AICTE Sponsored QIP Short Term Course on
Cyber Security for Next Generation Technologies:
Challenges and Solutions
(Online Mode)

Organized by
Department of Computer Science and Engineering
Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, Chennai - 600 127

Between
7th - 12th March 2022

Coordinator
Dr. Sanjeet Kumar Nayak

About the Institute
Indian Institute of Information Technology, Design and Manufacturing (IIITDM), Kancheepuram is an Institute of National Importance (INI) established in 2007, by the Ministry of Education, Government of India, to pursue design and manufacturing oriented engineering education and research and to promote the competitive advantages of Indian products in global markets. With mastery in domain specific design, engineering skills and required managerial expertise, the graduates can entrepreneur organisations involved in the design and manufacture of commercially successful electronic or mechanical products.

About the Department
Department of Computer Science and Engineering (CSE) offers design centric programmes such as B.Tech (CSE), M.Tech (CSE) with specialization Data Science and Artificial Intelligence and Ph.D. in various research areas. IIITDM Kancheepuram’s Computer Science and Engineering curriculum is modelled on the ACM recommendations and is the first of its kind engineering program offered in India. The Department consists of a vibrant team of faculty members working in diverse areas including Image Processing, Machine Learning, Data Analytics, Biometrics, Graph Theory, Combinatorial Optimization, Reconfigurable Computing, Wireless Sensor Networks, IoT, Blockchain and Cyber Security. The faculty members are involved in sponsored and consultancy research projects from reputed industries and government organizations.

Important Dates

| Last date for applications | 01-03-22 |
| Intimation of selection | 03-03-22 |
| Confirmation of participation | 05-03-22 |

Contact

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Application Form

Please fill the Google form using the link below

Click the form icon or scan the QR code

Eligible teachers are requested to submit the filled in application (Google form) along with the sponsorship certificate in the format given below on or before 01-03-2022.

About the Course

Introduction: The next-generation technologies like the Internet of Things (IoT), Robotic Process Automation, Cloud Computing, Digital Healthcare, etc., are boons for humanity. But, because these technologies rely on the underlying Internet communication, there is a high probability of cyberattacks. Therefore, there is an essential need to secure the digital transmission of data in the technologies mentioned above. Nowadays, “Cybersecurity” has evolved as a necessary aspect in this technological era with increased online threats. The current trend involves Cryptography, Machine Learning, Cyber forensics, Blockchain, Intrusion detection systems, Side-channel analysis, Hardware security, and a collaborative defense mechanism to address state-of-the-art threats. Therefore, both the academicians and the industry people need to get acquainted with the latest Cybersecurity trends to deliver a promising solution to existing technologies against cyber threats. In addition to these, awareness related to various IT laws and Data protection laws provided by different countries is also required. As a result, cyber-attacks safe next-generation technologies can be built and will surely enhance the popularity of the next generation technologies and the products.

Course Objectives: The importance of this FDP proposal is to promote research and development, along with the technical skills needed in cyber security. The proposed FDP will familiarize the participants with various cyber security tools for network and computer scanning, identifying, and realizing cyber security techniques. Also, through FDP, participants will be acquainted with the awareness for data and system protection from cyber-attacks (prevent, detect and respond), etc. The FDP will not only cover the technical sessions but also will cover the hands-on sessions.

Course Overview:

- Network Security Attacks and Mitigation Techniques
- Mathematical Foundations for Crypto Primitives
- Cyber Forensics
- AI for Cyber Security
- Introduction to Blockchain
- Hardware Security
- Lightweight Ciphers Design
- Biometric Security
- Advanced Persistent Threats
- Security and Privacy in IoT
- URL Phishing Detection and Countermeasures
- Cloud Security

Course Duration: The course is of one week duration starting from 7th to 12th March, 2022.

Resource Faculty: The resource faculty includes experts from both academia and industry.

Eligibility: Engineering college teachers from AICTE approved colleges are eligible to apply for the course.

Registration Fee: There is no course fee for the participants.

Mode: The course will be online, and the attendance during all the sessions is compulsory. The course link will be sent to shortlisted candidates (maximum of 100) by 5th March, 2022.
SPONSORSHIP CERTIFICATE FORMAT

Certified that Dr./Sri./Smt. ...................................................... is a faculty of our Institute and is being sponsored hereby for attending QIP short term course on “Cyber Security for Next Generation Technologies: Challenges and Solutions” to be conducted by Department of Computer Science and Engineering, IIITDM Kancheepuram in online mode from 7th to 12th March, 2022.

Signature of Sponsoring Authority
(with date and seal)