Article 4: Introduction to Cybersecurity and Threat Management

Cybersecurity involves protecting computer systems, networks, and data from unauthorized access, attacks, or damage. With increasing digitalization, cybersecurity has become critical to safeguard information and ensure operational continuity.

Key Concepts

- **Threats:** These include malware, phishing, ransomware, and insider threats.

- **Vulnerabilities:** Weaknesses in systems or software that can be exploited.

- **Risk Management:** Identifying, assessing, and mitigating cybersecurity risks.

Cybersecurity Frameworks

Frameworks like NIST and ISO 27001 provide structured approaches to managing security.

Threat Detection and Response

Techniques like intrusion detection systems (IDS), firewalls, and security information and event management (SIEM) tools help monitor and respond to threats.

Emerging Trends

AI-powered threat detection and zero trust architecture are advancing cybersecurity defenses.