CO-ORDINATORS:

Prof. S. Parthasarathi, Assistant Professor, Prof. M.A. Ganesh, Assistant Professor, Prof. M.M. Devarajan, Assistant Professor, Department of Mechatronics Engineering, Thiagarajar College of Engineering Madurai-625015, Tamilnadu.

IMPORTANT DATES:

Last Date of Receiving Applications : 03/05/24. Selection Intimation to Participants : 06/05/24. (Through Email Only) Confirmation of Participants : 10/05/24. REGISTRATION FEE:

Industry Persons	: Rs. 2000/- *
Faculty	: Rs. 1500/- *
Research Scholars	: Rs. 750/- *

* - inclusive of 18% GST

The registration fee includes workshop kit, presentation materials, certificate of participation, lunch, and refreshment.

ONLINE REGISTRATION PROCEDURE:

Step 1: Make your registration fee payment at https://eazypay.icicibank.com/

- Type "T C E" with Space (as mentioned) in the "Enter Institute Name".
- Select the Last Option* ("T C E SOUVENIOR") from the drop-down menu.
- Enter the Required Information (Email id, Mobile number, Name, Designation, College Name, Department, Registration Fee, Title of the Programme). Please specify the "Title of the Programme" as HOMPFBA.
- Pay the fees and download the eazypay Transaction Receipt

Step 2: Submit Google Form

https://forms.gle/3mpXMs5g2yz51WzF7

Three Days Faculty Development Programme On "Hands-On with MicroPython: From Basics to Applications" 23rd May to 25th May 2024

REGISTRATION FORM

Name (in Block Letters):Designation:Department:Name of Institution/ Industry:

Institution Recognised

by AICTE	: Yes / No
Mailing Address	:`
Phone no	:
Email Id	:

Experience (in years):

Academic	Industry	Research	Total

Accommodation required: Yes/No

DECLARATION:

The above information is true to the best of my knowledge. I agree to abide by the rules and Regulation governing the Short-Term Course.

Date: Place: Signature of the Participant

Signature & seal of the Sponsoring Authority



Three days Faculty Development Programme on "Hands-On with MicroPython: From Basics to Applications"

23^{rd} May to 25^{th} May 2024



Organized by

Department of Mechatronics Engineering

Thiagarajar College of Engineering

Madurai-625015, Tamilnadu

www.tce.edu





THIAGARAJAR COLLEGE OF ENGINEERING:

Thiagarajar College of Engineering (TCE) is a premier institution recognized by India's Ministry of Human Resource Development (MHRD). Nestled on a sprawling 139-acres campus, TCE offers a tranquil and eco-friendly learning environment complemented by cutting-edge infrastructure. A dedicated faculty of 219, fosters academic excellence. TCE empowers a student body of 4300 through a diverse range of academic programs. Our thirteen departments offer nine undergraduate and Seven postgraduate programs, equipping students with the knowledge and skills to excel in their chosen fields. TCE's commitment to hands-on learning is evident in our state-of-the-art facilities. Five nodal research centres, an incubation centre, and over fifty well-equipped laboratories provide students with valuable opportunities to experiment, collaborate and turn their ideas into reality.

ABOUT THE DEPARTMENT:

The Department of Mechatronics Engineering was established in the year of 2016. At present, the Department offers B.E. Mechatronics. The Department aims at producing talented Mechatronics engineering specialists who cater to the needs of the relevant industries. The faculty members are doing research projects from major funding agencies such as DST, UGC, CVRDE and AICTE. The Department has full-fledged laboratories to carry out undergraduate, postgraduate, and doctoral program in the Mechatronics engineering field. State-of-the art facilities in various laboratories encourage students to carry out research in the areas of Robotics and Automation, Sensors, Internet of Things (IoT), Thermal Management in Engineering Applications

SCOPE:

The rise of Embedded Systems and IoT (Internet of Things) demands dynamic, efficient, resource-friendly programming solutions. MicroPython's power and versatility make it an ideal choice for developing smart devices, wearables, and sensor networks.

This Faculty Development Program is all about empowering teachers to bring MicroPython into their classrooms, helping to shape a new wave of engineers who are savvy with its applications. Plus, we're diving into the RP2040, which is a dual-core ARM Cortex M0+ 32-bit microcontroller that was Developed by Raspberry Pi Foundation.

PROGRAM CONTENTS:

- MicroPython Foundations: Syntax, data structures, control flow, modules, and object-oriented programming concepts.
- Hardware Interfacing: Connecting MicroPython to sensors, actuators, displays, and communication protocols (I2C, SPI, Bluetooth, etc.).
- Real-World Project Development: Building applications for data collection, automation, device control, and web interfaces.
- Best Practices and Optimization Techniques for efficient MicroPython code and resource management on constrained devices.

PROGRAM OUTCOMES:

After successful completion of the FDP, participants will be able to:

- Confidently write and debug MicroPython programs for various applications.
- Effectively interface MicroPython with a range of hardware components and sensors.
- Design and implement complete MicroPythonbased projects addressing real-world problems.

- Utilize MicroPython's capabilities in the IoT domain, creating connected and intelligent devices.
- Share MicroPython knowledge with students, inspiring them to explore its potential.

WHOM TO APPLY:

Faculty members from Engineering and polytechnic colleges of ECE, EEE. EIE, CSE, IT and those who want to Explore the Embedded programming for R&D, Product Development, Industry 4.0, and Smart Devices can apply.

RESOURCE PERSONS:

• Faculty Members from Department of Mechatronics, TCE.

ACCOMMODATION AND BOARDING:

Participants are requested to make their own arrangements for stay during the workshop. However, suggestions to suitable accommodation nearer to the college and hostel could be made on request.

SELECTION NORMS:

- Number of seats are Limited.
- Selection of the participants will be based on first come first serve basis.
- Coordinator's decision will be final in selection of participants.

CONTACT DETAILS:

S. Parthasarathi, Assistant Professor, Department of Mechatronics, Thiagarajar college of Engineering, Madurai-625105 Mobile: +91-9843634674, 7598493800. Email: parthasarathi s@tce.edu, ganeshma2015@tce.edu,