

**Hello,**  
**Admissions of New Complete ONLINE "Python Machine Learning with Automations" batch are open.**

Batch will starts from 24th March 2024.

**Batch Duration: 3.5 Months (Complete Online)**  
**Days: Saturday & Sunday, Public Holidays**  
**Timing :**  
**SATURDAY 4.30 to 7.30 PM (+/- 30 Minutes)**  
**SUNDAY 8 TO 11 AM**

Prerequisite for the batch : मेहनत घेण्याची अभ्यासात सातत्य राखण्याची तयारी.

This batch is divided into multiple modules which cover below things as

Module 1: Python Programming language Fundamentals  
Module 2: Python Programming language Advanced  
Module 3: Data Science  
Module 4: Artificial Intelligence  
Module 5: Machine learning with Python  
Module 6: Case studies based on Machine Learning  
Module 7: Automation using Python

Please watch open to all session before taking the admission

Open to all session link of previous batch: <https://www.youtube.com/live/3bSmaeN9-m4?feature=share>

Please check our YouTube channel for the informative videos of Python and Machine Learning

Programming in Python: <https://youtu.be/wUCEHYOAXsw>

Machine Learning: <https://youtu.be/ArdpEy84bM>

**Contents covered under**  
**Module 1:**  
**Python Programming Language Fundamentals**

- Introduction of Python Programming
- History of Python Language
- Features of Python language and its importance
- Versions of Python
- Toolchain of Python application
- First application in Python
- Data types in Python
- Variables and their types
- Operators and their types
- Memory allocation strategy used by Python
- Numbers in Python
- Input-Output mechanisms
- Command-line arguments
- Procedural programming approach in Python

- Function definition and function calling techniques
- Function arguments and their types
- Inner function and its calling techniques
- Returning multiple values from a function
- Anonymous function and its use
- Default function arguments
- Required function argument
- Variable number of the argument of the function
- Keyword arguments of the function
- Iterative approach using loops
- Iteration using for loop
- Use of break and continue keyword
- Iteration using while loop
- Recursive function approach
- Programs control using if, else, else if
- Array and its types
- Manipulate different types of array
- Creation and use of a multidimensional array
- List in Python
- Dynamic input in List
- Range in python
- Tuples in Python
- String in Python
- Dictionaries and their use
- Manipulation of String
- File Handling
- File Reading Writing
- File creation and manipulation

## **Contents covered under Module 2: Python Programming Language Advanced**

- Module in Python
- Creation of user-defined Module
- Multiprocessing application development
- Multitasking using thread
- Thread Synchronisation techniques
- Single-threaded vs multithread application development
- Parallel programming in Python using Pool class
- Decorators in Python
- Practical use of Decorators
- Lambda functions in python
- Filter Map Reduce concept in Python
- Exception handling
- Object-Oriented Programming in Python
- Concept of Encapsulation using Class
- Characteristics of class and its types
- Behaviours of class and its types
- Nested class and its use
- Use of self keyword
- Object creation
- Constructor and its types

- Abstraction in Python
- Polymorphism and its types
- Inheritance for reusability and its types
- Function Overloading technique
- Multiprocessing concept and its use
- Special variables in python

### **Contents covered under Module 3:**

#### **Data Science**

- Introduction to Data Science
- Types of data
- Data set and its classification
- Volume, Variety, and Velocity of data
- Features of and labels from data set
- Training dataset and Testing data set
- Data encoding in the dataset
- Split activity to divide the dataset
- Types of data
- Data sources
- Data cleaning
- Data manipulation techniques
- Data representation techniques
- Data analysis
- Data storage techniques
- Loading data set
- Cleaning dataset

### **Contents covered under Module 4:**

#### **Artificial Intelligence**

- Concept of Artificial Intelligence
- Types of AI
- Fields in which AI is used
- Philosophy of Artificial Intelligence

### **Contents covered under Module 5:**

#### **Machine Learning**

- Machine learning concept
- Types of machine learning
- Developmental phases of Machine Learning application
- Concept of Supervised machine learning
- Concept of Unsupervised machine learning
- Libraries used for machine learning
- Introduction of PIP utility
- Environment setup for Machine Learning
- Pandas library installation
- Data set manipulation using the pandas library
- Series , DataFrame and Panel in Pandas
- Numpy installation
- Numeric calculations using Numpy
- Scipy installation
- Anaconda installation

- Features of Anaconda and its use in ML
- Installation of Matplotlib library
- Visualisation techniques using Matplotlib
- Supervised machine learning using Classification
- Decision Tree algorithm for Classification
- K Nearest Neighbour algorithm for Classification
- Implementation of K Nearest Neighbour algorithm
- Supervised machine learning using Regression
- Types of Regression algorithms
- Linear Regression algorithms
- Logistic Regression algorithms
- Unsupervised machine learning using Clustering
- K Mean algorithm for clustering
- Implementation of K Mean algorithm
- Elbow method for finding the value of K
- Accuracy calculation for an ML algorithm
- Classification of the dataset for Supervised and Unsupervised ML

## **Module 6: Case studies designed for Machine Learning**

- \* Iris Species classification using Decision tree algorithm
- \* Ball classification using Decision Tree algorithms
- \* Advertisement predictor using Regression
- \* Iris Species classification using K Nearest Neighbour algorithm
- \* Breast Cancer Detection using Random Forest algorithm
- \* Play predictor application using Linear Regression
- \* Head Brain size predictor using Linear Regression
- \* Height Weight prediction using the algorithm
- \* Titanic Survival predictor using Logistic regression algorithm
- \* Diabetes detector using Linear Regression
- \* Wine type classifier using K Nearest Neighbour

## **Module 7: Automation using Python**

- Introduction to python scripting
- File system automation
- Mailing activity through script
- Process sub system automation
- Periodic execution policy

At the end of the batch, we prepare a resume for Python development & Data Science.

For more information please call admin 7020713938 in between 12:00PM to 6:00PM

If your call is not received then please drop one message we will call you back.

For registration please fill the form on [www.marvellousinfosystems.com](http://www.marvellousinfosystems.com) by selecting Python Machine Learning batch which will generate registration id.  
After that contact Admin for the further procedure.

Note: Only limited seats are available.

Before paying any amount kindly contact admin, do not pay directly ( in case you have any payment details available).

Fees are non-refundable and non-transferable in any case.

\*\* Note:

- कृपया class ला admission आधी खालील गोष्टी अवश्य करा
- ज्यांनी तुम्हाला class बदल माहिती सांगितली त्यांचा अनुभव समजून घ्या.
- सरांची शिकवण्याची पद्धत बघण्यासाठी YouTube वरील videos बघा.
- Website वरील आणि facebook page वरील students feedback वाचा.
- Batch मध्ये cover होणारे सर्व contents वर दिलेले आहेत ते नीट बघा.
- All the sessions are live only. -Camera should be on while attaining the session.
- Fees are non REFUNDABLE and non-transferable in any situation.
- कुठलीही शंका असल्यास admin ला contact करा.

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Marvellous WhatsApp: <http://wa.me/917020713938>

Marvellous Admin: 7020713938

Regards,

Team Marvellous 🙏