A Report on Hands on Workshop
"Ethical Hacking and Cyber Security (Level-1)"
Organized by Department of CSE- Cyber Security
in association with
IIIC-MITS and Entrepreneurship Development Cell
from 10.02.2025 to 15.02.2025

Report Submitted by: Mr. M. Mutharasu Assistant Professor, Department of CSE-Cyber Security; Mrs. A. Esther Merlin, Assistant Professor, Department of CSE-Cyber Security.

Resource Person Details: Mr. Santosh Chaluvadi, Founder & CEO, Mr. S. Kumar (Security Analyst), Ms. G. Mituna(Junior Mentor), Supraja Technologies, Vijayawada.

Venue: Scale-up Room.

Total Participants: 68 Students of III-year B. Tech (Cyber Security)

Mode of Conduct: Offline.

Report Received on 05.03.2025.

Program Overview:

The program commenced at 10:00 AM with a welcome address by **Vice principal Dr. P Ramanathan** and **Dr. S.V.S Ganga Devi, Head of the Department of C.S.E (Cyber Security)**, who introduced the resource person**, Mr. Santosh Chaluvadi, Founder & CEO of Supraja Technologies, Vijayawada, Andhra Pradesh. Mr. M. Mutharasu, Assistant Professor of CSE-Cyber Security** began the session by expressing his gratitude to the participants, organizing committee, Head of the department, Principal, and Management of MITS for the opportunity to share his insights on Ethical Hacking and Cyber Security.

MoU Signing between MITS and Supraja Technologies, **Vijayawada, A.P Inaugural MoU Signing Ceremony:**

The first day of the workshop began with the signing of a Memorandum of Understanding (MoU) between Madanapalle Institute of Technology & Science (MITS) and Supraja Technologies, Vijayawada, Andhra Pradesh. The MoU aims to enhance collaboration in Cyber Security through training programs, Guest lectures, FDP and Workshops.

Day 1 (10.02.2025): Installation and Hands-On with Cyber Security Tools
On Day 1 (10.2.2025): Students were introduced to key concepts in Cyber Security and Ethical Hacking, with a focus on installing and configuring essential tools used in security testing. The following tools were covered:

- Kali Linux (Common OS for Security Testing)
- Wireshark (Packet Sniffer)
- Deepsound (steganography tool)
- QuickStego
- Snow (Snowstegan)

Day 2 (11.02.2024): Advanced Cyber Security Techniques and Tools:
On Day 2 (11.02.2025) of the workshop, Students gained hands-on experience with more advanced Cyber Security concepts, focusing on various techniques and tools. The following topics were covered:

- Sniffing and Steganography
- Snow Commands, Virtualization
- 3.Google Dork
- Password Cracking

Day 3 (12.02.2025): Social Engineering and Malware Detection:
On Day 3 of the workshop (12th February 2025), Students focused on understanding the psychological aspects of cyber threats and how to detect and defend against malware. The following topics were covered:

- Social Engineering
- Malware
- How to detect Malware
- Types of malware

Day 4 (13.02.2025): Advanced Hacking Techniques and Cyber Security Tools:
On Day 4 of the workshop (13th February 2025), Students explored more advanced hacking techniques and tools used by ethical hackers to identify vulnerabilities and secure systems. The following topics were covered:

- Sql injection authentication bypass
- Email Spoofing
- Clearing tracks
- Burpsuit tool

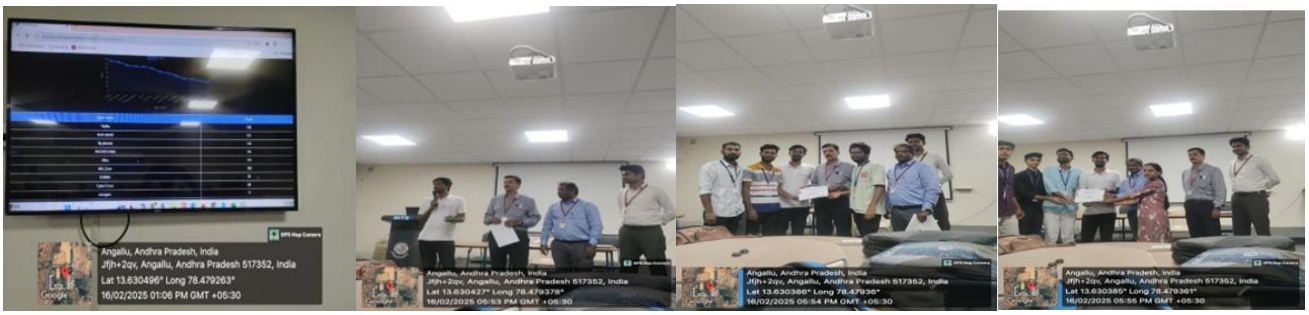
Day 5 (14.02.2025): Web Application Vulnerabilities and Exploitation Techniques:
On Day 5 of the workshop (14th February 2025), students delved into advanced hacking techniques and learned about various cyber security tools to help identify vulnerabilities and secure systems. The following topics were covered:

- Host header injection
- Parameter tampering
- Cart tampering
- 4.Otp by Pass
- 5.Mitigation Techniques

Day 6 (16.02.2025): Hackathon and Internship Opportunities:

On the last day of the workshop (16th February 2025), students participated in an exciting Hackathon where they applied the advanced techniques they had learned over the course of the workshop. The competition included real-world scenarios focused on vulnerabilities such as Host Header Injection, Parameter Tampering, Cart Tampering, and OTP Bypass.

As a result of their performance in the Hackathon, **35 students got internship opportunities at Supraja Technologies in Vijayawada, Andhra Pradesh**, in the field of cybersecurity. These students demonstrated their skills in identifying and exploiting vulnerabilities, as well as implementing effective mitigation strategies, and were recognized for their talent and potential.



Program Outcomes:

- 35 students **got internships at Supraja Technologies, Vijayawada-Andhra Pradesh.**
- Understanding of Ethical Hacking Principles
- Knowledge of Networking Fundamentals
- Hands-on Experience with Cyber security Tools
- Understanding Phases of Hacking
- Understanding Cryptographic Concepts
- Implementation of Sniffing and Steganography Techniques
- Gaining Proficiency with Virtualization and Advanced Commands
- Gaining Google Dorking for Security Research
- Understanding and Applying Password Cracking Techniques
- Understanding Social Engineering Tactics
- Malware Identification and Analysis
- Understanding and Defending Against Email Spoofing
- SQL Injection and Web Application Security
- Clearing Tracks and Maintaining Security
- Practical Understanding of Cyber Threats and Mitigation Techniques
- Hands-on Experience in Security Testing
- Code, Collaborate, Create: The Hackathon Experience.

Newspaper Clips:

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epaper.eenadu.net

సైబర్ సెక్యూరిటీపై ఒప్పందం

మదనపల్లె విద్య, న్యూస్ టుడే : సైబర్ సెక్యూరిటీ రంగంలో పరిశ్రమ, విద్యా సహకారాన్ని పెంపొందించేందుకు మిట్స్ ఇంజినీరింగ్ కళాశాల విజయవాడకు చెందిన సుప్రజా టెక్నాలజీస్ ప్రైవేటు లిమిటెడ్ సంస్థలో ఒప్పందం చేసుకున్నట్లు కళాశాల వైస్ ప్రిన్సిపల్ డాక్టర్ పి.రామనాథన్ తెలిపారు. ఈ సందర్భంగా మిట్స్ కళాశాల కంప్యూటర్ సైన్స్ అండ్ ఇంజినీరింగ్ విభాగాధిపతి డాక్టర్ ఎస్.వి.ఎస్.గంగాదేవి, సుప్రజా టెక్నాలజీస్ వ్యవస్థాపకుడు, సీఈఓ సంతోష్ చలువాడిలు ఒప్పందపత్రాలపై సంతకాలు చేశారు. కార్యక్రమంలో ఆధ్యాపకులు, విద్యార్థులు పాల్గొన్నారు.

ఒప్పంద పత్రాలను చూపుతున్న వైస్ ప్రిన్సిపల్ రామనాథన్, సుప్రజా టెక్నాలజీస్ వ్యవస్థాపకుడు సంతోష్ చలువాడి