

Workshop Overview

Cyber Security & Cyber Forensics is one of the key thrust areas of R&D activity. The workshop aims at providing participants with concepts of computer security, cryptography, digital money, secure protocols, detection and other security techniques. The course will help participants to gauge understanding in essential techniques in protecting Information Systems, IT infrastructure, analysing and monitoring potential threats and attacks, devising security architecture and implementing security solutions. The participants will also have a wider perspective to information security and national security perspective from both technology and legal perspective

Course Contents

Session 1: Introduction to Cyber Security and Cyber forensics

Session 2 (Lab): Introduction to open source tools e.g. nmap, zenmap.

Session 3: PKI and Digital Signature - Digital Signature Certificate / Authority / Trust model / Types / Classes / Lifecycle / eSign

Session 4: Overview of Firewalls-Types of Firewalls, User Management, VPN Security, Security Protocols: -security at the Application Layer-PGP and S/MIME, Security at Transport Layer-SSL and TLS, Security at Network Layer-IPSec.

Session 5 (Lab): Implementation of Cryptographic techniques, OpenSSL, Hash Values Calculations

Session 6: Network Design Simulation. DOS/ DDOS attacks. Asset Management and Audits, Vulnerabilities and Attacks, Network packet Sniffing

Session 7: Intrusion detection and Prevention Techniques

Session 8 (Lab): DOS Attacks, DDOS attacks, Wireshark

Session 9: Internet Security, Cloud Computing & Security, Social Network sites security

Session 10: Malware, Types of Malware: Virus, Worms, Trojans, Rootkits, Robots, Adware's, Spywares, Ransom wares, Zombies etc

Session 11 (Lab): Memory Forensics and analysis of Zeus and Stuxnet Malware

Session 12: IOT Security

Session 13: Basic Security for Web Services like SOAP, REST

Session 14 (Lab): adb for android

Target Audience

The program has been designed UG/PG students, researchers, and faculty members from academic institutes.

Resource Persons

Distinguished faculty members of reputed National and International Institutions and Industrial Organizations shall be conducting the sessions.

Registration is CLOSED now.

**MALAVIYA NATIONAL INSTITUTE OF
TECHNOLOGY, JAIPUR**
**Department of Computer Science &
Engineering**

**AICTE TRAINING AND LEARNING
(ATAL) ACADEMY NATIONAL
WORKSHOP ON
Cyber Security**

December 17-21, 2019

Registration form is available at :-

<https://forms.gle/jHgAsYicPqbKBQhi6>

Please fill the form and submit it before the last date.

Address for Correspondence

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About MNIT Jaipur

Malaviya National Institute of Technology Jaipur is one of the premier NITs, established by the Ministry of Human Resource Development, Government of India. The Institute, earlier known as MREC Jaipur, was established as a joint venture of the Government of India and the Government of Rajasthan in 1963. Later in 2002, the college was given the status of National Institute of Technology, and on 15 August 2007, proclaimed as an 'Institute of National Importance' through an Act of Parliament.

The lush green campus of MNIT is centrally located in the city of Jaipur, and spreads over 325 acres of land. At present the Institute offers undergraduate and postgraduate courses (M.Tech. /M.B.A./ M.Planning /M.Sc. & Ph.D.) to about 5000 students, in almost all leading fields of engineering & technology, architecture, management and sciences. Through the internationally renowned faculty, laboratories with state of art equipments and excellent infrastructure, the institute is actively engaged in research, consultancy and developmental activities, besides imparting regular teaching.

About the Department

The Department of Computer Science and Engineering started functioning in 1994. The Department offers Four Year courses leading to the Bachelor's Degree and also Post Graduate Program leading to M. Tech. in Computer Science and Engineering. It offers Ph.D. programs in various specializations like Wireless Sensor Networks, MANET, Network Security, QoS in Wireless Networks, Cloud Computing, Big Data, Real Time Systems, Image Processing, etc. The Department is equipped with state of the art labs to support the UG, PG and Research Programs.

Jaipur: The Pink City of India

Jaipur, the capital of Rajasthan, is well known as the Pink City of India. It is a famous heritage city and is a major tourist destination. Jaipur is located about 270 kms south of Delhi, and is well connected by road, rail and air services. MNIT Jaipur is situated on Jawaharlal Lal Nehru Marg and is about 9 kms each from the main railway station of Jaipur and from Central Bus Stand (Sindhi Camp), and 4 kms from Gandhi Nagar railway station. Jaipur International Airport (located near the Jawahar Circle) is about 5 km from the institute. The weather in Jaipur in December is cold with temperatures ranging between 5-20°C.

Registration

For registration, a copy of the duly filled Registration form should be sent in advance to the Course Coordinators through email or in original through registered post. Confirmation would be sent through email. There is no registration fees. All the participants would be provided with course material, certificate, working lunch and tea.

Accommodation

Limited accommodation is available in the Guest House/Hostels of MNIT for outstation participants on a paid basis with an advance request. Shared accommodation will be provided on first come first served basis. The participant will not be paid any TA/DA.

AICTE TRAINING AND LEARNING (ATAL) ACADEMY



SPONSORED NATIONAL WORKSHOP

ON

Cyber Security

December 17-21, 2019

Organized by

Department of Computer Science and Engineering

Course Coordinators:

Dr. Meenakshi Tripathi

Dr. Jyoti Grover



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