

Lab 11 Report

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IST 894-001: Capstone Experience

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General Context

This lab introduces participants to principles of cybersecurity leadership and governance, with a particular focus on the role of the Chief Information Security Officer (CISO).

The lab is comprised of a series of videos detailing the CISO's responsibilities and strategic role. Participants explore how the role the CISO plays can change depending on their organizations' size, sector, or maturity level. They also learn how the CISO is responsible for bridging communication gaps between technical teams and executive leadership, turning complex technical jargon into language that people on the business side of the company can understand (Hooper & McKissack, 2016; Ramezan, 2025).

Participant quickly realize that an organization's cybersecurity efforts start and end with the CISO; the CISO's role as a translator between technical teams and executives is a big reason why. Responsible cybersecurity has to come from the top down, and it is the CISO's job to convince the people at the top that investing in cybersecurity is worthwhile. Without organizational buy-in, no effective cybersecurity program can exist (Panteli et al., 2025).

The lab also stresses that cybersecurity leadership should yield security, trust, and stability. Participants are encouraged to see cybersecurity not just as a technical function, but as a broader organizational responsibility — one that builds a security-conscious culture where security practices and business strategy are aligned (Gilbert & Gilbert, 2024).

Technical Overview

This lab entails a series of videos that teach participants about the strategic roles and organizational responsibilities of the Chief Information Security Officer (CISO).

Guided by the video series, participants learn how the CISO fits into various organizational structures, ranging from large enterprises where the CISO reports directly to the CEO, to smaller firms where the effective CISO is often just the IT or IS manager. Participants review the key responsibilities expected of the CISO, including policy development, risk management, compliance oversight, incident response planning, and communicating with stakeholders.

A central theme of the lab is the STS (Security, Trust, Stability) leadership triad. It's used throughout the course as a framework in which the CISO's roles and responsibilities are explained. Participants learn how the CISO delivers security by balancing confidentiality, integrity, and availability; build trust through control maturity, visibility, and compliance; and ensure stability through operational resilience.

Participants also examine cybersecurity governance and management models, such as the cybersecurity task force and the McKinsey 7S framework. These models help participants understand how organizations can align people and roles with cybersecurity objectives.

Ultimately, participants come away from the lab knowing that cybersecurity is not just a technical function but an enterprise-wide strategic missions, and that the CISO is at the center of that missions.

References

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Screenshots



Figure 1. Certificate of completion.