

TOPICS TO BE COVERED

DAY 1

- Introduction to IoT
- Various devices for IoT
- Basics of Arduino Programming
- Program for interfacing Arduino with wi-fi shield and Nodemcu

DAY 2

- Raspberry Pi OS installation
- Basic Python Programming for IoT
- Serial communication between Arduino and Raspberry Pi
- Data transmission from sensor node to cloud
- Mini project Using Arduino and Raspberry Pi
- Introduction to Industry 4.0

DAY 3

- ✓ Create local server and client for data communication
- ✓ MySQL for data storage(DBMS)
- ✓ Developing an application for monitoring sensor data
- ✓ Python -OpenCV for image processing
- ✓ Project on sensor data management and app development

Organizing Committee

Chief Patron
Thiru.K.Ramasamy
Chairman

Patron
Thiru.K.R.Arunachalam
Managing Committee member

Co-Patron
Dr.Kn.K.S.K.Chockalingam
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Chairperson
Dr.S.Shanmugavel
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Convenor
Dr.B.Sankaragomathi
Prof.& Head/EIE

Co-ordinators
Mrs.A.Geetha, A.P(SG) / EIE
Mrs.J.Babitha Thangamalar, AP(SG)/EIE

Co-coordinators
Mr. N.Chermakani, AP /EIE
Ms.V.Soundaravalli, AP /EIE

Organizing student members
M.Veera shanthi ram, IV year EIE
A.Baskar, IV year EIE
P.Sridhar, IV year EIE
P.Athesh, III year EIE
S.Maniraj, III year EIE



NATIONAL ENGINEERING COLLEGE

(An Autonomous Institution affiliated to anna university-Chennai)
K.R.NAGAR, KOVILPATTI



Three Days Hands On Training On

“Programming for IoT”

01.02.2018 to 03.02.2018



Organized by

Electronic and Instrumentation Engineering Association (EIEA)

Department of Electronics and Instrumentation Engineering

NATIONAL ENGINEERING COLLEGE

(An Autonomous Institution)

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ABOUT THE INSTITUTION

National Engineering College was established in the year 1984. It offers 7 UG, 6 PG and several research programs leading to Ph.D. degrees in all departments. NEC has several centers of excellence and laboratories. The college has signed MoU with research organizations and industries in order to promote closer interaction with other institutions in the areas of technology development, students training, curriculum updation and development of state-of-art centers. The College has well-equipped laboratories for all branches of engineering and also has close interactions with the leading Industries and IT firms for students training and project works. Due to the excellent academic climate in the campus, UG and PG students of our college enjoy good campus placement prospects.

ABOUT THE DEPARTMENT

- Accredited by NBA Tier - I, New Delhi and Institute of Engineers (India), Kolkata.
- Recognized as Research Centre by Anna University Chennai.
- Supported by 17 qualified faculty members, among them 5 holds doctoral degree and 7 were pursuing Ph.D.
- Two funded research projects worth Rs.36 Lakhs from BRNS-IGCAR & ICMR were completed.
- MSME, NewGen IEDC has sanctioned Rs.10 Lakhs for two students projects.
- Memorandum of Understanding (MoU) has been signed with M/s.IELEC Systems, Tirunelveli for training.
- Students won Best Project Award in Techno Fair (District Science Centre) - 2016 and awarded through INAE and One PG project nominated for INAE award.
- Measurements and Instrumentation Laboratory was Upgraded through AICTE-MODROBS scheme in 2013-2014 for Rs.6 Lakhs. Our Department is equipped with smart class room with audio system.
- Our department alumni have proven records in the following companies IGCAR, KKNPP, Emerson, Yokogawa, Sterlite, Saipem India, Wipro etc.

SCOPE OF THE PROGRAMME

With the wide availability of Broadband Internet, the cost of connecting more devices to internet has drastically reduced. Internet of Things has thus emerged which allows literally any device to the internet. With an estimated number of over 100 billion devices connected to the internet within the next 5 years from now, we are faced with big challenges in IoT, such as reliability & security of data, network scalability, hard real-time operations, capabilities for massive storage, analysis of huge amount of data, design of specific protocols to meet the QoS requirements in IoT, etc. The three-day seminar will consist of lectures to elucidate the fundamentals of IoT and also give an overview of some important issues of IoT in instrumentation aspects.

RESOURCE PERSONS

Eminent Keynote speakers from R&D sectors, Academic Institutions & Industries will be invited to deliver special Lectures

WHO SHOULD ATTEND

Students of Post Graduates and Under Graduates

IMPORTANT DATES

Last date for Registration	:27 th January 2018
Intimation for Selection	:29 th January 2018
Confirmation by Participant	:30 th January 2018

Workshop kit comprises of

- ✓ Raspberry Pi 3+
- ✓ Arduino UNO
- ✓ SD Card-16GB
- ✓ Power supply
- ✓ Sensors and other devices

FEES DETAILS

- Fees for this IoT workshop is Rs.800/-
- Components will be provided and should be returned after the end of workshop
- Working lunch will be provided
- Own Trainer kit will be provided on payment basis

HOW TO APPLY

Visit the website for the registration

- <https://eienec.wikispaces.com/home>
- Registration fee is to be paid by DD in favour of The Principal, National Engineering College, Kovilpatti payable at kovilpatti
- Selection is based on "First come First basis".
- **Number of participants is restricted to 30.**

BOARDING AND LODGING

Accommodation is free and Food will be provided for the participants on payment basis.

ADDRESS FOR COMMUNICATION

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