



Learning Outcomes of the College of Computer Science and Information Technology (Cybersecurity)

The learning outcomes in the College of Computer Science and Information Technology aim to define the advanced knowledge, technical skills, and professional competencies acquired by students upon completing their academic programs in the Department of Cybersecurity. This aims to prepare innovative, technically qualified graduates to bridge the digital gap in the labor market, actively contribute to digital transformation, and protect the community's critical and institutional infrastructure.

Learning Outcomes for the Cybersecurity Department

Graduates of the Cybersecurity Department are expected to achieve a set of scientific and professional competencies, including:

- **Network and Systems Protection:** Acquiring skills to design and secure networks and software systems against breaches and cyber threats.
- **Incident Response and Recovery:** The ability to detect security vulnerabilities, analyze attacks, and establish proactive plans for response and recovery from digital disasters.
- **Cryptography and Data Security:** Mastering advanced encryption algorithms and protocols for protecting data privacy and securing data exchange.
- **Digital Forensics:** Acquiring digital investigation skills and gathering evidence from compromised devices in compliance with legal and technical standards.
- **Penetration Testing and Security Assessment:** Developing ethical hacking skills to evaluate the strength of institutional defense systems, identify weaknesses, and close security gaps.
- **Cloud & IoT Security:** Mastering strategies to protect cloud environments and network-connected devices from evolving threats.
- **Secure Software Engineering:** Applying secure coding principles and malware analysis to detect vulnerabilities in the early stages of system development.
- **Compliance, Legislation, and Security Governance:** Familiarity with international and local laws governing cyberspace, and applying governance standards and digital risk management within organizations.

Graduate Competencies (General Skills)

In addition to the core specialization, the department works on enhancing general skills, which include:

1. **Teamwork:** The ability to work effectively within multidisciplinary technical teams and respond rapidly to crises.
2. **Technical Communication:** Skill in explaining security and technical concepts, preparing technical reports, and simplifying them for non-specialists both verbally and in writing.
3. **Continuous Learning:** Developing the capacity to keep pace with rapid updates in global technologies, defensive methods, and software.



مصادقة عميد الكلية

A handwritten signature in blue ink. The signature is written in Arabic and appears to be 'د. محمد علي الفانسي' (Dr. Mohamed El-Fanisi). Below the signature, the word 'المصدق' (The Signatory) is written.