

Joint Online Faculty Development Programme Wireless Communication Technologies for IoT



Organized By
E&ICT Academy, NIT Patna

27 Jul – 7 Aug 2020
[Click here to register](#)

Supported By:

Ministry of Electronics and Information Technology, MeitY, Govt. of India.

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About NIT Patna :

National Institute of Technology Patna is the 18th National Institute of Technology created by the Ministry of H.R.D. Government of India after rechristening the erst while Bihar College of Engineering Patna on 28/01/2004. The Institute imparts high level education training, research and development in science, engineering technology and humanities alongwith high quality education and values at UG, PG and Ph.D. level.

At present the Institute offers courses in six major technical disciplines viz. Architecture, Civil Engineering, Computer Science & Engg., Electrical Engg., Electronics & Communication Engg. and Mechanical Engg. It also consists of well-established departments of Physics, Chemistry, Mathematics and Humanities and Social Sciences.

About E&ICT Academy Patna :

Ministry of Electronics and Information Technology, Government of India has instituted seven Electronics and Information & Communications Technology (ICT) Academies of which, the academy of NIT Patna is one. The Academy at NIT Patna aims to design and organize basic as well as specialized training programmes in niche areas of electronics and ICT for the development required knowledge base, skills and tools to equip the teaching community with better knowledge and understanding.

Experts / Speakers :

Inaugural Speaker :

Prof. Sukumar Nandi (IIT Guwahati)

Speakers from Industry :

- Kaushlendra Singh Sisodia
Senior Expert, UniConverge
- Mr. Rishabh Kumar
Senior Expert, UniConverge
- Mr. Jitesh Kumar
Senior Expert, UniConverge
- Mr. Narang N. Kishor
NarnixTechnolab Pvt. Ltd

Other Speakers :

- Dr. Ferdous Ahmed (IIIT Guwahati)
- Prof. Ratnajit Bhattacharjee(IIT Guwahati)
- Prof. Sukumar Nandi (IIT Guwahati)
- Dr. Santosh Biswas (IIT Guwahati)
- Dr. Rishikesh Kulkarni (IIT Guwahati)

Course Content :

- Introduction to IoT : What is IoT IoT ; Applications in different domains ; Trends in IoT Market.
- Basic Architecture: Basic knowledge of IOT Architecture; Protocols Introduction (MQTT, AMQP, CoAP)
- Recap of Embedded, Basic Concepts - Sensors, Actuators, Microcontroller units and Architecture Application driven Selection of Microcontrollers .
- IoT Architecture and Communication Theory IoT Layered, Architecture and IPV6, RF Zigbee, Wifi BLE e. LPWAN.
- IoT Protocols Theory MQTT : CoAP, LoWPANdesign .
- Introduction of Cloud Computing : About Cloud and Cloud Computing, Benefits of cloud, History of cloud computing, Deployment Models.
- Cloud Computing : Top Cloud providers, Service Models, Service catalogues, Different cloud services, Advantages for different offerings.
- Web Services : What are web services Why web services, Types of web services, RESTful web services, Design Principles.
- Design Principles : Design principles with respect to architecture, power, ruggedness, size, weight, security Practical usecases.
- IoT Security : How secure is IoT, Issues and vulnerabilities, Key aspects for securing IoT Solutions .
- Industry 4.0 : Introduction to Industry 4.0, Road to Industry 4.0, Role of data, information, knowledge and collaboration in future organizations. Related Disciplines, System, Technologies for enabling Industry 4.0.

Course Fee

Certification Fee:-

Faculty/ PhD Scholar = **Rs.500/-**

(SC/ST = **Rs. 250/-**)

Others (Except Faculty/PhD-Scholar): **1000/-**

(SC/ST = **Rs. 500/-**)

Online payment details :-

Bank Name: Allahabad Bank

Account Name: NIT Patna

Account No.: **50380476798**

IFSC Code: **ALLA0212286**

Link for Registration :

<https://forms.gle/mfuW4Htgp2u9UM1W6>

Contact Details: E & ICT Academy ,NIT Patna (office)

Website: <http://www.nitp.ac.in/ict/> Email: eictapatna@nitp.ac.in

Landline: 0612 - 237 1715 / 237 2715 (Ext: 344)

http://www.nitp.ac.in/ict/Contact_us.php