

Connect and Protect: Networks and Network Security

Provider: Google (Coursera)

Completion Date: May 31, 2025

Overview

This course introduced the foundations of computer networking and how those systems are secured in modern cybersecurity environments. It emphasized how networks communicate using common protocols, how to identify potential threats using logs and monitoring tools, and how to apply frameworks like the NIST-CSF. The course provided both conceptual theory and hands-on practice in identifying risks, responding to alerts, and documenting incident response.

Key Topics Covered

- Network architecture and TCP/IP fundamentals
- Network protocols, firewalls, and VPNs
- Identifying and triaging suspicious activity using logs
- Security incident reports and playbooks
- NIST Cybersecurity Framework application

Practical Applications

- Applied the NIST-CSF to a mock case study
- Completed a network traffic analysis incident report
- Explored SIEM-style log queries using Splunk Cloud
- Developed an incident response playbook
- Created a visual network diagram based on an attack scenario

Personal Reflection

This course helped me connect technical networking skills with real-world security operations. Since my Coursera labs were locked by the time I completed the course, I adapted by recreating key assignments in Splunk Cloud and Google Colab. The work reinforced my ability to triage security events, document findings, and build structured reports, skills I will use in future cybersecurity roles.