



Email Security Engineer

Official Course Syllabus

Duration: **4 Weeks** | Live Instructor-led | Hands-on Labs | Capstone Project

Course Overview

Master enterprise email security using Microsoft Defender for Office 365 and Cisco Secure Email. Learn phishing protection, email authentication, malware analysis, AI-powered email security and incident response through hands-on labs.

Module 1 – Email Security Fundamentals

- Email Security Architecture
- SMTP Flow
- Common Email Threats
- Spam, Phishing & BEC
- Email Security Lifecycle

Module 2 – Email Authentication & Protection

- SPF
- DKIM
- DMARC
- Anti-Spam
- Anti-Malware
- Safe Links & Safe Attachments

Module 3 – Microsoft Defender for Office 365

- Microsoft 365 Defender Portal
- Threat Explorer
- Explorer & Real-time Detections
- Attack Simulation Training
- Threat Policies
- Incident Investigation

Module 4 – Cisco Secure Email

- Cisco Secure Email Overview
- Mail Policies

- Content Filters
- Message Tracking
- Quarantine Management
- Threat Defense

Module 5 – AI & Machine Learning in Email Security

- AI-based Phishing Detection
- Machine Learning Models
- Behavioral Analysis
- LLM-assisted Email Investigation
- AI-powered Threat Classification
- Email Security Automation

Module 6 – Threat Hunting & Incident Response

- Email Threat Hunting
- Message Trace
- IOC Analysis
- Containment
- Remediation
- Post-Incident Review

Module 7 – Enterprise Email Security Best Practices

- Security Policies
- User Awareness
- Compliance
- Secure Email Gateway
- Email Security Monitoring
- Reporting

Module 8 – Capstone Project

- Secure a Microsoft 365 Email Environment
- Investigate a Phishing Campaign
- Implement Email Authentication
- Generate Executive Security Report

Tools Covered

Microsoft Defender for Office 365, Cisco Secure Email, Microsoft 365 Defender Portal, Message Trace, Exchange Online Protection (EOP).

Career Opportunities

- Email Security Engineer
- Microsoft Security Engineer

- SOC Analyst
- Security Operations Engineer
- Cybersecurity Analyst
- Messaging Security Administrator