



# IoT for Smart Cities: Use Cases

(18<sup>th</sup> – 23<sup>rd</sup> November, 2019)

Organized by

**BAPATLA ENGINEERING COLLEGE, BAPATLA**

in association with

**E & ICT Academy, National Institute of Technology, Warangal.**

(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

**Preamble:**

“Electronics & ICT Academy” was set up at NIT Warangal with financial assistance from MeitY, Govt. of India (GoI). The jurisdiction of this academy is Telangana, Andhra Pradesh, Andaman and Nicobar Islands, Goa, Pondicherry and Karnataka states/UTs. The role of the academy is to offer faculty development programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, Curriculum development for Industry, Training & Consultancy services for Industry; CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

As part of this initiative, a Faculty Development Programme (FDP) on “**IOT for Smart Cities: Use Cases**” is being conducted at Bapatla Engineering College, Bapatla for the Faculty members of engineering colleges, industries and research laboratories. The proposed faculty development programme (FDP) is devoted to the fundamental theory, recent developments and research outcomes addressing the related theoretical and practical aspects in the usage of IOT (Internet of Things). FDP provides an exposure to new areas of research and development being carried out in universities abroad and rest of the world.

**Major Course Contents:**

- Introduction to IoT
- Basics of sensors and actuators
- Expressif RF enabled tensilica microcontrollers
- IoT protocols
- Sensing and Actuation
- IoT Development Platforms
- Use-cases: Water, Agriculture, Healthcare and Wellness, Utilities, Waste Management, Environment, Transport from an Indian context

**Workshop Objectives:**

1. Sensitize audience to get acquainted with IoT and make them to guide IoT application projects specific to different engineering streams.
2. Give exposure to IoT protocols and application of Python language to IoT applications developed using Raspbian.
3. To impart hands on experience for developing IoT applications using Expressif RF enabled Tensilica microcontrollers.
4. Hands on IoT examples using Raspbian platform.
5. Give exposure to a few other IoT platforms.

**Eligibility:** The programme is open to the faculty, Research Scholars of engineering colleges and other allied disciplines in India. Industry personnel working in the concerned/allied discipline can also attend.

**Organized at:** The programme will be coordinated and conducted by Department of ECE, Bapatla Engineering College, Bapatla, Guntur (District), Andhra Pradesh.

**Accommodation:** No TA/DA will be paid to the participants. Accommodation is arranged for outstation participants on PAYMENT Basis, Working Lunch, tea & Snacks would be provided during the training at the venue.

**Resource Persons:** The faculty from NIT Warangal, experts from Industry and stakeholders from different organizations (to present use- cases) will form the core faculty for delivering lectures and conducting hands-on sessions during the program.

**How to Apply:** A filled in form of application in the prescribed format duly signed and sponsored by appropriate authorities (along with DD/Online Transfer Receipt) should reach the

Coordinator by speed post. It is also mandatory to send scanned application form & DD/ Online Transfer receipt through email to chestialtaff@gmail.com as selection will be intimated only through mail.

**Registration Fee Particulars:**

- Faculty/Research Scholars : Rs. 2,500/- Only
- Industry participants : Rs. 7,500/- Only

Participants need to pay the Registration fee either in the form of Demand Draft (DD) or Online Transfer using the following details:

DD Details	Online Transfer Details
Demand Draft in favor of “Electronics & ICT Academy NITW, NIT Warangal” payable at any bank in Warangal	Account Name: Electronics & ICT Academy NITW Account No.: 62423775910 Name : State Bank of India Branch: REC Warangal IFSC: SBIN0020149

**Selection Criteria:**

Selection will be done based on *first-cum-first-serve basis* and the confirmed candidates will be notified immediately. The maximum number of participants will be **50 (fifty)**. Additionally 10 participants from industry are allowed to participate. The list of selected participants will be sent to their personal e-mail IDs. In case a candidate is not selected, the demand draft will be sent back. A test will be conducted at the end of the course. Candidates will be issued satisfactory certificate on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

**Important Dates:**

Last date for submission of application: **25th October, 2019**  
Selection-list intimation/display before: **28th October, 2019**  
Duration of Program: **18th to 23rd November, 2019**

**About NIT Warangal:**

National Institute of Technology Warangal, formerly known as Regional Engineering College was established in 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 14 Departments offering eight undergraduate and 32 post-graduate programmes besides doctoral programmes. About 5000 students across the country and about 500 international students study on the campus. It is a fully residential campus sprawling over 250 acres with excellent infrastructure in the form of state of the art library, seminar halls, guest houses and laboratories.

**About Department of ECE, Bapatla Engineering College:**

The Department of Electronics and Communication Engineering was established in 1981 and accredited by NBA. The department offers a four year degree program in Electronics and Communication Engineering with an annual intake of 180 students and M.Tech P.G. program in Communications Engineering and Signal Processing with an annual intake of 18 students. The ECE department emphasizes teaching and research in the areas of electronic devices and circuits, computer engineering, VLSI design testing, controls, communications, and signal processing. The staff and students of the department are well connected to external professional bodies like IETE, IEI, ISTE and IEEE.



FACULTY DEVELOPMENT PROGRAMME (FDP)  
ON  
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**APPLICATION FORM**

1. Name of the Applicant:

2. Designation:

3. Institution:

4. E-mail ID:

5. Mobile No. :

6. Category

- ☐ Faculty/Scholars (Rs. 2,500/-)  
☐ Industry Participants (Rs. 7,500/-)

7. Payment Mode

DD /Online Transfer Receipt No:

Bank:

Date:

8. Address for Correspondence:

9. Subjects taught so far:

10. Educational Qualifications with specialization:

11. No .of refresher courses/workshops attended:

12. Experience (in years):

Teaching: Research:

Industry:

13. Do you require accommodation during Training?

YES/NO

14. Do you belong to SC ST?

- ☐ SC  
☐ ST

**DECLARATION**

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and 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:

Date: Signature of the Applicant

**SPONSORSHIP CERTIFICATE**

Dr./Mr./Ms.....is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on ““IoT for Smart Cities: Use Cases” sponsored by Electronics & ICT Academy during 18th – 23rd November, 2019 at Bapatla Engineering College, Bapatla, Guntur(District), Andhra Pradesh.

Place:

Date: Signature of Principal/Head of Institution

**Address for correspondence**

Post your application form along with DD/NEFT Receipt to :

**CHESTI ALTAFF HUSSAIN**

Assistant Professor  
Department of Electronics and Communications  
Engineering  
Bapatla Engineering College (Autonomous)  
Mahatmajipuram  
Bapatla, Guntur (District)-522102  
Andhra Pradesh  
Cell no: 9441789347  
email: [chestialtaff@gmail.com](mailto:chestialtaff@gmail.com)

**Coordinators:**

**Dr. B.LAKSHMI**  
Associate Professor  
Department of ECE  
National Institute of Technology,  
Warangal , Telangana  
Cell No: 9493436845  
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For more details about Electronics and ICT academy please visit: <http://www.nitw.ac.in/eict/>