

Programme Schedule

DAY 1 - 13/01/24

Inauguration (9:30 am - 10:00am)

Session 1 (10:00 am - 1.00pm)

- Basics of the Embedded System; Some examples in real life, latest usages, (IoT, AI, Automotive)
- C - History

Session 2 (2:00pm - 4:00pm)

- Basic Embedded C,
- Arduino IDE installation and ESP32
- Basic Programming

DAY 2 - 14/01/24

Session 1 (9:30 am - 1.00pm)

- Introduction to Microcontroller Peripherals like GPIO, ADC, UART, Interrupt, and Timer (Example Programming)

Session 2 (2:00pm - 4:00pm)

- Basic WiFi programming using ESP32 WROOM Development Board(EVK)

DAY 3 - 15/01/24

Session 1 (9:30 am - 1.00pm)

- Wireless connectivity to network: Station, access point, server creation with peripheral usages

Session 2 (2:00pm - 4:00pm)

- IoT Analytics using ThingSpeak Cloud

More details:-

- No TA/DA will be paid to the participants.
- Tea and snacks are provided for all
- Bring your own Laptop (Windows 10)
- Payment is non refundable.
- Venue : Auditorium ,Dept. of Instrumentation

Patrons

Dr. P. G. Sankaran
Vice-Chancellor, CUSAT

Dr. Meera V
Registrar, CUSAT

Coordinators

Mr. Anurath M S
Assistant Professor,
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Registration Link

https://docs.google.com/forms/d/e/1FAIpQLSdOBY5jBVA3BU_QclbxIYbTPMprXu4jrNZ1HyC9tX2czOYhw/viewform?usp=sf_link

Acc. No: 67271337890

IFSC Code: SBIN0070235

Bank Name: SBI, CUSAT Campus Branch

Acc. Holder Name: The Head, Dept. of Instrumentation

Last date of registration : 10/01/2024

Reg.Form



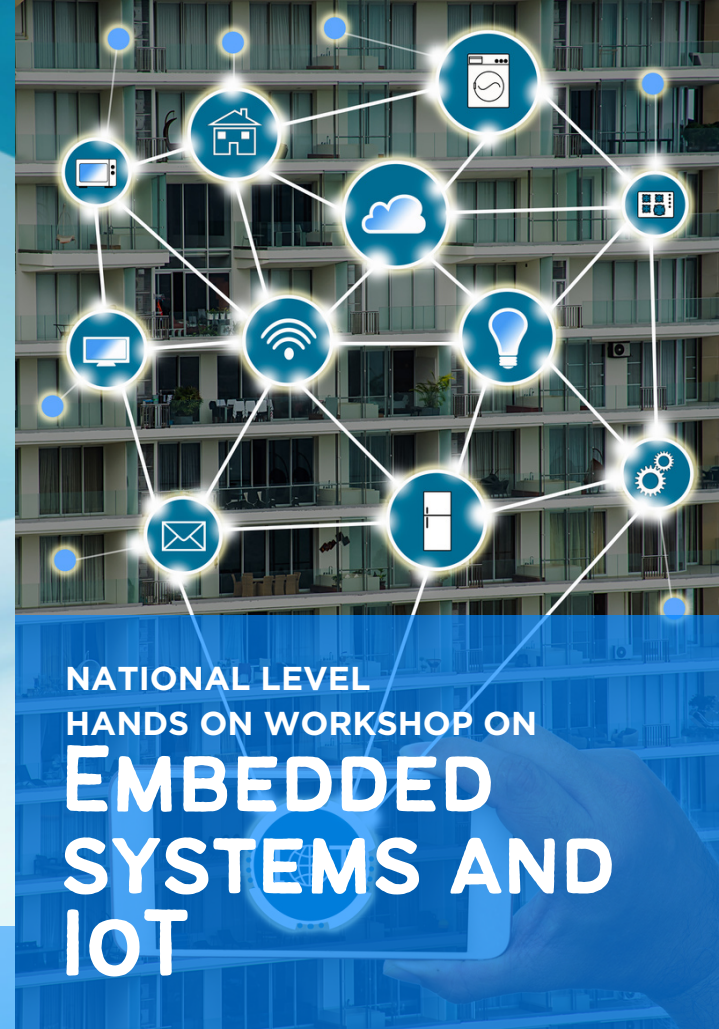
Registration fee

- Participants from CUSAT: ₹500
- External Participants: ₹750

Location



For any queries contact
98952 64143, 94972 72867



NATIONAL LEVEL HANDS ON WORKSHOP ON EMBEDDED SYSTEMS AND IOT

Organised by.



Cochin University of Science and Technology

Re-accredited by NAAC with 'A+' Grade

കൊച്ചി ശാസ്ത്ര സാങ്കേതിക സർവ്വകലാശാല

Department of Instrumentation

**Cochin University of Science
and Technology**

13-15 January 2024

About CUSAT

Cochin University of Science and Technology (CUSAT) was initially constituted as the University of Cochin through an Act of Kerala Government on 10th July 1971. The University of Cochin was re-constituted as Cochin university of Science and Technology in February 1986, redefining its objectives as “promoting Graduate and Post-Graduate studies and

Advanced Research in Applied Sciences, Technology, Industry, Commerce, Management and Social Sciences.” CUSAT is now a world-ranking university with the specific purpose of nurturing higher education, emphasizing post-graduate studies and research in applied science, technology, industry, humanities, and commerce. CUSAT has also found a place in the QS World University Ranking and the National Institutional Ranking Framework (NIRF) of the Indian Government. The research activities are supported and funded by the Central Government agencies like UGC, DST, DBT, MHRD etc..



About Dept. of Instrumentation

The Department of Instrumentation, originally the university science instrumentation Centre (USIC) has its origin in 1978 as a service department with the support of the UGC. It has been extending instrumentation support to science and technology departments of the university. The center was elevated to a level III USIC by UGC in 1990. With this the Centre became a full-fledged academic department. The department started a post graduate diploma course in instrumentation in 1994. In 1995 the university re organized USIC into a full-fledged teaching department with USIC contained in it and the department came into existence in its present form.

The department has a very active research programme in the area of instrumentation and applied physics. The department has implemented a number of research projects funded by DST, DAE, UGC, AICTE, KSCSTE, etc. The department has published a number of research papers pertaining to instrumentation and allied areas.

Workshop Outline

- Basics of Embedded System.
- Basics of Embedded C.
- Arduino IDE installation and introduction to ESP32.
- Introduction to Microcontroller peripherals.
- Basic of WiFi programming using ESP32.
- One Cloud Connection - Thingspeak

Resource Person

Sapthas R S

Senior Firmware Engineer,
InnoPhase IoT Inc.
Bangalore.

Who can attend?

UG/PG students, Research scholars, Industry personnel, Startup founders, and Faculty from any stream who are passionate about Embedded Firmware Design and IoT.

- Shortlisting is on a first come first serve basis
- Certificates will be given ONLY to participants who attend the program in person.

