



## Department of Robotics and Automation

### Report on Faculty Knowledge Enhancement

NAME OF THE DEPARTMENT: Department of Robotics and Automation

1. Type of Event : THREE DAYS STAFF DEVELOPMENT PROGRAM ON "INTRODUCTION TO PYTHON PROGRAMMING & ITS APPLICATIONS"
2. Resource Persons : Mr. Srikanth Jere, Associate Principal,  
Data Scientist Accenture India Pvt Ltd., Bengaluru.  
Dr. J Satheesh  
Professor Department of Mechanical Engineering SJBIT,  
Bengaluru.  
Dr. Kiran Kumar R Associate Professor  
Department of CIVIL Engineering SJBIT, Bengaluru.
4. Date of the programme : 4<sup>th</sup> to 6<sup>th</sup> September 2023
5. Faculty attended : Dr.M.Karthikeyan,  
Professor and Head  
Department of Robotics and Automation  
RajaRajeswari College of Engineering  
Bengaluru 560074

6. Outcome of the programme:

Faculty gained information about the following:

1. Introduction to Python: Provide a solid understanding of Python's syntax, data structures, and basic concepts.
2. Programming Fundamentals: Cover essential programming concepts such as variables, data types, operators, and control structures.



## Department of Robotics and Automation

3. Functions and Modules: Teach participants how to create functions for code modularity and how to organize code using modules.
4. File Handling: Introduce file input/output operations, enabling participants to manipulate data stored in files.
5. Object-Oriented Programming: Explain the principles of object-oriented programming and guide participants in creating and using classes and objects.
6. Exception Handling: Familiarize participants with error handling techniques to make their programs more robust.
7. Python Libraries: Introduce commonly used Python libraries like NumPy and Pandas for data manipulation and analysis.
8. Web Development Basics: Provide an overview of web development using frameworks like Flask, highlighting the potential building web applications.
9. Introduction to Data Science: Touch upon the basics of data science, including data visualization and introductory machine learning concepts.
10. Real-world Projects: Engage participants in hands-on projects, allowing them to apply their knowledge to real-world scenarios.



## Department of Robotics and Automation

### Geotagged Photos of the Faculty Knowledge Enhancement



**Dr.M.Karthikeyan, HOD RA gave the feedback about the programme**



**Dr.M.Karthikeyan, HOD RA received the participation certificate from the  
Dr. K. V. Mahendra Prashanth Principal, SJBIT, Bengaluru**

**-Report prepared by Dr.M.Karthikeyan, HOD-R&A**



॥ Jai Sri Gurudev ॥  
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**SJB Institute of Technology**

An Autonomous Institution under VTU

No.67, BGS Health & Education City, Dr.Vishnuvardhan Rd, Kengeri,  
Bengaluru, Karnataka 560060



Department of Mechanical Engineering

*Certificate*

OF PARTICIPATION

*This Certificate is Presented To :*

Dr. M. KARTHIKEYAN

*For his/her active participation during the conduct of three days Staff Development Program titled "Introduction to Python Programming & its Application" held from 4th to 6th September 2023*

**Dr. H R Vitala**  
Head of the Department

**Dr. K V Mahendra Prashanth**  
PRINCIPAL



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## SJB Institute of Technology

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NBA & NAAC Accredited With A+

No. 67, BGS H & E City, Dr. Vishnuvardhan Road, Kengeri, Bengaluru-60

**DEPARTMENT OF MECHANICAL ENGINEERING**



Date: 06-09-2023

### Attendance Certificate

This is to certify that Mr./Mrs./Prof. Dr. M. KARTHIKEYAN of  
RRCE, Bengaluru has attended the Staff Development  
Program on “Introduction to Python Programming and its Application” held  
from 04-09-2023 to 06-09-2023.

Dr. Vitala H R

Head, Dept. of Mechanical Engg

Head of the Department  
Department of Mechanical Engineering  
SJB Institute of Technology  
Kengeri, Bengaluru-560 060

## Resource Persons

### Mr. Srikanth Jere

Associate Principal Data Scientist  
Accenture India Pvt Ltd., Bengaluru.

### Dr. J Satheesh

Professor  
Department of Mechanical Engineering  
SJBIT, Bengaluru.

### Dr. Kiran Kumar R

Associate Professor  
Department of CIVIL Engineering  
SJBIT, Bengaluru.

### Divine Blessings:

His Divine Soul **Jagadguru Padma bhushana Sri Sri Sri Dr. Balangadaranatha Maha Swamiji**  
Founder President, Sri Adichunchanagiri Shikshana Trust (R)

### Chief Patron:

His Holiness **Jagadguru Sri Sri Sri Dr. Nirmalanandanatha Maha Swamiji**  
Chief Pontiff, Sri Adichunchanagiri Shikshana Trust (R)

### Patron:

**Revered Sri Sri Dr. Prakashanatha Swamiji**  
Managing Director, SJB & BGS Group of Institutions & Hospitals, Bengaluru

### Organising chair :

**Dr. K. V. Mahendra Prashanth**  
Principal, SJBIT, Bengaluru

### Convener:

**Dr. H R Vitala**  
Professor & Head,  
Department of ME, SJBIT, Bengaluru

### Chief Coordinator:

**Dr. Chandrashekar K**  
Asso. Professor, Dept. of ME

### Coordinators:

**Mr. Thirumala S V**, Asst. Prof, Dept. of ME  
**Mr. Uday M**, Asst. Prof, Dept. of ME  
**Mrs. Smitha N**, Asst. Prof, Dept. of ME

### Organizing Committee

**Dr. Sanjay Kumar S M**, Asso. Professor, Dept. of ME  
**Dr. Girija V**, Asst. Prof, Dept. of ME  
**Dr. Karthik Raj K V**, Asst. Prof, Dept. of ME  
**Dr. Gangadhar T G**, Asst. Prof, Dept. of ME  
**Mr. Shankara D R**, Asst. Prof, Dept. of ME  
**Mrs. Chaithra B K**, Asst. Prof, Dept. of ME  
**Mrs. Vanishree T S**, Asst. Prof, Dept. of ME  
**Mr. Gowtham K** Asst. Prof, Dept. of ME  
**Mr. Naveen Kumar RR**, Asst. Prof, Dept. of ME.  
**Mr. Manjunath Naik H R**, Asst. Prof, Dept. of ME  
**Mr. Sanjay B S**, Asst. Prof, Dept. of ME  
**Mr. Krishnamurthy N K**, Asst. Prof, Dept. of ME  
**Mr. Hareesha M S**, Asst. Prof, Dept. of ME  
**Mr. Ravi Kumbar**, Asst. Prof, Dept. of ME

II JAI SRI GURUDEV II

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**S J B Institute of Technology**  
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NO. 67, BGS HEALTH & EDUCATION CITY, DR. VISHNUVARDHAN RD, KENGERI,  
BENGALURU, KARNATAKA 560060



## THREE DAYS STAFF DEVELOPMENT PROGRAM ON "INTRODUCTION TO PYTHON PROGRAMMING & ITS APPLICATIONS"

4th Sept - 6th Sept 2023



ORGANIZED BY  
**DEPARTMENT OF MECHANICAL ENGINEERING**

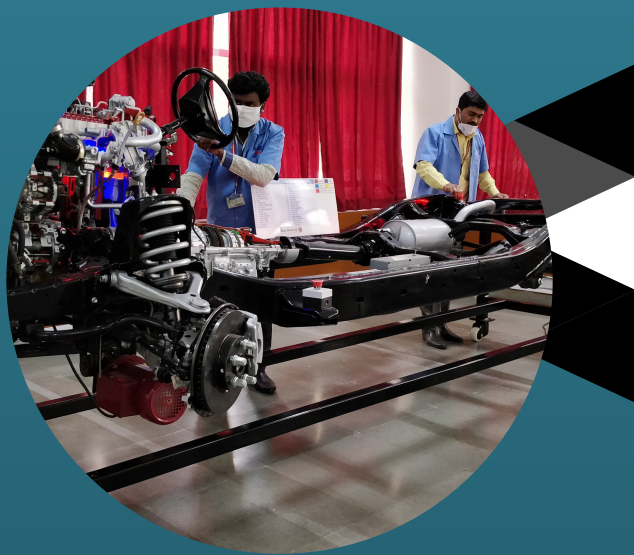


IN ASSOCIATION WITH



**S J B Institute of Technology**

NO.67, BGS HEALTH & EDUCATION CITY,  
DR. VISHNUVARDHAN RD, KENGERI,  
BENGALURU, KARNATAKA 560060



## About SJBIT

SJB Institute of Technology was started under the stewardship of Sri Adichunchanagiri Shikshana Trust® in the year 2001 and is located amidst peace and tranquillity, spread across 13 acres. SJBIT, being an autonomous institution under VTU, offers 8 UG programs and 4 PG programs which includes MBA and MCA as well. All the programs are approved by AICTE, New Delhi & Accredited by NBA & NAAC with 'A+' Grade.

SJBIT is committed to personal, social & intellectual growth emphasizing a comprehensive educational programme leading to high academic standards.

### Institution Vision

To become a recognized technical education center with global perspective.

### Institution Mission

To provide learning opportunities that fosters students' ethical values, intelligent development in science & technology and social responsibility so that they become sensible and contributing members of the society.

## ABOUT DEPARTMENT

The Mechanical Engineering program was started in the academic year 2009-2010 with well-equipped, spacious laboratories, classrooms and state of art facilities backed by experienced teaching faculties. So far department has secured 8 ranks both in UG and PG. Department encourages students to involve in R&D activities and inculcate innovative thinking by doing inventive projects. So far many innovative projects have been carried by the students and have applied for patents.

### Department Vision

To become a center of excellence and a platform in diversified fields for the aspirants in Mechanical Engineering.

### Department Mission

M1: To impart comprehensive education in the field of Mechanical Engineering to produce highly accomplished graduates

M2: To endow technical & soft skill trainings to foster professionalism and ethical values among students

M3: To induce innovative thinking among students through projects and research work

## ABOUT SDP

### About this Program

In an constantly developing technological landscape, proficiency in programming languages is becoming increasingly essential. Python, a versatile and user-friendly programming language, has gained significant popularity across industries. To empower our staff with valuable skills, we propose a comprehensive Staff Development Program focused on Python Programming. This program aims to equip participants with the fundamental knowledge and practical expertise needed to leverage Python for various tasks, from automation to data analysis.

### Program Objectives

- Introduction to Python: Provide a solid understanding of Python's syntax, data structures, and basic concepts.
- Programming Fundamentals: Cover essential programming concepts such as variables, data types, operators, and control structures.
- Functions and Modules: Teach participants how to create functions for code modularity and how to organize code using modules.
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## Registration Details

Scan QR code  
for registration



or

[Click on the link for registration](#)