Course Content of Cyber Security

Commencing from Saturday, 25th March 2023 Via Hybrid Mode (Online/Offline)
Timing: 2 PM to 5 PM Duration: 8 Weeks (Only on Saturdays)

1. Cybersecurity Fundamentals
    a. Threats, Attacks and Vulnerabilities
    b. Vulnerability Management
    c. Application Security
    d. Operational Security
    e. Information Security
    f. Network Security
    g. Cybersecurity Frameworks and Tools
    h. Incident Response
2. Enterprise Architecture and Components
    a. Application Architecture
    b. Data Architecture
    c. Technology Architecture
    d. Information Security Architecture
    e. Enterprise Architecture Frameworks
    f. Best Practices for Enterprise Architecture
3. Network Security
    a. Network Protocols and Internet Architecture
    b. Application Layer Security
    c. Transport Layer Security
    d. Network Layer Security
    e. Data Link Layer Security
    f. Network Defence Tools
4. Information System Governance and Risk Assessment
    a. Information Security Management
    b. IT Service and Portfolio Management
    c. Threat Modeling
    d. Risk Management Frameworks
5. Malware and Attack Technologies
    a. Attacks using Malware
    b. A First Aid approach to Malware
    c. Malware Analysis and Detection
    d. Malware Response
    e. Adversarial Behaviour
6. Security Operations and Incident Management
    a. Security Architecture
    b. System and Server logs
    c. Network traffic
    d. SIEM Platforms and countermeasures

    e. Incident Management
7. Forensics
    a. Categories of Forensics
    b. Conceptual Models
    c. Storage Forensics
    d. Memory Forensics
8. Systems Security
    a. Encryption and Cryptography
    b. Public Key Infrastructure
    c. Standard Protocols
9. Operating Systems and Virtualisation
    a. Operating Systems Security Principles and Models
    b. Operating System Hardening
10. Authentication, Authorization and Accountability (AAA)
    a. Enforcing Access Control
    b. Identity Management
    c. Privacy and Accountability
11. Software Security
    a. Memory Management Vulnerabilities
    b. API vulnerabilities
    c. Coding Practices
    d. Static and Dynamic Detection
12. Web and Mobile Security
    a. OWASP Web and Mobile Security
    b. Server-side Vulnerabilities
    c. Client-side Vulnerabilities
    d. Sandboxing
    e. Application Stores
    f. Cookie Management

Course Fee: ***Rs.10,000/-***
25% discount for IETE Members & 50% for Students/Teaching Staffs
Fee Excluding of GST (18%) as per Govt. norms

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