# **ACHARYA INSTITUTE OF TECHNOLOGY**



Department of mathematics

# 5 Days Faculty Development Program on APPLIED MATHEMATICAL METHODS USING PYTHON ON OCCASION OF INTERNATIONAL PI DAY

10th to 14th March 2025 | 10:00 am to 04:30 pm

#### **About the Program**

Acharya Campus, Bangalore

An FDP (Faculty Development Programme) on Applied Mathematical Methods using Python is typically designed to help educators to enhance their skills in applying Mathematical techniques using Python. This program aims to bridge the gap between theoretical Mathematics and its practical applications in Engineering and

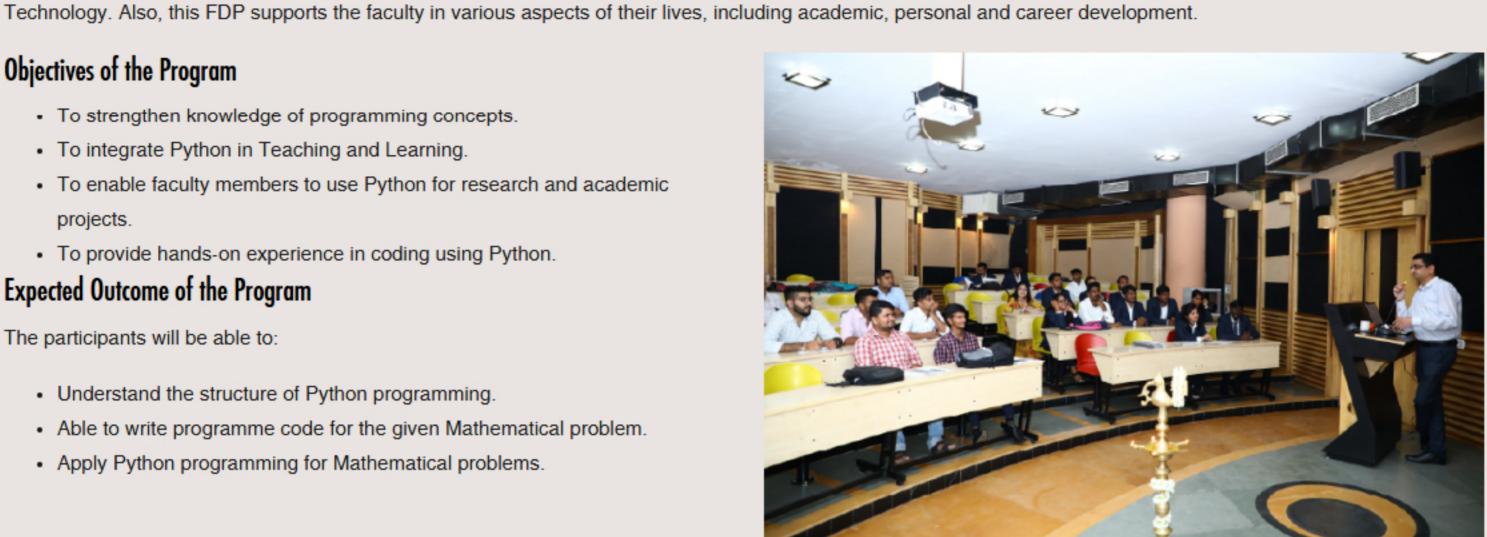
#### Objectives of the Program

- · To strengthen knowledge of programming concepts. To integrate Python in Teaching and Learning.
- · To enable faculty members to use Python for research and academic projects.
- · To provide hands-on experience in coding using Python.

#### Expected Outcome of the Program

The participants will be able to:

- Understand the structure of Python programming.
- Able to write programme code for the given Mathematical problem.
- · Apply Python programming for Mathematical problems.



#### Important Dates

Event Details	Dates
Important Dates	10 <sup>th</sup> - 14 <sup>th</sup> Mar 2025
Time	10:00 AM to 04:30 PM
Target Audience	Faculty of Mathematics, Acharya Institute of Technology
Type of program	Offline
Venue	Civil Seminar Hall, ANA block, AIT

**REGISTER NOW** 

#### Committee Members

## **ADVISORY COMMITTEE**

· Dr. Rajeswari M, Principal, AIT

- Dr. C K Mari Gowda, Vice Principal, AIT Dr. Rajanna K R, Professor and Coordinator - Students Affairs, AIT
- · Dr. Kala Venugopal, Dean- Faculty & Staff Development, AIT . Dr. Abhishek V, Associate Dean - Faculty & Staff Development, AIT
- · Dr. Vijayashekhar S Sankannanavar , HOD, Department of Al& ML, AIT

CONVENER · Dr. T Rami Reddy, Assistant Professor and HOD, Dept. of Mathematics, AIT

### COORDINATORS

• Dr. Girisha A, Associate Professor, Dept. of Mathematics, AIT, ☐ girisha2934@acharya.ac.in , \$\schicklet\$+91 97397-60112 

### Resource Persons Details



Dr. Kavitha Nair R Designation: Assistant Professor, Department of AIML, AIT



Prof. Surbhi **Designation:** Assistant Professor, Department of AIML, AIT



Prof. Syed M Illahi **Designation :** Assistant Professor, Department of AIML, AIT

## **Program Schedule**

### Day-1 (10-03-2025)

- 10:00 AM 12:30 PM : Fundamentals of Python programming by Dr. Kavitha Nair R
- 12:30 PM 02:00 PM : Lunch Break
- 02:00 PM 04:30 PM : Hands-on session on Python programming by Dr. Kavitha Nair R

## Day-2 (11-03-2025)

Day-3 (12-03-2025)

 10:00 AM - 12:30 PM : Implementation of elementary mathematical methods - Hands-on session by Dr. Kavitha Nair R 12:30 PM - 02:00 PM : Lunch Break

- 02:00 PM 04:30 PM : Computation of Laplace and Fourier transforms using Python Hands-on session by Prof. Syed M Illahi
- 10:00 AM 12:30 PM : Computation of vector quantities and evaluation of beta and gamma functions Hands-on session by Prof. Syed M Illahi 12:30 PM - 02:00 PM : Lunch Break

## 02:00 PM - 04:30 PM : Exploring Interpolation and Numerical Integration using Python - Hands-on session by Dr. Kavitha Nair R

- Day-4 (13-03-2025)
- 10:00 AM 12:30 PM : Computation of numerical solution of differential equations using Python Hands-on session by Prof. Surbhi 12:30 PM - 02:00 PM : Lunch Break

### 02:00 PM - 04:30 PM : Solution of equations and PDEs using Python - Hands-on session by Prof. Surbhi

- Day-5 (14-03-2025)
- 10:00 AM 12:30 PM : Hands-on session on Linear Algebra using Python by Prof. Surbhi 12:30 PM - 02:00 PM : Lunch Break
- 02:00 PM 04:30 PM : Valedictory and Feedback session











Acharya Institute of Technology

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Dr. Girisha A

Associate Professor

Dept. of Mathematics, AIT