



Data Science & AI

PYTHON CERTIFICATION TRAINING



500K+

Satisfied Students



100K+

Online Students



300+

Trainers



300K+

Placements



200+

Global Certifications



150+

Companies

Introduction to Data Analytics

- ✓ What Is Data Analytic?
- ✓ Common Terms In Data Analytics
- ✓ What Is Data?
- ✓ Classification Of Data
- ✓ Relevance In Industry And Need Of The Hour
- ✓ Types Of Problems And Business Objectives In Various Industries
- ✓ How Leading Companies Are Harnessing The Power Of Analytics?
- ✓ Critical Success Drivers.
- ✓ Overview Of Data Analytics Tools & Their Popularity.
- ✓ Data Analytics Methodology & Problem-Solving Framework.
- ✓ List Of Steps In Data Analytics Projects

Python for Data Analyst

- ✓ Introduction To Python
 - Installation and Working with Python
 - Understanding Python variables
 - Python basic Operators
 - Understanding the Python blocks.
- ✓ Python Keyword And Identifiers
 - Python Comments, Multiline Comments.
 - Python Indentation
 - Understating the concepts of Operators
 - Arithmetic
 - Relational
 - Logical
 - Assignment
 - Membership
 - Identity
- ✓ Introduction To Variables
 - Variables, expression condition and function
 - Global and Local Variables in Python
 - Packing and Unpacking Arguments
 - Type Casting in Python

- Byte objects vs. string in Python
- Variable Scope

✓ Python Data Type

- Declaring and using Numeric data types
- Using string data type and string operations
- Understanding Non-numeric data types
- Understanding the concept of Casting and Boolean.
- Strings
- List
- Tuples
- Dictionary
- Sets

✓ Control Structure & Flow

- Statements – if, else, elif
- How to use nested IF and Else in Python
- Loops
- Loops and Control Statements.
- Jumping Statements – Break, Continue, pass
- Looping techniques in Python
- How to use Range function in Loop?
- Programs for printing Patterns in Python
- How to use if and else with Loop
- Use of Switch Function in Loop
- Elegant way of Python Iteration
- Generator in Python
- How to use nested Loop in Python
- Use If and Else in for and While Loop
- Examples of Looping with Break and Continue Statement
- How to use IN or NOT IN keyword in Python Loop.

✓ Python Function, Modules And Packages

- Python Syntax
- Function Call
- Return Statement
- Arguments in a function – Required, Default, Positional, Variable-length
- Write an Empty Function in Python –pass statement.
- Lambda/ Anonymous Function
- *args and **kwargs
- Help function in Python
- Scope and Life Time of Variable in Python Function
- Nested Loop in Python Function
- Recursive Function and Its Advantage and Disadvantage
- Organizing python codes using functions
- Organizing python projects into modules
- Importing own module as well as external modules
- Understanding Packages

- Random functions in python
- Programming using functions, modules & external packages
- Map, Filter and Reduce function with Lambda Function
- More example of Python Function

✓ List

- What is List.
- List Creation
- List Length
- List Append
- List Insert
- List Remove
- List Append & Extend using “+” and Keyword
- List Delete
- List related Keyword in Python
- List Revers
- List Sorting
- List having Multiple Reference
- String Split to create a List
- List Indexing
- List Slicing
- List count and Looping
- List Comprehension and Nested Comprehension

✓ Tuple

- What is Tuple
- Tuple Creation
- Accessing Elements in Tuple
- Changing a Tuple
- Tuple Deletion
- Tuple Count
- Tuple Index
- Tuple Membership
- TupleBuilt in Function (Length, Sort)

✓ Dictionary

- Dict Creation
- Dict Access (Accessing Dict Values)
- Dict Get Method
- Dict Add or Modify Elements
- Dict Copy
- Dict From Keys.
- Dict Items
- Dict Keys (Updating, Removing and Iterating)
- Dict Values
- Dict Comprehension
- Default Dictionaries
- Ordered Dictionaries

- Looping Dictionaries
- Dict useful methods (Pop, Pop Item, Str , Update etc.)

✓ Sets

- What is Set
- Set Creation
- Add element to a Set
- Remove elements from a Set
- PythonSet Operations
- Frozen Sets

✓ Strings

- What is Set
- Set Creation
- Add element to a Set
- Remove elements from a Set
- PythonSet Operations

✓ Python Exception Handling

- Python Errors and Built-in-Exceptions
- Exception handing Try, Except and Finally
- Catching Exceptions in Python
- Catching Specific Exception in Python
- Raising Exception
- Try and Finally

✓ Python File Handling

- Opening a File
- Python File Modes
- Closing File
- Writing to a File
- Reading from a File
- Renaming and Deleting Files in Python
- Python Directory and File Management
- List Directories and Files
- Making New Directory
- Changing Directory

✓ Python Database Interaction

- SQL Database connection using
- Creating and searching tables
- Reading and Storing config information on database
- Programming using database connections

✓ Reading An Excel

- Working With Excel
- Reading an excel file using Python
- Writing to an excel sheet using Python

- Python| Reading an excel file
- Python | Writing an excel file
- Adjusting Rows and Column using Python
- ArithmeticOperation in Excel file.
- Play with Workbook, Sheets and Cells in Excel using Python
- Creating and Removing Sheets
- Formatting the Excel File Data
- More example of Python Function

✔ Complete Understanding Of OS Module Of Python

- Check Dirs. (exist or not)
- How to split path and extension?
- How to get user profile detail?
- Get the path of Desktop, Documents, Downloads etc.
- Handle the File System Organization using OS
- How to get any files and folder's details using OS?

Statistics for Data Analyst

✔ Introduction To Statistics

- Categorical Data
- Numerical Data
- Mean
- Median
- Mode
- Outliers
- Range
- Interquartile range
- Correlation
- Standard Deviation
- Variance
- Box plot

✔ Understanding Statistics

- Descriptive Statistics
- Sample vs Population Statistics
- Random variables
- Probability distribution functions
- Expected value
- Normal distribution
- Gaussian distribution
- Z-score
- Spread and Dispersion
- Correlation and Co-variance

✔ Data Pre-Processing & Data Mining

- Data Preparation
- Feature Engineering

- Feature Scaling
- Datasets
- Dimensionality Reduction
- Anomaly Detection
- Parameter Estimation
- Data and Knowledge
- Selected Applications in Data Mining

✓ EDA (Exploratory Data Analysis)

- Need for structured exploratory data
- EDA framework for exploring the data and identifying any problems with the data (Data Audit Report)
- Identify missing data
- Identify outliers' data
- Imbalanced Data Techniques

Data Analysis and Visualization

✓ Data Analysis And Visualization Using Pandas.

- Read data from Excel File using Pandas More Plotting, Date Time Indexing and writing to files
- How to get record specific records Using Pandas Adding & Resetting Columns, Mapping with function
- Using the Excel File class to read multiple sheets More Mapping, Filling Nonvalue's
- Exploring the Data Plotting, Correlations, and Histograms
- Getting statistical information about the data Analysis Concepts, Handle the None Values
- Reading files with no header and skipping records Cumulative Sums and Value Counts, Ranking etc
- Reading a subset of columns Data Maintenance, Adding/Removing Cols and Rows
- Applying formulas on the columns Basic Grouping, Concepts of Aggregate Function
- Complete Understanding of Pivot Table Data Slicing using iLoc and Loc property (Setting Indices)
- Understanding the Properties of Pivot Table in Pandas Advanced Reading CSVs/HTML, Binning, Categorical Data
- Exporting the results to Excel Joins
- Python | Pandas Data Frame Inner Join
- Understanding the properties of Data Frame Left Join (Left Outer Join)
- Indexing and Selecting Data with Pandas Right Join (Right Outer Join)
- Pandas | Merging, Joining and Concatenating Full Join (Full Outer Join)
- Pandas | Find Missing Data and Fill and Drop NA Appending Data Frame and Data
- Pandas | How to Group Data How to apply Lambda / Function on Data Frame
- Other Very Useful concepts of Pandas in Python Data Time Property in Pandas (More and More)

✓ Data Analysis And Visualization Using NumPy

- Introduction to NumPy Numerical Python
- Importing NumPy and Its Properties

- NumPy Arrays
- Creating an Array from a CSV
- Operations an Array from a CSV
- Operations with NumPy Arrays
- Two-Dimensional Array
- Selecting Elements from 1-D Array
- Selecting Elements from 2-D Array
- Logical Operation with Arrays
- Indexing NumPy elements using conditionals
- NumPy's Mean and Axis
- NumPy's Mode, Median and Sum Function
- NumPy's Sort Function and More

✓ Data Analysis And Visualization Using Matplotlib

- Bar Chart using Python Matplotlib
- Column Chart using Python Matplotlib
- Pie Chart using Python Matplotlib
- Area Chart using Python Matplotlib
- Scatter Plot Chart using Python Matplotlib
- Play with Charts Properties Using Matplotlib
- Export the Chart as Image
- Understanding plt. subplots () notation
- Legend Alignment of Chart using Matplotlib
- Create Charts as Image
- Other Useful Properties of Charts.
- Complete Understanding of Histograms
- Plotting Different Charts, Labels, and Labels Alignment etc.

✓ Introduction To Data Visualization With Seaborn

- Introduction to Seaborn
- Making a scatter plot with lists
- Making a count plot with a list
- Using Pandas with seaborn
- Tidy vs Untidy data
- Making a count plot with a Dataframe
- Adding a third variable with hue
- Hue and scatter plots
- Hue and count plots
- Visualizing Two Quantitative Variables
 - Introduction to relational plots and subplots
 - Creating subplots with col and row
 - Customizing scatter plots
 - Changing the size of scatter plot points
 - Changing the style of scatter plot points
 - Introduction to line plots
 - Interpreting line plots
 - Visualizing standard deviation with line plots

- Plotting subgroups in line plots
- Visualizing a Categorical and a Quantitative Variable
 - Current plots and bar plots
 - Count plots
 - Bar plot with percentages
 - Customizing bar plots
 - Box plots
 - Create and interpret a box plot
 - Omitting outliers
 - Adjusting the whisk
 - Point plots
 - Customizing points plots
 - Point plot with subgroups
- Customizing Seaborn Plots
 - Changing plot style and colour
 - Changing style and palette
 - Changing the scale
 - Using a custom palette
 - Adding titles and labels Part 1
 - Face Grids vs. Axes Subplots
 - Adding a title to a face Grid object
 - Adding title and labels Part 2
 - Adding a title and axis labels
 - Rotating x-ticks labels
 - Putting it all together
 - Box plot with subgroups
 - Bar plot with subgroups and subplots
 - Well done! What's next?

e-Learning through LMS

Learning **Management System**

Our LMS (LearnPitch) is for the administration, documentation, tracking, reporting, automation, and delivery of educational courses, training programs, or learning and development programs.

Our LMS has been designed to identify training and learning gaps, using analytical data and reporting to keep you up with the class activities.

Key Features **Learning Management System**



Live Sessions with Class recordings



Get study material with Assignments.



Track your curriculum covered.



Track your class wise attendance



Share your feedback for Trainer & Training



Get your Training Certificate from LMS



|Training Certification

Earn Your **Certificate**

Your certificate and skills are vital to the extent of jump-starting your career and giving you a chance to compete in a global space.



|Croma Campus is Nasscom Certified

Croma Campus is now

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www.cromacampus.com

|Croma Campus! Reviews



"The most rewarding part of my experience has been achieving a prestigious certification in the subject that I love. Moreover, the training offered out by the specialists are of world-class and prepares out the students for corporate world. For me Croma Campus means a lot."

"By The Students For The Students,,

Your Success is **Our Story**



Bharat

"I am fully satisfied with the excellent training services received by the expert staff at Croma Campus. I want to thank Croma Campus for providing me with the most innovative and affordable training services for learning all the software testing procedures and guidelines."



Ankit

"It was a lifetime experience for me to get trained by IT Experts of Croma Campus. What I liked most about the training was the consistent high-quality education, which was friendly and co-active. The placement department was also proactive, they keep me updated regarding new job opportunities and provide the grooming session to crack the interview. At last, I would like to thank all faculty members of Croma Campus for their immense help and support."



Umesh

"Without any second thought, I will give Croma Campus 10/10. Their placement department is highly proactive. I remember they started scheduling interviews for me from the very next day when I told them my course has been completed. These people are doing a phenomenal job and I highly recommend Croma Campus to everyone."



Shams Khan

"Croma Campus is doing a phenomenal job in the IT training industry. The reason why I decided to join their training program was that they provide quality training at very a nominal price. Plus, the online training mode was also a factor due to which I decided to join the training program of Croma Campus as I didn't want to attend physical classes."



|Meet Our Team



Sales Team

Our Sales team is highly passionate, emphatic, positive attitude, great listening skills, ability to deliver quick solutions, and they are multitasker too. Our team always remains up-to-date about all the latest technologies and market trends. With effective communication skills, they always work to deliver the right information to customers when it is needed.

Product Team

Our product team is highly functional and collaborative working together to achieve the common outcome of designing exceptional digital experiences. Each of our members is a contributor to help us achieve success in long-run. Sitting at the high-end of technology and innovation, team helps to deliver high-end customer experiences and always comes out with a big idea as a game-changing plan.



Marketing Team

Our Marketing team works as gladiators and helps us to achieve business success in all possible ways. They are included in almost everything either it is building a brand, creating brand awareness, promoting products or services, delivering trailblazing customer experiences or increasing engagement at public forums. They are the true backbone of the Company.

Content Team

Our content team is responsible for ideation, creation, optimization, and distribution of content throughout the company. The team always starts its work with a strategy, how to create high-quality contents, and how to promote or share the content. Our in-house content team help us to produce all types of contents either they are educational content pieces, marketing content, SEO content, or any other forms too.



Customer Access Team

This is the team that has actually been taken up us from reactive state to a pro-active state. The team utilizes high-valued solutions to satisfy customers in all possible ways. It is truly said that no company can succeed if your customers are not satisfied. And our customer success team is dedicatedly working to keep all the customers satisfied and we always consider our customer feedback on priority.

HR Team

Our HR team is committed to provide high-end solutions to employees as they require. Our HR team has the right skills and knowledge to make sure that the HR department can always be legally and strategically successful. They know how to keep employees motivated all the time with the best HR policies and fun activities too from time to time.



| Glimpse Of Our Office

Look **Who We are**

Our office's infrastructure comprises all the necessary software and network resources that are required to deliver IT & Design, Human Resources, Digital Marketing, and training services.

We are well-equipped with bright designed work bays for employees and managers having separate cabins with spacious cafeteria and training classrooms.



|About Croma Campus

“Our Mission is to Build Nation through Education & Beyond Limitation.”

Croma Campus Training & Development Private Limited is an education platform providing rigorous industry-relevant programs designed and delivered in collaboration with world-class faculty, industry & Infrastructure. In the past 13 years we have trained 18000+ candidates and out of which we are able to place 12000+ professionals in various industries successfully.



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