certification courses. Our training programs are meant for those who want to expand their horizons by acquiring professional certifications across the spectrum. We train small- and medium-sized organizations all around the world, including in USA, Canada, Australia, UK, Ireland and Germany.



Guaranteed Quality



Handpicked Trainers



Global Presence



Online Training Option

**We've trained professionals across global companies**

# Importance of Advanced Data Analytics Certification Training

- ✓ Advanced Data Analytics Certification molds a professional to use the data constructively and to coerce innovation-driven decisions in their career. By attaining this certification, an individual encompasses their awareness in various aspects of data analytics. It includes descriptive analytics, diagnostic analytics, predictive analytics, and prescriptive analytics. Furthermore, Advanced Data Analytics Certification adorns professionals with obligatory knowledge in data visualization, text mining, social media analysis, and more.
- ✓ Advanced-Data Analytics Certification Training covers the latest techniques such as data mining, predictive modeling, machine learning, and data visualization. It empowers data analysts to take up real-world data projects by supporting them with real data examples to work with. This training program lets professionals gain knowledge from a basic level right from importing intricated data, cleaning and sorting data, merging, grouping, aggregating, and exploring data analysis to processing the resultant data for statistics, presentation, and so on.

## ELIGIBILITY CRITERIA

- ✓ Aspirants need not meet any requirements to pursue Advanced Data Analytics Training Course. However, having prior knowledge of the ISO standard is beneficial.

## WHO SHOULD ATTEND

- ✓ Anyone involved in and wanting to gain knowledge about data analytics can attend Advanced Data Analytics Training Course.

# ADVANCED DATA ANALYTICS TRAINING CERTIFICATION

## Advantages



CERTIFIES  
YOUR TALENT



HELPS  
BUILDING  
VALUES



GLOBAL  
RECOGNITION



PERFECT  
EXECUTION



BUILDS  
CUSTOMER  
LOYALTY



MORE  
EMPLOYABILITY  
OPTIONS

# Syllabus of Advanced Data Analytics Training

## Domain 1: Data Analytics

### Lesson 01 – Introduction to Data Analytics

|    |  |
|----|--|
| 1. | Data Analytics Overview  |
| 2. | <ul style="list-style-type: none"><li>Types of Data Analytics</li><li>Descriptive Analytics</li><li>Diagnostic Analytics</li><li>Predictive Analytics</li><li>Prescriptive Analytics</li></ul> |
| 3. | Benefits of Data Analytics   |
| 4. | Data Visualisation for Decision Making   |
| 5. | Data Types, Measure of Central Tendency, Measures of Dispersion  |
| 6. | Graphical Techniques, Skewness and Kurtosis, Box Plot  |
| 7. | Descriptive Stats  |
| 8. | Sampling Variation, Central Limit Theorem, Confidence Interval   |
| 9. | Optimisation Techniques for Data Analytics   |

### Lesson 02 – Introduction to Statistical Analysis

|    |  |
|----|--|
| 1. | Counting, Probability, and Probability Distributions |
| 2. | Sampling Distributions                               |
| 3. | Estimation and Hypothesis Testing                    |
| 4. | Scatter Diagram                                      |
| 5. | ANOVA and Chi-Square                                 |
| 6. | Imputation Techniques                                |
| 7. | Data Cleaning  |
| 8. | Correlation and Regression                           |

# Syllabus of Advanced Data Analytics Training

## Lesson 03 – Data Wrangling with SQL

|     |   |
|-----|---|
| 1.  | Introduction to SQL                                       |
| 2.  | Database Normalisation                                    |
| 3.  | Entity-Relationship Model                                 |
| 4.  | SQL Operators   |
| 5.  | Join, Tables, and Variables                               |
| 6.  | SQL Functions   |
| 7.  | Subqueries  |
| 8.  | Views and Stored Procedures                               |
| 9.  | User-Defined Functions                                    |
| 10. | SQL Performance and Optimisation                          |
| 11. | Advanced Concepts<br>Correlated Subquery<br>Grouping Sets |

## Lesson 04 – Presto

|    |  |
|----|--|
| 1. | Introduction to Presto                       |
| 2. | Writing Queries in Presto on Large Data Sets |



# Syllabus of Advanced Data Analytics Training

## Lesson 05 – Feature Engineering

- |     |   |
|-----|---|
| 1.  | Handling Unstructured Data                    |
| 2.  | Machine Learning Algorithms                   |
| 3.  | Bias Variance Trade-Off                       |
| 4.  | Imbalance Data                                |
| 5.  | Handling Unbalanced Data                      |
| 6.  | Boosting                                      |
| 7.  | Model Validation                              |
| 8.  | Hyper Parameter Optimisation                  |
| 9.  | Advanced Machine Learning Libraries – Xgboost |
| 10. | Solving Problems on Kaggle                    |

# Syllabus of Advanced Data Analytics Training

## Domain 2: Business Analytics with Excel

### Lesson 06 – Introduction to Data Analysis with MS Excel

- |    |                        |
|----|------------------------|
| 1. | Steps to Analyse Data  |
| 2. | Introduction to Tables |

### Lesson 07 – Cleaning Data with Text Functions

- |    |  |
|----|--|
| 1. | Removing Unwanted Characters from the Text <ul style="list-style-type: none"><li>• Steps for Data Cleaning</li></ul> |
|----|--|

# Syllabus of Advanced Data Analytics Training

## Lesson 08 – Sorting and Filtering

|    |  |
|----|--|
| 1. | What is Sorting and Filtering?             |
| 2. | Applying Sorting on Two Columns            |
| 3. | Steps to Sort Dates and Columns by Colours |
| 4. | Apply Filtering                            |
| 5. | Clear Filter                               |
| 6. | Apply Filter on Text                       |

## Lesson 9 – Exploring Lookup Functions

|    |                            |
|----|----------------------------|
| 1. | VLookUp Functions in Excel |
| 2. | HLookUp Functions in Excel |

# Syllabus of Advanced Data Analytics Training

## Lesson 10 – Introduction to Power Pivot and Formula Auditing

|     |                                 |
|-----|---------------------------------|
| 1.  | Working with Pivot Tables       |
| 2.  | How to Use Power Pivot?         |
| 3.  | Measures                        |
| 4.  | Dimension Tables                |
| 5.  | Relationships                   |
| 6.  | Advanced Functions              |
| 7.  | Data Visualisation and Analysis |
| 8.  | Show Formulas                   |
| 9.  | Trace Precedents                |
| 10. | Trace Dependents                |
| 11. | Evaluate Formula                |

## Lesson 11 – DAX Variables and Formatting

|    |                                      |
|----|--------------------------------------|
| 1. | What is DAX?                         |
| 2. | Data Types and Operators             |
| 3. | DAX Variables                        |
| 4. | Formatting DAX Code                  |
| 5. | Debugging Errors in DAX Code         |
| 6. | Progressive DAX Syntax and Functions |

# Syllabus of Advanced Data Analytics Training

## Lesson 12 – Introduction to Power Map

|    |                                      |
|----|--------------------------------------|
| 1. | Create a Power Map                   |
| 2. | Explore Sample Datasets in Power Map |
| 3. | Visualise Data in Power Map          |
| 4. | Create a Custom Map in Power Map     |

## Lesson 13 – Design a Dashboard Using Data Model

|    |                                     |
|----|-------------------------------------|
| 1. | Using PowerPoint and Excel          |
| 2. | Make a Dashboard in Excel           |
| 3. | Customise with Macros, Colour, etc. |
| 4. | Make a Dashboard in Smartsheet      |

# Syllabus of Advanced Data Analytics Training

## Domain 3: Programming Basics and Data Analytics with Python

### Lesson 14 – Python for Data Analysis – NumPy

|    |                                     |
|----|-------------------------------------|
| 1. | Introduction to NumPy               |
| 2. | NumPy Arrays                        |
| 3. | Aggregations                        |
| 4. | Computation on Arrays: Broadcasting |
| 5. | Comparison, Boolean Logic and Masks |
| 6. | Fancy Indexing                      |
| 7. | Sorting Arrays                      |
| 8. | NumPy's Structured Arrays           |

### Lesson 15 – Python for Data Analysis – Pandas

|     |                              |
|-----|------------------------------|
| 1.  | Installing Pandas            |
| 2.  | Pandas Objects               |
| 3.  | Data Indexing and Selection  |
| 4.  | Operating on Data in Pandas  |
| 5.  | Handling Missing Data        |
| 6.  | Hierarchical Indexing        |
| 7.  | Concat and Append            |
| 8.  | Merge and Join               |
| 9.  | Aggregations and Grouping    |
| 10. | Pivot Tables                 |
| 11. | Vectorised String Operations |
| 12. | Working with Time Series     |

# Syllabus of Advanced Data Analytics Training

## Domain 3: Programming Basics and Data Analytics with Python

### Lesson 16 – Python for Data Visualisation – Matplotlib

|     |                                     |
|-----|-------------------------------------|
| 1.  | Overview                            |
| 2.  | Object-Oriented Interface           |
| 3.  | Simple Line Plots and Scatter Plots |
| 4.  | Visualising Errors                  |
| 5.  | Contour Plots                       |
| 6.  | Histograms, Binnings, and Density   |
| 7.  | Customising Plot Legends            |
| 8.  | Customising Colour Bars             |
| 9.  | Multiple Subplots                   |
| 10. | Text Annotation                     |
| 11. | Three-Dimensional Plotting          |

### Lesson 17 – Python for Data Visualisation – Seaborn

|    |  |
|----|--|
| 1. | Installing Seaborn and Load Dataset                            |
| 2. | Plot the Distribution  |
| 3. | Regression Analysis  |
| 4. | Basic Aesthetic Themes and Styles                              |
| 5. | Distinguish Between Scatter Plots, Hexbin Plots, and KDE Plots |
| 6. | Use Boxplots and Violin Plots                                  |

# Syllabus of Advanced Data Analytics Training

## Domain 4: Tableau Training

### Lesson 18 – Get Started

|    |  |
|----|--|
| 1. | What is Tableau?                               |
| 2. | Steps in Creating Tableau Data Analysis Report |
| 3. | Navigation                                     |
| 4. | Data Terminology                               |
| 5. | Design Flow                                    |
| 6. | File Types                                     |
| 7. | Data Types                                     |
| 8. | Show Me  |

### Lesson 19 – Data Sources

|    |                       |
|----|-----------------------|
| 1. | Types of Data Sources |
| 2. | Custom Data View      |
| 3. | Extracting Data       |
| 4. | Fields Operations     |
| 5. | Editing Metadata      |
| 6. | Data Joining          |
| 7. | Data Blending         |



# Syllabus of Advanced Data Analytics Training

## Domain 4: Tableau Training

### Lesson 20 – Worksheets

|    |                   |
|----|-------------------|
| 1. | Add and Rename    |
| 2. | Save and Delete   |
| 3. | Reorder Worksheet |
| 4. | Paged Workbook    |

### Lesson 21 – Calculations

|    |  |
|----|--|
| 1. | Operators  |
| 2. | Functions  |
| 3. | Calculations <ul style="list-style-type: none"><li>• Numeric</li><li>• String</li><li>• Date</li><li>• Table</li></ul> |
| 4. | LOD Expressions  |

# Syllabus of Advanced Data Analytics Training

## Domain 4: Tableau Training

### Lesson 22 – Sort and Filters

|   |   |
|---|---|
| 1 | Basic Sorting   |
| 2 | Basic Filters   |
| 3 | Filters <ul style="list-style-type: none"><li>• Quick</li><li>• Context</li><li>• Condition</li></ul> |
| 4 | Top Filters   |
| 5 | Filter Operations   |

### Lesson 23 – Tableau Charts

|     |  |
|-----|--|
| 1.  | Chart <ul style="list-style-type: none"><li>• Bar</li><li>• Line</li><li>• Pie</li></ul> |
| 2.  | Crosstab   |
| 3.  | Scatter Plot   |
| 4.  | Bubble Chart   |
| 5.  | Bullet Graph   |
| 6.  | Box Plot   |
| 7.  | Tree Map   |
| 8.  | Bump Chart   |
| 9.  | Gantt Chart  |
| 10. | Histogram  |
| 11. | Motion Charts  |
| 12. | Waterfall Charts   |

# Exam Format of Advanced Data Analytics Training Certification

| Examination Format         |                              |
|----------------------------|------------------------------|
| Exam Name                  | Advanced Data Analytics exam |
| Exam Format                | Multiple Choice              |
| Total Questions & Duration | 30 Questions, 1 Hour         |
| Passing Score              | Minimum passing score of 70% |
| Exam Cost                  | Included in training fee     |

To get you fully prepared with the knowledge and skills for the Advanced Data Analytics, a training session at Unichrone gives immense importance to mock questions at the end of every module and problem-solving exercises within the session. Prepared by certified faculty, the practice tests are a true simulation of Advanced Data Analytics exam.

# Contact Us

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