

Cyber Security

7 Days 60* hours Intensive Certified Internship

India's First ever Exclusive training program on Unmanned Aerial Vehicle/Drone Systems Design and Development

JOIN – INTERACT – LEARN – BUILD – FLY..!

Internship Structure

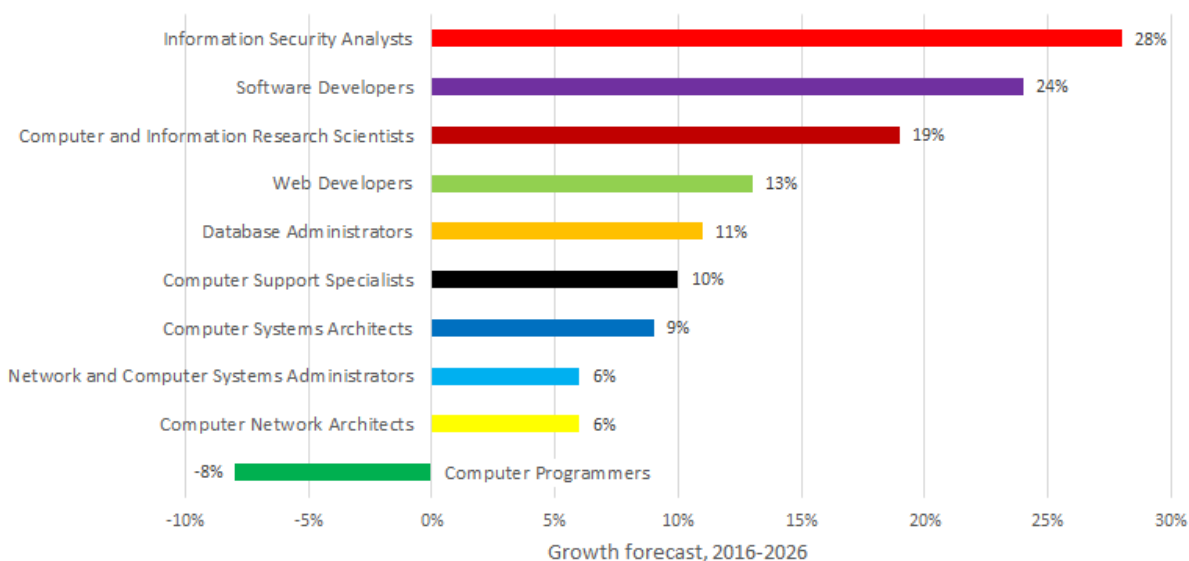
No of Days: 7

No of Hours: Total 60 (40 Training Hours) + (20 Hours on Hands-On)

The course is divided into four diff. areas of UAV/Drone Design

WHY YOU STUDY CYBER SECURITY ?

Computer and IT jobs outlook, 2016-26



According to the predictions by experts, the scope of the Cyber Security market will become \$170 billion industry by 2020. For the last 5 years, Cyber Security professionals have been making more salary than average IT professionals. And the average salary gap across the gap is 9% to state the least.

National Association of Software and Services Companies (NASSCOM) estimated that India alone will need 1 million cybersecurity professionals by 2020 to meet the demands of its rapidly growing economy

Introduction to Cyber Security

- Cybersecurity Fundamentals
- Fundamentals of Cybersecurity
- Threat Actors, Attacks, and Mitigation
- Security Policies and Procedures
- Cybersecurity Mitigation Methods

Enterprise Architecture and Components

- Secure Architecture
- Wireless Networks
- Network Security Controls
- Cloud, Virtualization, BYOD, and IOT Security
- Security Testing
- Key Takeaways

Information System Governance and Risk Assessment

- Introduction
- Information Security Governance
- Risk Management
- Information Security Programs

Incident Management

- Introduction
- Developing an Incident Management and Response System
- Digital Forensics
- Business Continuity and Disaster Recovery

Ethical Hacking Specialist

Under this training you will learn the advanced step-by-step methodologies that hackers actually use, such as writing virus codes, and reverse engineering, so you can better protect corporate infrastructure from data breaches. This ethical hacking program will help you master advanced network packet analysis and advanced system penetration testing techniques to build your network security skill-set and beat hackers at their own game.

Introduction to Ethical Hacking

- Information Security Overview
- Demo of Aspen and iLabs
- Internet is Integral Part of Business and Personal Life - What Happens Online in one minute
- Essential Terminology
- Elements of Information Security
- The Security, Functionality, and Usability Triangle

Information Security Threats and Attack Vectors

- Motives, Goals, and Objectives of Information Security Attacks
- Top Information Security Attack Vectors
- Information Security Threat Categories
- Types of Attack on a System 01:56
- Information Warfare

Penetration Testing Concepts

- Penetration Testing
- Why Penetration Testing
- Comparing Security Audit, Vulnerability Assessment, and Penetration Testing
- Blue Teaming/Red Teaming
- Types of Penetration Testing
- Phases of Penetration Testing
- Security Testing Methodology

Ethical Hacking Concepts

- What is Hacking & Who is a Hacker?
- Hacker Classes, Hacking Phases
- What is Ethical Hacking?
- Why Ethical Hacking is Necessary
- Scope and Limitations of Ethical Hacking
- Skills of an Ethical Hacker

Information Security Controls

- Information Assurance (IA)
- Information Security Management Program
- Enterprise Information Security Architecture (EISA)
- Network Security Zoning
- Defence in Depth
- Information Security Policies
- Physical Security
- What is Risk?, Threat Modelling
- Incident Management
- Security Incident and Event Management practices (SIEM)
- User Behaviour Analytics (UBA), Network Security Controls

- Identity and Access Management (IAM)
- Data Leakage, Data Backup, Data Recovery
- Role of AI/ML in Cyber Security

Information Security Laws and Standards

- Payment Card Industry Data Security Standard (PCI-DSS)
- ISO/IEC 27001:2013
- Health Insurance Portability and Accountability Act (HIPAA)
- Sarbanes Oxley Act (SOX)
- The Digital Millennium Copyright Act (DMCA)
- Federal Information Security Management Act (FISMA)
- Cyber Law in Different Countries

Foot printing and Reconnaissance

- Foot printing Concepts
- Foot printing through Search Engines
- Foot printing through Web Services
- Foot printing through Social Networking Sites
- Website Foot printing, Email Foot printing
- Competitive Intelligence, Who is Foot printing, DNS Foot printing
- Network Foot printing, Foot printing through Social Engineering
- Foot printing Tools & Countermeasures, Foot printing Pen Testing

Scanning Networks

- Network Scanning Concepts
- Scanning Tools
- Scanning Techniques
- Scanning Beyond IDS and Firewall
- Banner Grabbing06:25Preview
- Draw Network Diagrams
- Scanning Pen Testing

Enumeration

- Enumeration Concepts
- NetBIOS Enumeration
- SNMP, LDAP, NTP Enumeration
- SMTP Enumeration and DNS Enumeration
- Enumeration Countermeasures
- Other Enumeration Techniques
- Enumeration Pen Testing

Vulnerability Analysis

- Vulnerability Analysis
- Vulnerability Assessment Concepts
- Vulnerability Assessment Solutions
- Vulnerability Scoring Systems
- Vulnerability Assessment Tools
- Vulnerability Assessment Reports

System Hacking

- System Hacking Concepts
- Cracking Passwords
- Escalating Privileges, Executing Applications
- Hiding Files, Covering Tracks
- Penetration Testing

Malware Threats

- Malware Concepts
- Trojan Concepts
- Virus and Worm Concepts
- Malware Analysis
- Countermeasures & Anti-Malware Software
- Malware Penetration Testing

Sniffing Concepts

- MAC Attacks, DHCP Attacks, ARP Poisoning, Spoofing Attacks, DNS Poisoning
- Sniffing Tools, Countermeasures
- Sniffing Detection Techniques, Sniffing Pen Testing

Social Engineering Concepts

- Social Engineering Techniques
- Impersonation on Social Networking Sites & Identity Theft
- Countermeasures
- Social Engineering Penetration Testing
- Insider Threats

Denial of Service : DoS/DDoS Concepts

- DoS/DDoS Attack Techniques, Botnets
- DDoS Case Study
- DoS/DDoS Attack Tools & Countermeasures
- DoS/DDoS Protection Tools
- DoS/DDoS Attack Penetration Testing

Session Hijacking Concepts

- Application Level Session Hijacking, Network Level Session Hijacking
- Session Hijacking Tools & Countermeasures, Penetration Testing

Evading IDS, Firewalls, and Honeypots

- IDS, Firewall and Honeypot Concepts
- IDS, Firewall and Honeypot Solutions, Evading IDS & Firewalls, IDS/Firewall Evading Tools
- Detecting Honeypots, IDS/Firewall Evasion Countermeasures & Penetration Testing

Hacking Web Servers

- Web Server Concepts, Web Server Attacks & it's methodology
- Web Server Attack Tools & Countermeasures
- Patch Management, Web Server Security Tools, Web Server Pen Testing

Hacking Web Applications

- Web App Concepts & App Threats
- Hacking Methodology & Web Application Hacking Tools
- Countermeasures & Web App Security Testing Tools, Web App Pen Testing

SQL Injection Concepts

- Types of SQL Injection & Injection Methodology
- SQL Injection Tools & Evasion Techniques, Countermeasures

Hacking Wireless Networks

- Wireless Concepts, Wireless Encryption & Wireless Threats
- Wireless Hacking Methodology and Wireless Hacking Tools
- Bluetooth Hacking & Countermeasures
- Wireless Security Tools & Wi-Fi Pen Testing

Hacking Mobile Platforms

- Mobile Platform Attack Vectors & Hacking Android OS, Hacking iOS
- Mobile Spyware, Mobile Device Management
- Mobile Security Guidelines and Tools, Mobile Pen Testing

Introduction Cloud Computing Hacking

- Cloud Computing Threats, Cloud Computing Attacks
- Cloud Security, Cloud Security Tools & Cloud Penetration Testing

Basics of Cryptography

- Cryptography Concepts, Encryption Algorithms
- Cryptography Tools, Public Key Infrastructure (PKI)
- Email Encryption, Disk Encryption
- Cryptanalysis & Countermeasures