



Indian Institute of
computing and Technology

Workshop

Foundations of

CYBER DEFENSE

Understand • Defend • Stay Ahead

Build a strong base in cybersecurity principles.





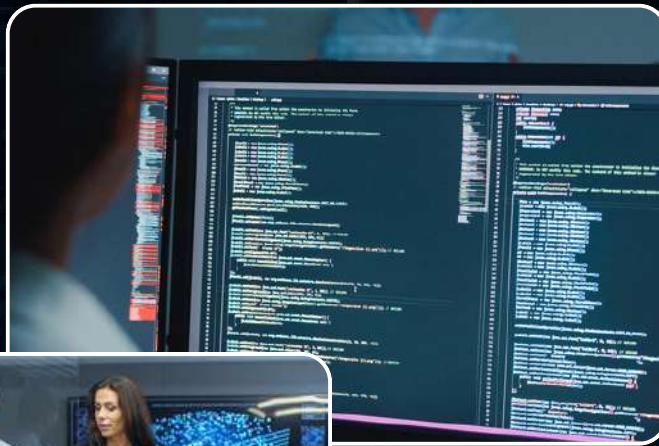
ABOUT WORKSHOP

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BUILD YOUR CYBER DEFENSE FOUNDATION

Cybersecurity is essential in today's connected digital world. From personal devices and online communication to networks and digital systems, protecting information and technology has become increasingly important. Foundations of Cyber Defense introduces participants to the fundamental concepts needed to understand, identify and defend against common cyber threats.

Through real-world examples, simulations, practical challenges and teamwork, participants will learn how cyber attacks happen, how threats can be identified, and how defenders respond to security incidents.





WORKSHOP OBJECTIVE

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The objective of this workshop is to build a strong and practical foundation in cybersecurity by introducing participants to the fundamental principles of digital security, common cyber threats, and essential defense mechanisms. Participants will explore how cyberattacks occur, how attackers exploit vulnerabilities, and how individuals and organizations can protect their systems, networks, devices, and data from potential threats.

The workshop will cover key concepts such as cyber threats and vulnerabilities, social engineering, malware, phishing, basic cryptography, secure communication, authentication, network security, threat detection, and incident response. Through hands-on activities, interactive simulations, real-world scenarios, demonstrations, and problem-solving exercises, participants will learn how to identify suspicious activities, understand security risks, and apply basic defensive techniques.

Introduce cyber threats

Introduce participants to common cyber threats.

Teach basic cryptography

Introduce participants to basic cryptography.

Explain secure communication

Introduce participants to secure communication.

Cover network defense

Introduce participants to network defense.

Practice threat detection

Introduce participants to threat detection through practical activities, simulations and real-world scenarios.





WORKSHOP HIGHLIGHTS

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This workshop offers a practical and interactive introduction to cybersecurity, combining essential concepts with real-world scenarios and hands-on activities.

Participants will explore the cyber threat landscape, learn to identify phishing, malware, ransomware and other common threats, and understand how attackers target digital systems.



Through a hands-on cryptography challenge, participants will experience how encryption and secure communication help protect information. They will also explore firewalls, network security and Intrusion Detection Systems (IDS) through interactive exercises.

A Threat Hunt Simulation will help participants analyze suspicious emails and identify potential security indicators, while a Firewall Role-Play will allow them to make decisions about which network traffic should be allowed or blocked.



The workshop focuses on critical thinking, teamwork, problem-solving and practical cyber-defense skills, helping participants develop the mindset required to recognize threats and respond effectively.



THINGS TO LEARN

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Cybersecurity Fundamentals

Understand the basics of cybersecurity and cyber defense.



Common Cyber Threats

Learn about malware, phishing, ransomware and social engineering.

Threat Identification

Recognize suspicious activities and common indicators of cyber attacks.



Cryptography Basics

Explore encryption, decryption, ciphers and secure communication.

Network Security

Understand how networks are protected from unauthorized access.



Firewalls

Learn how firewalls monitor and control network traffic.



THINGS TO LEARN

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Intrusion Detection Systems

Understand how suspicious network activity can be detected.



Phishing Detection

Identify red flags in suspicious emails and messages.

Threat Response

Learn the basic principles of identifying and responding to cyber incidents.



Cyber Defense Mindset

Develop critical thinking and problem-solving skills for cybersecurity challenges.





WHY JOIN THIS WORKSHOP

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Learn cybersecurity, experience it through practical activities, and apply your skills to real-world challenges

- Understand common cyber threats
- Learn how attackers exploit systems
- Explore the basics of cryptography
- Understand secure communication
- Discover how firewalls protect networks
- Explore Intrusion Detection Systems
- Practice identifying suspicious activities
- Develop a practical cyber-defense mindset





HANDS-ON CHALLENGES

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THREAT HUNT SIMULATION

Analyze mock emails and identify signs of phishing and suspicious activity.



ENCRYPTION CHALLENGE



Encrypt and decrypt messages using simple ciphers and understand their connection to modern cryptography.

FIREWALL ROLE-PLAY

Become a network defender and decide which traffic should be allowed or blocked.



CYBER DEFENSE SCENARIO



Work as a team to identify a simulated cyber threat and decide how you would respond.



OUTCOMES

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UNDERSTAND Cyber Threats

Learn about common cyberattacks and how attackers target users and systems.



EXPLORE Cryptography & Secure Communication

Discover how encryption helps protect digital information.



DEFEND Network Security

Understand firewalls, network security and Intrusion Detection Systems.



RESPOND Threat Identification & Response

Apply your knowledge to simulated cybersecurity scenarios.



WHAT YOU'LL TAKE AWAY

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By the end of the workshop, participants will be able to:

- Recognize common cyber threats
- Identify phishing indicators
- Explain basic cybersecurity principles
- Understand encryption and secure communication
- Explain the role of firewalls
- Understand the purpose of Intrusion Detection Systems
- Analyze basic cyber threat scenarios
- Think critically about cybersecurity risks
- Develop a foundation for further cybersecurity learning



WHO IS THIS FOR

Students | Tech Enthusiasts | Future Innovators

The workshop is designed for beginners and curious learners who want to understand cybersecurity through practical activities and real-world examples.

NO PRIOR CYBERSECURITY EXPERIENCE REQUIRED.

Basic computer familiarity is sufficient.





DETAILS

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WORKSHOP	DETAILS
Workshop Name	Foundations of Cyber Defence
Workshop Date	27 September 2026 (Sunday)
Workshop Time	12:00 PM - 2:00 PM (2 Hours)
Workshop Mode	Online
Workshop Platform	Zoom
Workshop Eligibility	UG/PG Students, Graduates, Faculty Members, Tech Enthusiasts, Future Innovators
Workshop Certification	All registered participants will get a participation certificate after the workshop

Registration Start Date: 10th September 2026

Registration End Date: 25th September 2026

Registration Fee: ₹ 300/- (Non-refundable)

Registration Form: https://iict.edu.in/workshop/registration_form/

Website: <https://iict.edu.in/workshop/>



CONTACT US

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