

JB INSTITUTE OF ENGINEERING AND TECHNOLOGY
Department of AI&D, CSE (DS)
Value-Added Course on Python for Data Science
Report

Date: 23.09.2025

Module Number: 01

Key Topics Covered: Basics of Python, Pandas Library

Resource Person(s): Mr Sagar NV, Dr Sudheer Reddy Bandi

Duration: 2h

Mode of Delivery: Face to Face

Target Audience: AI&DS, CSD Students

Number of Participants: 65

Venue: First floor, Lab 105

Objectives of the Course Module:

- To introduce students to the foundational concepts of Python programming.
- To familiarize students with the basic syntax, data types, and control structures in Python.
- To provide hands-on experience with Python's popular data analysis library, **Pandas**.
- To enable students to perform basic data loading, cleaning, and manipulation using Pandas.
- To develop problem-solving skills using Python for data-driven tasks.





Expected Learning Outcomes of the Module:

By the end of the module, students will be able to:

- Understand and write basic Python programs involving variables, loops, and functions.
- Explain the role and structure of the Pandas library in data analysis.
- Import, explore, and manipulate datasets using Pandas DataFrames and Series.
- Apply essential Pandas operations like indexing, slicing, filtering, and grouping.
- Perform basic data preprocessing tasks including handling missing values and summarizing data.

Summary:

This module served as an introductory hands-on session designed for students of AI&DS and CSD departments. Delivered by Mr. Sagar NV and Dr. Sudheer Reddy Bandi, the 2-hour session focused on building a strong foundation in Python programming and data analysis using Pandas. The session covered syntax essentials, data structures, and practical operations on datasets. With active participation from 50 students, the module helped learners gain practical insights into using Python and Pandas for real-world data manipulation tasks.

Signature of the HoD