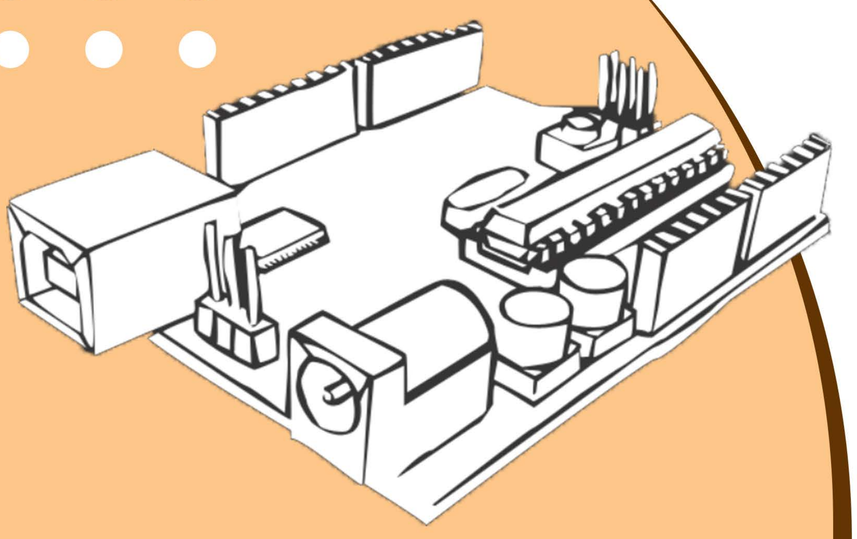

8th School on System Design Using Microcontroller

Duration: One Week from 16th May, 2022

Organised by

Department of Instrumentation and USIC
Gauhati University

IoT using Microcontroller

Organising Committee

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Honourable Vice Chancellor
Gauhati University

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Mr. Arnob Doloi, Abhista Technologies

Coordinator
Dr. Debashis Saikia

Programme Coordinator
Nairit Barkataki

Registration Fee: FREE

Register at:

tinyurl.com/sdes2022reg

Workshops updates:

tinyurl.com/sdes2022

Selection will be on a first-come-first-served basis and a maximum of 2 participants will be selected from each institute / department.

BACKGROUND

All sorts of electronic devices are becoming smart/intelligent nowadays, which means that they all have some kind of inbuilt processing and storing capacity. These gadgets gain intelligence by incorporating several types of microcontrollers.

Embedded systems design is a productive synergy between hardware and software design. In fact, the embedded systems are now becoming Internet of Things (IoT) enabled. If students at the undergraduate level become acquainted with these concepts, there is a chance that a better embedded system designer will emerge from the group.

OBJECTIVES

1. Familiarise with working of microprocessor and microcontroller
2. Writing code for microcontroller in C and programming a microcontroller
3. Exposure to the concept of Embedded System and IoT
4. Design and fabrication of signal conditioning circuits for sensing and data acquisition using OpAmp (comparator, amplifier, integrator, differentiator)

TARGET GROUPS

The target group for the workshop will be the third and fifth semester appeared students of TDC with major in Physics, Electronics and Computer Science, end semester post graduate students and research scholars of Instrumentation, Physics, Electronics and Computer Science.

WORKSHOP COVERAGE

The course will cover the following topics from basic level.

1. Architecture of Microprocessor & Microcontroller
2. Concept of Data Acquisition System
3. Idea of Signal Conditioning
4. Project Work on Microcontroller based Data Acquisition System.

The lectures will be followed by hands-on sessions in both analog and digital electronics.

Important Dates:
- Last date of application : **11.05.2022**
- Date of publication of selection list : **12.05.2022**

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