



# CYBER SECURITY & ETHICAL HACKING

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NURTURE | UPGRADE | IGNITE

# FEATURES OF PROGRAM

## STUDY ONLINE

According to your availability

## BEGINNER FRIENDLY

No basic knowledge required

## PROJECTS

Mini& Major projects

## CERTIFICATIONS

Training completion certificate

## DOUBT CLEARING SESSIONS

Get Your Doubts Solved Fast

## PLACEMENT GUIDANCE

Empowering Your Career

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# **OUR MOTIVE**

## **NURTURE**

**Guiding growth,inspiring futures**

## **UPGRADE**

**Transfor Today upgrade for tomorrow**

## **IGNITE**

**Ignite Ideas,Transform possibilites**

# **ABOUT US**

KI-TECH is an online education platform dedicated to providing students with exceptional learning opportunities and growth. Our mission is to address student's needs and prepare them for success in their fields. With a wide range of programs and courses, we focus on delivering excellence through top-quality study materials and expert instructors, helping students achieve remarkable growth.

# WHY CYBER SECURITY & ETHICAL HACKING



- **Protects Data:** Safeguards sensitive information from unauthorized access and breaches.
- **Prevents Attacks:** Identifies and mitigates vulnerabilities to prevent cyberattacks
- **Ensures Privacy:** Maintains user privacy and secures personal data.
- **Compliance:** Meets regulatory and legal requirements for data protection.
- **Promotes Trust:** Builds confidence among users and clients by ensuring secure systems.

# TRAINING OUTCOMES

- **Identify Threats:** Recognize common cybersecurity threats and vulnerabilities.
- **Basic Security Measures:** Implement fundamental security practices and controls.
- **Ethical Hacking Skills:** Understand ethical hacking principles and methodologies.
- **Vulnerability Assessment:** Perform basic vulnerability assessments and penetration testing.
- **Network Security:** Secure and monitor network infrastructure.
- **Incident Response:** Respond to and manage security incidents effectively.
- **Compliance Knowledge:** Understand key regulations and compliance requirements.

# TRAINING PATH WAY

- Introduction to Cybersecurity
- Basic Security Concepts
- Network Security Fundamentals
- Cryptography Basics
- Operating System Security
- Ethical Hacking Fundamentals
- Reconnaissance Techniques
- Vulnerability Assessment
- Penetration Testing Basics
- Web Application Security
- Incident Response and Management
- Compliance and Best Practices

# Module-I

- Overview of Cybersecurity
- Types of Threats and Attacks
- Importance of Cybersecurity



# Module-II

- Confidentiality, Integrity, and Availability (CIA) Triad
- Authentication and Authorization
- Security Policies and Procedures



# Module-III

- Networking Basics (TCP/IP, OSI Model)
- Firewalls and Intrusion Detection Systems (IDS)
- Network Segmentation and VPNs



# Module-IV

- Encryption and Decryption
- Symmetric vs. Asymmetric Encryption
- Hashing and Digital Signatures



# Module-V

- Securing Windows and Linux Systems
- Patch Management
- File System Permissions



# Module-VI

- Ethical Hacking vs. Black Hat Hacking
- Phases of Ethical Hacking (Reconnaissance, Scanning, Exploitation)
- Legal and Ethical Considerations





# Module-VII

- Information Gathering
- Footprinting and Scanning
- Social Engineering



# Module-VIII

- Identifying Vulnerabilities
- Using Vulnerability Scanners
- Interpreting Scan Results



# Module-IX

- Penetration Testing Methodologies
- Exploit Development and Execution
- Post-Exploitation and Reporting



# Module-X

- Common Web Vulnerabilities (XSS, SQL Injection)
- Web Application Firewalls (WAF)
- Secure Coding Practices





# Module-XI

- Ethical considerations in AI development
- Bias and fairness in machine learning models
- Regulatory and compliance aspects



# Module-XII

- Case studies and industry applications
- Building a complete AI project from data collection to deployment
- Presenting findings and solutions



# Tools, Languages & softwares used



## Sample Projects

- Network Vulnerability Scan
- Basic Firewall Configuration
- Password Strength Analyzer

# CERTIFICATIONS

