Cybersecurity Centre of Excellence in association with NASSCOM Futureskills Prime

present

Seven-Day Workshop on Foundations of Cybersecurity

Topics Covered:

- Thorough Introduction to Cybersecurity
- Essential Cyber Security Concepts
- Important Fundamentals of Networking
- Key Elements of Cyber Threats, Cyber Crimes and Cyber Laws
- Security Testing and Deep dive into social engineering attacks
- Introduction to Privacy, Cyber Crime, and Cyber Laws

Six Merits of this Workshop:

- Firm Grasp of the Key Concepts in Cybersecurity.
- Insights into Cybersecurity Security Tools
- Dive in Hands-On Experience
- Bag the Coveted NASSCOM Future skills Prime Certification to prepare for the Industry. The Certification carries the approval and stamp of MeitY (Ministry of Electronics and Information Technology, Govt. of India)
- Get Participation Certificate from Cybersecurity Centre of Excellence and get plugged into the Cybersecurity industry.
- Automatic enrolment in our Cybersecurity Database for Industry Opportunities (Internships / Employment / Research).

Eligibility:

Open to: All Streams UG/PG Students, Faculty, Researchers & PhD Scholars
(Note: You need not have technical background to sign up!)

42 Hours
28 Hours Theory + 14 Hours Practical
Instructor - Led Course

Course Price
INR 1,000 + 18% GST Including F.S.P Certification (T&C Apply)

Register at: bit.ly/CCOE_Workshop

20th February 2023 - 26th February 2023 | 10:00 AM to 5:00 PM
Module 1: Thorough Introduction to Cybersecurity:
- Defining Cyberspace and Overview of Computer and Web Technology
- Architecture of Cyberspace Communication and Web Technology
- Internet
- World Wide Web
- Advent of Internet
- Internet Infrastructure for Data Transfer and Governance
- Internet Society Regulation of Cyberspace Concept of Cybersecurity
- Issues and Challenges of Cybersecurity

Module 2: Essential Cyber Security Concepts
- Layers of Security
- Vulnerability
- Threat
- Harmful Acts
- Computer Criminals
- Assets and Threat
- Motive of Attackers
- Types of Attacks
- Taxonomy of Various Attacks
- IP Spoofing
- Malware- Types of Malware
- Methods of Defense
- Security Models
- Physical Security
- Personnel Security
- Secure Development Process

2.a Data Security
- Confidentiality, Integrity, Availability
- Encryption and Decryption Data backup and Recovery

2.b Access Control
- Identification, Authentication, Authorization
- Access Control Models
- User Management
- Identity Access Management

Module 3: Important Fundamentals of Networking:
- Understanding of Network Architecture
- Network Components: Routers, Switches, Access points, Firewalls
- Network Topology Architectures
- Common Ports and Protocols
- TCP UDP and 3 Way Handshake
- IP Addresses
- MAC Addresses
- OSI Model
- Network Attacks
- Introduction to Intrusion Detection System
- Bastion Hosts and DMZ
- Proxy Servers
- Virtual Private Network

Module 4: Security Testing and Deep dive into social engineering attacks
- Introduction to security testing
- Understanding the concepts of Vulnerability Scanning and its real time applications
- Understanding the concepts of Penetration Testing and its applications
- Fundamentals of Security Auditing and Posture Assessment
- Importance of Ethical Hacking and its applications
- How to Manipulate and Exploit Human Behavior
- Social Engineering Techniques: Phishing, Pretexting, Baiting, Quid Pro Quo , Tailgating , Dumpster Diving , Vishing
- Social Engineering in the Digital Age Emerging Trends in Social Engineering Tactics
- Scenario Planning and Attack Simulation
- Designing Realistic Scenarios: Conducting Ethical and Safe Attack Simulations

Module 5: Introduction to Privacy, Cyber Crime, and Cyber Laws
- Introduction
- Security Operations
- Developing an Incident Management and Response System
- Digital Forensics
- Business Continuity and Disaster Recovery
- Risk Assessment and Management
- Incident Response and Disaster Recovery
- Compliance and Regulations
- Key Elements of Cyber Threats,
- Cyber Crimes and Cyber Laws
- Cyber Threats-Cyber Warfare,
- Cyber Terrorism & Cyber Espionage

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From 20th February 2023 to 26th February 2023
Timings: 10:00 AM to 5:00 PM
Registration Fee: 1000 INR + 18% GST
Important Information:

- Today, Cyber Risks are **Rated Globally as the #1 Risk**, surpassing every other kind of risk like Climate Change, Political Unrest, Terror Attacks, Natural Disasters, Fire / Accidents, Business Interruptions, etc.
- Cyber Attacks can happen anytime, anywhere, at any scale, with any level of sophistication.
- The damage due to Cyber Breaches is estimated to be **$12 Trillion globally by 2025.** Hence the investments being made to prevent the damages are about **$2 Trillion** globally.
- The Unemployment Rate in the Cybersecurity Sector remains firmly in the **Negative.** There is a VAST gap between Supply and Demand.
- About **137 Countries** are adopting Privacy Laws. This will accelerate the need for Cyber Security.
- All these indicate a HUGE Career Opportunity for YOU! Whether you are a student/researcher/professional/manager, please note that Cybersecurity and Privacy **Cut across ALL Domains** (Industry / Technology / Business) – Both Horizontally and Vertically, Because there is a Cyber Component in practically EVERYTHING.
- You need not be a Techie to be in this Domain. People from backgrounds of Technology, Management, Law, Commerce, Sciences, Arts, etc. – all are welcome to explore.
- For those interested - Many Cutting-Edge areas are also included (like AI, Blockchain, 5G, IoT, etc.). It is a rich domain, exploding with possibilities.