

# Value-Added Program (VAP): Basics of Python and its Libraries

10th to 14th November, 2025 | 9.00AM to 4.30 PM Venue: ECE Block Seminar Hall and Al093F08





# **About the Program**

The Value-Added Program (VAP) on Basics of Python and its Libraries, organized by the Department of Computer Science and Engineering (Data Science), aims to strengthen students' foundational programming skills. The program introduces Python syntax, data structures, and essential libraries such as NumPy, Pandas, and Matplotlib, enabling participants to apply coding concepts to data analysis and problem-solving in real-world scenarios.

#### Objectives of the Program

- Introduce students to the fundamentals of Python programming, including syntax, data types, conditional statements, loops and control structures.
- Familiarize students with essential Python libraries such as NumPy, Pandas, Matplotlib, and Scikit-learn, enabling them to handle and analyse data efficiently.
- Develop the ability to perform basic data visualization and pre-processing using Python tools.
- Build a strong foundation for applying Python in data science and machine learning projects
- To enhance the Python VAP course through alumni-led workshops that offer real-world perspectives and hands-on learning experiences.

### **Expected Outcomes of the Program**

- Students will be able to write basic Python programs and understand the core concepts of the language using conditional statements and loops.
- Students will be able to manipulate and analyze data using NumPy and Pandas effectively.
- Students will gain hands-on experience in creating data visualizations using Matplotlib.
- Students will understand the basic functionalities of Scikit-learn, including dataset handling and simple machine learning model building.
- Students will be ready to apply Python skills in mini-projects and advanced
- Students will gain practical knowledge, improved coding skills, and industryrelevant insights, preparing them for real-world applications and career opportunities through alumni interaction.

Target Audience: 3<sup>rd</sup> Semester CSE(DS) Students

# **Committee Members**

# ADVISORY COMMITTEE • Dr. C. K. Marigowda, Principal, AIT CONVENER +

• Dr. Vijayashekhar S.S, Associate Professor and Head, Dept. of Artificial Intelligence and Machine Learning, AIT

# COORDINATORS

- Mr. Abhijith S, Assistant Professor, Dept. of Computer Science and Engineering (Data Science), AIT.
  Dr. Kavitha Nair R, Assistant Professor, Dept. of Artificial Intelligence and Machine Learning, AIT
- Syed Musadiq Illahi, Assistant Professor, Dept. of Artificial Intelligence and Machine Learning, AIT

# **Resource Persons Details**



Mr. Navaneeth Krishna S Designation: Al Engineer, AMD



Mr. Krishna Kumar S

Designation: Associate Test Engineer,
Nokia



Mrs. Ranjitha H M

Designation: Assistant Professor,

Dept. of Information Science and Engineering, AIT



Mrs. Soniya R

Designation: Assistant Professor,

Dept. of Computer Science and Engineering,

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Mr. Vikas Kumar

Designation: Assistant Professor,

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# Event Coordinator

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