

# ITS4234 : Ethical Hacking I

This course is the first course in a two-course sequence on ethical hacking. An ethical hacker is a skilled professional who is proficient at examining vulnerabilities in target systems and applying knowledge and tools like those used by malicious hackers, but in a lawful and legitimate manner, to assess the security posture of target systems. The course covers the material needed to prepare for the Certified Ethical Hacker (CEH) certification from the International Council of E-Commerce Consultants (EC-Council). The course examines the specific network security discipline of ethical hacking from a technology-neutral perspective. In this first course, the student learns about threats, vulnerabilities, and exploitation techniques with computer systems, applications, and networks. The main topics covered include: cryptography, foot printing, scanning, enumeration, system hacking, malware, sniffers, and social engineering. The student gains knowledge through lectures and assignments, and hands-on experience through interactive practices, virtual-lab challenges and exercises that supplement the theory. The course assumes basic knowledge of network concepts and issues, computer hardware and software systems, as well as applications.

**Credits** 4.0

**Prerequisites**

[ITS3101: Advanced Operating Systems and Architecture](#)

[ITS3110: Applied Systems Analysis](#)

[ITS4211: Network Security](#)

[ITS4221: Application Software Security](#)

**Corequisites**

None