Joint Online Faculty Development Programme on Cyber Security 05-11 October, 2020

Resource Persons

1. Prof. R. K. Shymsunder, IIT Bombay (Keynote Speaker)
2. Prof. Krishna Shivlingam, IIT Madras
3. Dr. Mayank Agarwal, IIT Patna
4. Dr. Somanath Tripathi, IIT Patna
5. Dr. Rajiv Mishra, IIT Patna
6. Mr. Ch. A. S. Murthy, CDAC Hyderabad
7. Prof. B. Bezawada, MEC Hyderabad
8. Dr. S. K. Nandi, IIT Guwahati

Resource Persons from the Host Institute:
1. Dr. M. P. Singh, NIT Patna
2. Prof. M. S. Gaur, IIT Jammu
3. Dr. Amit Kumar Singh, NIT Patna
4. Emmanuel S. Pilli, MNIT Jaipur
5. Dr. Ramesh Babu Battula, MNIT Jaipur

Detailed

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 erstwhile 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 along with 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 of required knowledge base, skills and tools to equip the teaching community with better knowledge and understanding.

Supported by

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

- To update the participants with the state-of-the-art technologies of cyber security.
- To facilitate the participants about different types of security attacks.
- To work on intrusion detection system.
- To gain in-depth knowledge about blockchain technology.
- To enable the participants for developing a strong encryption algorithm.

## Course Contents

- Basic cryptography and its importance in cyber security, Cryptography hash functions
- Wireless Vulnerabilities: 802.11 wireless vulnerabilities, Hacking Wi-Fi networks by passing windows login system
- Software Security: Buffer overflow, Integer overflow, Format string vulnerabilities
- Web Security: SQL injection, XSS, CSRF, etc.
- Web App Penetration Testing: Data security in cloud, Big data and cyber security
- Network Security: DNS, ICMP, ARP attacks, IP Sec, BGP Sec, etc.
- Browser based attacks
- Security Tools: DVWA, Snort, Metasploit, Wireshark, NMAP, Nessus, Openssl, etc.
- Security in Internet of Things (IoT), Tools for cyber security
- Blockchain based IOT security
- Intrusion detection system
- Cyber security assurance and law, Cyber forensics

## Key Features

- Online/Live lectures sessions by subject experts
- Comprehensive tutorials and practice notes
- Online lab and training sessions
- Demo/hands-on experiments
- Follow up sessions
- Discussion on research problems and internship

## Course Fee Details

There is no registration fee to attend the FDP. Candidates are required to pay a mandatory examination fee, if they desire a certificate of completion of the FDP.

**Examination Fee:**

- **Faculty/PhD Scholar:** Rs. 500/- (SC/ST: Rs. 250/-)
- **Industry People:** Rs. 1000/- (SC/ST: Rs. 500/-)

**Online Payment Details:**

Account Name: NIT Patna
Account No.: 50380476798
IFSC Code: ALLA0212286
Bank Name: Allahabad Bank

## Link for Registration

https://forms.gle/vBXnf3X9XKDMxPS7

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Website: http://www.nitp.ac.in/ict/summercourses.php

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