



Sandip Institute of Technology and Research Centre

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(Approved by-AICTE, New Delhi, & Govt. of Maharashtra and Permanently Affiliated to Savitribai Phule Pune University (Formerly Pune University), Pune.

Accredited with "A" grade by NAAC With CGPA Score of 3.11 NBA Accredited for Computer & Mechanical Engineering(UG Course) w.e.f. 2023-24 to 2025-26



Activity Report Of

Value Added Program on Python Training

 $(12^{th} - 17^{th} August 2024)$

Organized by
Department of Computer Engineering
Sandip Institute of Technology and Research
Centre





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Department Of Computer Engineering





Notice

Date: 10/08/2024

All the students of SE and TE Computer Engineering are here by Informed that our department is organizing 05 Days Value Added Program on

In the view of same all students are instructed that attendance is compulsory for the same.

Venue: SITRC (Computer Engineering Seminar Hall, C Building)

Python Training Program on 12th to 17th August 2024.

Time:10.30 AM

Prof. (Dr.) Ankita.V.Karale

Head

Department of Computer Engineering Sandip Institute of Technology and Research Centre, Mahiravani, Nashik-422 213





TRAINING ON MICROSOFT PYTHON





Venue-

SITRC, Computer Engineering Department Seminar Hall

Mr. Aman Mishra

Software Engineer



Python Training Program Course Contents

A typical Python training program covers a wide range of topics to ensure participants gain a comprehensive understanding of the language and its applications. Here's an overview of the course contents:

1. Introduction to Python

- Overview of Python and its applications
- Setting up the Python environment
- o Understanding Python syntax and basic programming concepts

2. Data Types and Variables

- Working with different data types (integers, floats, strings, booleans)
- Variable assignment and naming conventions
- Type conversion and casting

3. Control Structures

- o Conditional statements (if, elif, else)
- Looping constructs (for loops, while loops)
- Understanding break and continue statements

4. Functions and Modules

- Defining and calling functions
- o Function parameters and return values
- Importing and using modules and libraries

5. Data Structures

- o Lists, tuples, and sets
- Dictionaries and their applications
- Understanding list comprehensions

6. File Handling

- o Reading from and writing to files
- Working with file paths and directories
- Exception handling for file operations

7. Object-Oriented Programming (OOP)

- Understanding classes and objects
- Attributes and methods
- Inheritance and polymorphism

8. Working with Libraries

- o Introduction to popular libraries (e.g., NumPy, Pandas, Matplotlib)
- Data manipulation and analysis with Pandas
- Data visualization techniques using Matplotlib

9. Web Development Basics

- o Introduction to web frameworks (e.g., Flask)
- o Building a simple web application
- Understanding RESTful APIs

10. Project Work

- Hands-on projects to apply learned concepts
- Collaborative coding exercises
- Final project presentation and feedback

Title: Value Added Program on "Python Training"

Date: 12th - 17th August 2024.

Event Conduction Duration: 30 Hours.

Venue: Computer Engg. Department, SITRC (Seminar Hall C Building)

Resource Person Details: Mr. Aman Mishra

(Software Engg Authorized Learning Partner: Microsoft)

Name of Event Coordinator: Prof. Pradeep Patil

Participants: SE, TE Students (Computer Department)

Aim:

The aim of this program organized for students is to provide the foundations of the practical implementation and usage of PYTHON Programming. This training program introduces fundamental concepts & recent advances of PYTHON Programming which in turn help students to apply it in practice and further load the foundation to a deeper study in this area.

Event Objectives:

Python Training Program Objectives:

A Python training program typically aims to equip participants with essential skills and knowledge to effectively use Python for various applications. Here are some common objectives:

- Understanding Python's Utility: Participants will learn why Python is a valuable scripting language for developers, including its versatility and ease of use
- **Application Design and Programming**: The program will focus on teaching how to design and program Python applications, enabling learners to create functional software solutions
- Familiarity with Programming Paradigms: The training will cover multiple programming paradigms supported by Python, such as procedural and functional programming, allowing participants to choose the best approach for their projects
- **Hands-on Experience**: Many programs emphasize practical experience, where participants engage in projects that reinforce their learning and

- help them apply Python in real-world scenarios.
- Skill Development for Specific Fields: Some training programs target professionals from specific backgrounds, such as clinical or IT fields, to help them gain Python skills relevant to their work.

Event Outcomes:

Python Training Program Outcomes:

Upon completing a Python training program, participants can expect to achieve several key outcomes that enhance their programming capabilities and prepare them for practical applications. Here are some common outcomes:

- **Proficiency in Python Programming**: Participants will gain a solid understanding of Python syntax and programming concepts, enabling them to write efficient and effective code for various applications.
- **Problem-Solving Skills**: The training will enhance participants' ability to approach and solve real-world problems using Python, including software design, implementation, and testing
- Hands-on Experience with Projects: Many programs include practical projects that allow participants to apply their knowledge in real-world scenarios, reinforcing their learning and building confidence in their skills.
- Familiarity with Libraries and Frameworks: Participants will become familiar with popular Python libraries and frameworks, which can be crucial for tasks such as data analysis, web development, and machine learning.
- **Preparation for Advanced Topics**: Graduates of the program will be well-prepared to explore more advanced topics in Python, such as data science, machine learning, or web development, depending on their interests and career goals.

By the end of the training, participants should feel equipped to tackle Pythonrelated tasks in their professional or personal projects, demonstrating a clear understanding of both foundational and practical aspects of the language.

Description of Event:

The Value Added Program on "**Python Training Program**" was organized by Computer Engineering Department, Sandip Institute of Technology and Research Center on the Date: 12th - 17th August 2024.

The Program was started with welcome & felicitation of Mr. Aman Mishra Software Engg Authorized Learning Partner: Microsoft.

In presence of Head of the department Prof. (Dr.) Ankita V. Karale, faculty members and students.

The Experts guided students about the requirements of the market. Experts also explained students about various Encourage the development of digital literacy and essential tech skills among students and young professionals. Expert also explain Overall, structured to equip participants with the knowledge and skills necessary to confidently use Python in a variety of applications, setting a strong foundation for further learning and professional development. The language's design philosophy promotes the use of significant indentation, which enhances code clarity and structure. This focus on readability, combined with a rich ecosystem of libraries and frameworks, has contributed to Python's popularity across various domains, from web development to scientific computing. Overall, Python serves as a powerful and flexible programming language that caters to a wide range of programming needs, making it a valuable skill for anyone in the tech industry.

The Program was attended by 155 students from Computer Engineering Department, at the end of Program students appreciated the event. The session concluded with vote of thanks.

Prof. Pradeep Patil Event Coordinator

Prof. (Dr.) Ankita Karale HOD

Department of Computer Engineering Sandip Institute of Technology and Research Centre, Mahiravani, Nashik-422 213 Prof.(Dr.) Amol Potgantwar Principal

Event photos:



Photo: Welcome & felicitation of expert Mr. Aman Mishra



Photo: Dr. Ankita Karale addressing students



Photo: Prof. Aashish Jagneet gives the Information of program.



Photo: Expert gives the session



Photo: Students and Staff attending the program.



Photo: Students attending the program.



Photo: Students attending the program

