

### **Seminar on Information Security and Cyber Laws**

The Department of Health System Management Studies held a seminar on information security and cyber laws on 1<sup>st</sup> and 2<sup>nd</sup> July 2024.

The morning session of Day 1 featured Mr. Jagadish A.T., an Assistant Professor from JSS Law College, Mysuru. He discussed various aspects of cybercrime and cyber law, including the necessity for IT security measures and the challenges faced in cybersecurity. Jagadish provided detailed explanations on cybercrime classifications and emphasized precautionary measures. He highlighted historical cyber incidents, noting the rapid advancement in cyber threats, such as a computer virus infecting a million computers within an hour in 2011. Additionally, he explained concepts like computer viruses, network worms, Trojan horses, and cyber terrorism.

In the afternoon, Dr. Usha M.S., Associate Professor and Head of the Department of CSE at NIE Mysuru, spoke about the importance of data protection in the digital era. She covered the fundamentals of cybersecurity, its types, and significant cyber threats such as malware, phishing, and ransomware. Dr. Usha emphasized the critical importance of data security in protecting sensitive information, maintaining business continuity, and ensuring compliance with regulations. She outlined technical, administrative, and physical measures for data security, and encouraged students to adopt proactive approaches to data security in their careers while staying updated with the latest security trends and developments.



On July 2, 2024, the seminar on information security and cyber laws continued with sessions focused on advanced topics. The morning began with a presentation by Dr. Gowtham M, Assistant Professor of Computer Science and Engineering at the National Institute of Engineering, Mysuru. Dr. Gowtham discussed the various tools and methods used in cybercrime, including proxy servers, anonymizers, phishing, viruses, worms, Trojan horses, backdoors, steganography, and DoS and DDoS attacks. He highlighted basic terminologies such as threats, vulnerabilities, attacks, mitigation, and countermeasures. Additionally, Dr. Gowtham detailed common cyber attack tactics like scareware, malvertising, clickjacking, and ransomware, emphasizing their impacts and preventive measures.

The afternoon session was led by Prof. Ajay A.V, Assistant Professor at the Department of CSE, NIE (North Campus), Mysuru. Prof. Ajay introduced the concept of cryptography, explaining its importance in ensuring data confidentiality, integrity, and authentication. He discussed the CIA triad and the differences between symmetric and asymmetric cryptography, providing examples like the Caesar cipher for practical understanding. Prof. Ajay also covered steganography, comparing it with cryptography, and outlined various techniques such as text, image, video, audio, and network steganography. He



concluded with an overview of authentication and authorization processes, stressing the importance of digital signatures and two-factor authentication for enhancing security.