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Date: 15-06-2025

CYBER SECURITY MEASURES IN KIET

1. Access Control and Authentication

- **Multi-Factor Authentication (MFA):** Implemented across all faculty and administrative systems to enhance account security.
- **Role-Based Access Control (RBAC):** Ensures users access only the data necessary for their roles, minimizing potential breaches.

2. Network Security

- Firewalls and Intrusion Detection Systems (IDS): Deployed to monitor and protect against unauthorized access and threats.
- Network Segmentation: Divides the network into segments to contain potential breaches and limit lateral movement of threats.

3. System Maintenance

- **Regular Updates and Patching:** All systems and software are updated regularly to patch known vulnerabilities.
- Vulnerability Assessments: Periodic scans and assessments are conducted to identify and remediate potential security weaknesses.

4. User Awareness and Training

- **Cybersecurity Training Programs:** Regular sessions for students, faculty, and staff to educate them on best practices and emerging threats.
- **Phishing Simulations:** Conducted to assess and improve users' ability to recognize and handle phishing attempts.

Internal Security Audits and Vulnerability Management

Our institution conducts regular internal security audits to identify and address potential vulnerabilities within our IT infrastructure. These audits are integral to our commitment to maintaining a secure digital environment for students, faculty, and administrative operations.

Recent Audit Findings and Remediation Efforts:

- FTP Server Vulnerability:
 - *Issue Identified:* During a routine audit, we discovered a misconfiguration in our FTP server that could potentially allow unauthorized access.
 - *Remediation:* We promptly reconfigured the server settings to enforce secure protocols and implemented additional access controls to prevent unauthorized access.
- Payment Gateway Vulnerability:
 - *Issue Identified:* An outdated component in our payment gateway system was found to be susceptible to a known security flaw.
 - *Remediation:* We immediately updated the affected component to the latest secure version and conducted comprehensive testing to ensure the integrity and security of the payment processing system.

Jaagrookta Diwas (Cyber Awareness Day)

In alignment with the Ministry of Home Affairs' initiative and directives from the All India Council for Technical Education (AICTE), our institution observes **Cyber Jaagrookta Diwas** on the **first Wednesday of every month**. This initiative aims to raise awareness about cyber security among students, faculty, and staff.

Activities Conducted:

- **Expert Talks and Seminars:** Sessions led by cybersecurity professionals on topics like cyber hygiene, social engineering attacks, and safe online practices.
- Interactive Workshops: Hands-on sessions to educate participants on identifying and mitigating cyber threats.
- Awareness Quizzes: Post-session quizzes to reinforce learning and assess understanding.
- **Distribution of Educational Materials:** Circulation of brochures, posters, and guidelines on cybersecurity best practices

Dr. ASN Chakravarthy, Special officer at DMC and WDC-JNTUK

A thought leader in cybersecurity, Dr. Chakravarthy provided a deep dive into the evolving digital threat landscape and emphasized the importance of strong cybersecurity practices. His session covered:

 \checkmark Secure browsing methodologies to prevent cyberattacks

By incorporating real-life cyber threat scenarios, he encouraged students to develop a critical and analytical approach to cybersecurity while motivating them to pursue careers in this ever-growing field.

Mr. Ramji Pentakota, Security Testing Executive at Yalamanchili payments and cards

Mr. Pentakota introduced students to the world of Capture The Flag (CTF) challenges, demonstrating how they can sharpen problem-solving skills through cybersecurity competitions. His session included:

✓ Vulnerability Assessment (VA) using Nmap and Nessus to identify security gaps

✓ Penetration Testing fundamentals with Metasploit, highlighting the importance of Vulnerability Assessment and Penetration Testing (VAPT)
✓ Web Application Security Testing with OWASP ZAP and Burp Suite, teaching students how to detect and mitigate vulnerabilities

Mr. Pawan Sohlot, Senior cyber crime investigator at SOG-ATS CB-CID

A cybersecurity investigator and digital forensics expert, Mr. Sohlot provided valuable insights into Cyber Investigations and Digital Forensics, focusing on how law enforcement agencies track cybercriminals using digital evidence. His session covered:

- \checkmark Digital footprint tracking through call records and internet activity
- \checkmark Real-world cybercrime investigations using forensic techniques
- \checkmark Bug bounty hunting strategies for identifying security flaws in websites

These expert sessions equip students with practical knowledge, industry insights, and the skills needed to thrive in cyber security careers.

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