

Declaration

The above information is true to the best of my knowledge. I agree to abide by the rules and regulations governing the course. If selected, I shall attend the course for the entire duration. I also undertake the responsibility to inform the coordinator in case I am unable to attend the course.

Place: _____ Signature of the Applicant
Date: _____

Sponsorship Certificate

Mr/Ms/Dr.....is an employee of our Institute / organization and is hereby sponsored by us. He / She will be permitted to attend the course, if selected.

Place: _____ Signature with Seal
Date: _____ Sponsoring Authority

Address for Correspondence:

The Convenor
Department of ECE
NANDHA ENGINEERING COLLEGE
(AUTONOMOUS)
PERUNDURAI,
ERODE – 638 052, TAMIL NADU
Cell: +91 9942215651, +91 9965139984
Email: gskkavitha@gmail.com, erparam@gmail.com

About the College

Nandha Engineering College was established in 2001, started with 3 branches and it is in its 20th year of service to the student's community. It remains the flagship brand of Nandha Educational Institutions and is recognized as one of the Best Engineering Colleges in the State of TamilNadu. Nandha Engineering College, under the guidance of illustrious Chairman Mr. V. Shanmugan, Secretaries Mr.S.NandhakumarPradeep and Mr. S. Thirumoorathi, with foresight and far reaching vision, is in the forefront of innovation in Technical and Management Education.

About the Department

Department of Electronics and Communication Engineering was established in the year 2001. It offers UG course in B.E-ECE and PG course in M.E-VLSI Design. The department is accredited by NBA and the faculty members and students have membership in Professional bodies (IETE, ISTE). Department of Electronics and Communication Engineering owns excellent laboratories which are extensively utilized round the year. These cater to the needs of students, research scholars and faculty members pursuing research in the area of Electronics, Communication, VLSI Design, Embedded System, Signal and Image processing and other allied Engineering disciplines. The laboratories are well equipped with the current technology equipments and licensed software packages to enrich the learning experience with the support of Program specific curriculum, which is carefully designed to include the modern technological trends. The department also has established Centre of Excellence in Antennas, Embedded systems, Nano research Lab funded by AICTE and Industry supported lab.

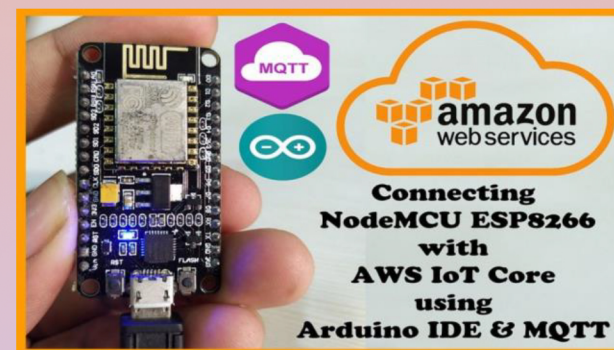
About the Location

Nandha Engineering College is located 14 Km away from Erode, 6Km away from Perundurai at Erode District.

Hands on Training using Node MCU (ESP 8266) for IoT applications



Department of Electronics and Communication
Engineering
Industry Supported Lab
Vi Microsystems Private Limited, Chennai
&
Institution of Electronics and Telecommunication
Engineers (IETE)



20.10.2021

Convenors

Dr. S.Kavitha HOD/ECE
Dr.C.N.Marimuthu Dean/R&D

Co-convenor

Prof.V.Parameshwari, AP/ECE

Co-ordinators

Prof.T.G.Dhaarani, ASP/ECE
Prof.G.Rathanasabhapathy, AP/ECE

Organized by

DEPARTMENT OF ELECTRONICS AND
COMMUNICATION ENGINEERING
NANDHA ENGINEERING COLLEGE
(AUTONOMOUS)
PERUNDURAI,
ERODE- 638 052, TAMIL NADU

Hands on training Highlights

The Node MCU (Node MicroController Unit) is an open-source software and hardware development environment built around an inexpensive System-on-a-Chip (SoC) called the ESP8266. The ESP8266, designed and manufactured by Espressif Systems, contains the crucial elements of a computer: CPU, RAM, networking (WiFi), and even a modern operating system and SDK. That makes it an excellent choice for Internet of Things (IoT) projects of all kinds. Node MCU Basics and Installation on Arduino IDE, Digital and Analog Sensor Interfacing to Node MCU, Sensor data upload to Thingspeak Server, MQTT Protocol and Sensor Data upload to MQTT Broker, Node Red and creating Apps on Node Red and Data upload from Node MCU to the apps. This training can be understood by anyone without any prior knowledge on Node MCU or Embedded systems or IoT. Training includes the hardware interfacing and the software coding.

Hands on training starts with the basics of Node MCU, Installing Arduino IDE and libraries required for Node MCU. Digital and Analog sensors are interfaced to Node MCU and the working of the sensors and the required code for that is explained. Sensors like DHT and Ultrasonic sensors are also interfaced to NodeMCU. The sensor data is uploaded onto the Thingspeak Server using HTTP GET and POST requests. MQTT Protocol is explained in detail with practical use cases and Implemented on Node MCU. Hands on training will serve as a platform for the participants to understand

the cutting edge technologies in IoT and latest advancements.

Contents on Hands on Training

1. Introduction to Embedded systems with IoT
2. Introduction of Node MCU with pin details
3. Hands on Training
 - LED interfacing
 - Switch interfacing
 - ADC interfacing Different types of sensors
 - Interfacing (Temperature, IR, Smoke and LDR)
 - Node MCU communication with mobile phone
 - Node MCU interfacing with cloud

Eligibility

Faculty from AICTE approved Engineering Colleges, UG&PG students and participants from Industries, R&D organizations.

Registration

Registration fees of Rs.100/- for the Hands on training can be made by sending the duly filled registration form along with DD in the favour of The Principal, Nandha Engineering College, Erode-52

How to Apply

The applicants can send their applications in the specified format with signature of sponsored to reach us on or before 16.10.2021. Only limited number of participants will be selected on first-come-first-served basis. If selected, they should confirm their participation in time.

Important Date

Last date for registration: **19.10.2021**

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Engineering
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20.10.2021

**DEPARTMENT OF ELECTRONICS AND
COMMUNICATION ENGINEERING**

NANDHA ENGINEERING COLLEGE, (AUTONOMOUS)
ERODE- 638 052, ERODE Dt.,
TAMIL NADU
Ph: 04294-225585

Registration Form

Name:

Age:

Sex:

Qualification:

Designation:

Organization:

Address for Communication:

Mobile No :

E-mail ID:

Experience

Teaching : Years

Others (Specify) : Years

Whether Accommodation is Needed: YES/NO