

# ADITYA DEGREE & PG COLLEGE DEPARTMENT OF FORENSIC SCIENCE

# 2-DAY HANDS-ON WORKSHOP ON CYBER SECURITY AND ETHICAL HACKING

Date: 22<sup>nd</sup> and 23<sup>rd</sup> August 2024.

Venue: ACET Seminar Hall, Vishweshwaraya Bhavan.

Organized by: Aditya Degree & PG College, Department of Forensic Science

Presented by: Cyberthreya (Founders: Mr. Ravi Sharma, Mr. D. Uday, Mr. Jaswanth)

Participants: Students of B.Sc. Forensic Science, B.Sc. Cyber Security, and B.Tech CSE

Day 1: 22nd August, 2024

Time: 9.30-10.00 am

#### **Inaugural Ceremony:**

The Workshop was inaugurated with a ceremony which was presided over by the Chief Guest Mr. Dola Sanjay, Dean & Principal, ACET, Mr. Vilas Anil Chavan, Principal, Aditya Degree & PG College, and Mr. Ravi Sharma, Mr. D. Uday, Mr. Jaswanth, Founders of CyberThreya. The workshop commenced with a warm welcome note to the guests and participants, delivered by Ms. V. Deexitha, Faculty of Cyberforensics. The Chief Guest and the Guest speakers were felicitated with a tree sapling. The Chief Guest addressed the audience and motivated the students to make use of the opportunity to keep learning. The Principal addressed the gathering with an inspiring talk about the importance of Cybersecurity in today's world. Mr. D. Uday, Guest speaker from CyberThreya encouraged the participants and briefed about the goals and objectives of the workshop.





The two-day workshop was specially designed to cater to the educational needs of students pursuing B.Sc. Forensic Science, B.Sc. Cyber Security, and B.Tech in Computer Science and Engineering (CSE), aiming to enhance their knowledge and practical skills in the fields of cyber security and ethical hacking.

# Session 01: Introduction to Networking, Cyber Security Time: 10.00am–12.30 am and Ethical Hacking

Mr. Ravi Sharma, kicked off the workshop with a comprehensive PowerPoint presentation. His presentation focused on the fundamentals of cyber security, covering various topics including:

- Overview of Cyber Security Threats
- Ethical Hacking Principles
- Techniques for Securing Networks using Linux
- Real-world Case Studies and Examples

Mr. Ravi Sharma's engaging presentation provided students with an in-depth understanding of the current cyber security landscape, highlighting the significance of ethical hacking in combating cyber threats.



# Session 02: Vulnerability Management & System Security Time: 1.30 pm-4.00 pm

Following the presentation, the Cyberthreya team, comprising Mr. Ravi Sharma, Mr. D. Uday, and Mr. Jaswanth, conducted a hands-on session. This session allowed students to apply the concepts learned in the morning session through practical exercises. The students were guided through various ethical hacking techniques, including:

- Network Scanning and Vulnerability Assessment
- Introduction to Dark Web

The hands-on approach enabled students to gain valuable experience in real-time scenarios, fostering a deeper understanding of cyber security practices.



Day 2: 23rd August 2024

# Session 02: Advanced Cyber Security Techniques and Capture the Flag (CTF) Challenge

The second day of the workshop began with an advanced hands-on session, where the Cyberthreya team continued to delve deeper into more sophisticated ethical hacking techniques. This session included:

- Exploitation Techniques
- Advanced Network Penetration Testing
- Web Application Security Testing

Students were provided with virtual lab environments to practice these advanced techniques, ensuring that they could apply what they had learned in a controlled and safe setting.

### Session 03: Capture the Flag (CTF) Challenge

The afternoon was dedicated to a Capture the Flag (CTF) competition, where students were grouped into teams and challenged to solve various cyber security puzzles and problems. The CTF challenge was designed to simulate real-world hacking scenarios, testing the participants' problem-solving abilities and teamwork. The competition was intense, and students demonstrated great enthusiasm and competitive spirit throughout the event.

Time: 2.00 pm- 3.15 pm

Time: 3.15 pm-4.00 pm

### **MOU Exchange Ceremony**

The day concluded with a significant milestone – the exchange of a Memorandum of Understanding (MOU) between Aditya Degree & PG College and CyberThreya. The MoU Exchange Ceremony was honoured with our Special Guest Dr. Suguna Reddy, Secretary, Aditya Degree Colleges along with Mr. Vilas Anil Chavan, Principal, Aditya Degree & PG College. Dr. Suguna Reddy addressed the participants by motivating the students to be curious and keep learning. This MoU marks the beginning of a collaborative relationship aimed at promoting cyber security education and research. The partnership will provide students with continued access to expert knowledge, resources, and future workshops, fostering an environment of academic and professional growth.

Through this MoU, our students will gain access to cutting-edge training programs like Certified Ethical Hacking and Bug Bounty Hunting, all supported by CyberThreya's state-of-the-art iLABS environment. This hands-on learning experience bridges the gap between theory and practice, ensuring our students are well-prepared for real-world challenges. Additionally, the flexibility of recorded sessions and personalized consulting will further enrich their learning journey.



#### **Conclusion**

The 2-day workshop on Cyber Security and Ethical Hacking, conducted by Aditya Degree & PG College in collaboration with Cyberthreya, was a resounding success. The workshop not only provided students with theoretical knowledge but also allowed them to apply what they learned through practical, hands-on sessions. The event culminated in a CTF challenge that

tested the students' skills in a competitive environment, followed by the establishment of a formal partnership through an MOU exchange. This workshop has undoubtedly empowered students with essential skills in cyber security and ethical hacking, equipping them to face the challenges of the digital world with confidence. The collaboration between Aditya Degree & PG College and Cyberthreya is expected to further enhance the quality of cyber security education offered at the institution, paving the way for future initiatives and opportunities in this critical field.