

COMPLIANCE STANDARDS

UPDATED DECEMBER 2025

cnd+ctrl

COURSE TITLE

CWE OWASP NIST* PCI ISO NERC HIPAA GDPR MITRE

SECURITY PRINCIPLES

AWA 101. Fundamentals of Application Security	✓	✓		✓		✓	✓	
AWA 102. Secure Software Concepts	✓	✓	✓	✓	✓	✓		✓
AWA 106. Building Secure Software: Overcoming Challenges in Application Security	✓	✓						
AWA 107. Building Secure Software: Foundations and Best Practices	✓	✓	✓	✓	✓	✓		
AWA 108. Building Secure Software: A Guide to Software Integration, Testing, and Deployment	✓		✓	✓	✓	✓		
ENG 110. Essential Account Management Security			✓					
ENG 111. Essential Session Management Security			✓					
ENG 112. Essential Access Controls for Mobile Devices			✓					
ENG 113. Essential Secure Configuration Management			✓					
ENG 114. Essential Risk Assessment			✓					✓
ENG 115. Essential System and Information Integrity			✓					
ENG 116. Essential Security Planning Policy and Procedures			✓					
ENG 117. Essential Information Security Program Planning			✓					
ENG 118. Essential Cyber Incident Response Planning			✓	✓				✓
ENG 119. Essential Security Audit and Accountability			✓					
ENG 120. Essential Personnel Security Policy and Procedures			✓					
ENG 121. Essential Identification and Authentication			✓					
ENG 122. Essential Physical and Environmental Protection			✓					
ENG 123. Essential Secure Software Engineering Principles			✓					
ENG 124. Essential Application Protection			✓					
ENG 125. Essential Data Protection			✓					✓
ENG 126. Essential Security Maintenance Policies			✓					
ENG 127. Essential Media Protection			✓					
ENG 150. Meeting Confidentiality, Integrity and Availability Requirements					✓			✓
ENG 151. Fundamentals of Privacy Protection	✓	✓						✓

SECURE DEVELOPMENT

API 210. Protecting APIs from Unrestricted Resource Consumption	✓	✓						
API 211. Protecting APIs from Broken Object Level Authorization	✓	✓						

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SECURE DEVELOPMENT (Continued)

API 213. Protecting APIs from Broken Object Property Level Authorization			✓	✓							
API 214. Protecting APIs from Improper Inventory Management			✓	✓							
API 351. Securing Kubernetes in the Build and Release Stage			✓	✓							
COD 110. Fundamentals Secure Mobile Development	✓	✓	✓	✓	✓	✓					✓
COD 141. Fundamentals of Database Security						✓					✓
COD 152. Fundamentals of Secure Cloud Development	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
COD 160. Fundamentals of Secure Embedded Software Development				✓	✓	✓	✓	✓		✓	✓
COD 170. Identifying Threats to Mainframe COBOL Applications and Data	✓	✓	✓	✓	✓	✓	✓	✓			
COD 201. Secure C Encrypted Network Communications	✓	✓	✓	✓							
COD 202. Secure C Run-Time Protection	✓			✓							
COD 206. Creating Secure C++ Code	✓	✓									
COD 207. Communication Security in C++	✓	✓	✓	✓							
COD 214. Creating Secure GO Applications	✓	✓									
COD 215. Mitigating .NET Application Vulnerabilities (NEW)			✓	✓	✓						
COD 219. Creating Secure Code SAP ABAP Foundations	✓	✓			✓						
COD 241. Creating Secure Oracle Database Applications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
COD 242. Creating Secure SQL Server and Azure SQL Database Applications											✓
COD 245. Securing NoSQL Cloud Databases	✓	✓	✓								✓
COD 246. PCI DSS Requirement 3: Protecting Stored Cardholder Data	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
COD 247. PCI DSS Requirement 3: Encrypting Transmission of Cardholder Data	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
COD 248. PCI DSS Requirement 6: Develop & Maintain Secure Systems & Applications	✓	✓	✓	✓	✓	✓	✓	✓			
COD 249. PCI DSS Requirement 11: Regularly Test Security Systems and Processes				✓	✓	✓	✓	✓			
COD 251. Defending AJAX-Enabled Web Applications	✓	✓	✓	✓	✓	✓	✓	✓			✓
COD 252. Securing Google Platform Applications & Data				✓							
COD 253. Creating Secure AWS Cloud Applications	✓	✓	✓		✓	✓	✓	✓			✓
COD 254. Creating Secure Azure Applications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
COD 255. Creating Secure Code Web API Foundations	✓	✓	✓			✓	✓	✓			
COD 256. Creating Secure Code Ruby on Rails Foundations	✓	✓	✓			✓	✓	✓			
COD 257. Creating Secure Python Web Applications	✓	✓	✓	✓	✓	✓	✓	✓			
COD 258. Creating Secure PHP Web Applications			✓	✓	✓	✓	✓	✓	✓		
COD 259. Node.js Threats and Vulnerabilities	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
COD 261. Threats to Scripts	✓	✓	✓	✓						✓	✓

SECURE DEVELOPMENT (*Continued*)

COD 262. Fundamentals of Shell and Interpreted Language Security	✓	✓		✓				
COD 263. Secure Bash Scripting	✓	✓		✓				
COD 264. Secure Perl Scripting	✓	✓		✓				
COD 265. Secure Python Scripting	✓	✓		✓				
COD 266. Secure Ruby Scripting	✓	✓		✓				
COD 267. Securing Python Microservices	✓	✓						
COD 268. Mitigating TypeScript Application Vulnerabilities		✓	✓	✓				
COD 270. Creating Secure COBOL and Mainframe Applications	✓	✓	✓	✓	✓	✓	✓	
COD 283. Java Cryptography		✓	✓					
COD 284. Secure Java Coding	✓	✓	✓		✓	✓	✓	✓
COD 285. Developing Secure Angular Applications		✓		✓				
COD 286. Creating Secure React User Interfaces		✓		✓				
COD 287. Java Application Server Hardening	✓	✓	✓	✓				
COD 288. Java Public Key Cryptography		✓	✓					
COD 289. Securing Java Spring APIs	✓	✓						✓
COD 301. Secure C Buffer Overflow Mitigations	✓	✓						
COD 302. Secure C Memory Management	✓			✓				✓
COD 304. Principles of C++ Memory Safety		✓	✓	✓				
COD 305. C++ Secure Memory Management		✓	✓	✓				
COD 306. C++ Memory Safety: Debugging Tools and Techniques		✓	✓	✓				
COD 303. Common C Vulnerabilities and Attacks	✓		✓					
COD 307. Protecting Data in C++	✓	✓						
COD 308. Common ASP.NET Vulnerabilities and Attacks	✓	✓	✓	✓	✓	✓	✓	✓
COD 309. Securing ASP.NET MVC Applications	✓	✓	✓	✓	✓	✓	✓	✓
COD 310. Securing ASP.NET Core Applications	✓	✓	✓					✓
COD 315. Preventing Vulnerabilities in iOS Code in Swift	✓	✓	✓	✓	✓	✓	✓	
COD 316. Creating Secure iOS Code in Objective C	✓	✓	✓	✓	✓	✓	✓	✓
COD 317. Protecting Data on iOS in Swift	✓	✓	✓	✓	✓	✓	✓	
COD 318. Protecting Data on Android in Java		✓	✓	✓	✓	✓	✓	✓
COD 319. Preventing Vulnerabilities in Android Code in Java		✓	✓	✓	✓	✓	✓	
COD 321. Protecting C# from Integer Overflows and Canonicalization Issues	✓	✓	✓	✓	✓	✓	✓	✓
COD 322. Protecting C# from SQL Injection	✓	✓	✓	✓	✓	✓	✓	✓

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SECURE DEVELOPMENT (Continued)

COD 323. Using Encryption with C#	✓	✓	✓	✓	✓	✓	✓	✓	✓
COD 324. Protecting C# from XML Injection	✓	✓	✓	✓	✓	✓	✓	✓	✓
COD 325. Protecting Data in C# for .NET	✓	✓	✓						✓
COD 352. Creating Secure JavaScript and jQuery Code	✓	✓	✓	✓	✓	✓	✓		
COD 361. HTML5 Security Threats	✓	✓	✓	✓	✓	✓	✓		
COD 362. HTML5 Built-In Security Features	✓	✓	✓	✓	✓	✓	✓		
COD 363. Securing HTML5 Data	✓	✓	✓	✓	✓	✓	✓		
COD 364. Securing HTML5 Connectivity	✓	✓	✓	✓	✓	✓	✓		
COD 366. Creating Secure Kotlin Applications		✓			✓				
COD 380. Preventing SQL Injection in Java	✓	✓	✓						
COD 381. Preventing Path Traversal Attacks in Java	✓	✓	✓						
COD 382. Protecting Data in Java	✓	✓							
COD 383. Protecting Java Backend Services	✓	✓	✓	✓	✓				
COD 384. Protecting Java from Information Disclosure	✓	✓	✓						
COD 385. Preventing Race Conditions in Java Code	✓	✓	✓						
COD 386. Preventing Integer Overflows in Java Code	✓	✓	✓						
DES 207. Mitigating OWASP API Security Top 10		✓	✓						
DES 208. Defending Against the CSA Top 11 Threats to Cloud			✓						
DES 232. Mitigating OWASP 2021 Injection	✓	✓	✓	✓	✓				
DES 233. Mitigating OWASP 2021 Identification and Authentication Failures	✓	✓	✓	✓	✓				
DES 234. Mitigating OWASP 2021 Cryptographic Failures	✓	✓	✓	✓	✓				✓
DES 235. Mitigating OWASP 2021 Insecure Design	✓	✓	✓	✓					
DES 236. Mitigating OWASP 2021 Broken Access Control	✓	✓	✓	✓	✓				
DES 237. Mitigating OWASP 2021 Security Misconfiguration	✓	✓	✓	✓	✓				
DES 238. Mitigating OWASP 2021 Server-Side Request Forgery (SSRF)	✓	✓	✓	✓					
DES 239. Mitigating OWASP 2021 Software and Data Integrity Failures		✓							
DES 240. Mitigating OWASP 2021 Vulnerable and Outdated Components	✓	✓	✓	✓					
DES 241. Mitigating OWASP 2021 Security Logging and Monitoring Failures	✓	✓	✓	✓					
DES 250. Secure Software Acceptance and Deployment			✓						
DES 270. Mitigating OWASP Mobile Top 10 Risks	✓	✓	✓						✓
DES 271. OWASP M1: Mitigating Improper Platform Usage		✓							
DES 272. OWASP M2: Mitigating Insecure Data Storage		✓							

SECURE DEVELOPMENT (Continued)

DES 273. OWASP M3: Mitigating Insecure Communication	✓					
DES 274. OWASP M4: Mitigating Insecure Authentication	✓					
DES 275. OWASP M5: Mitigating Insufficient Cryptography	✓					
DES 276. OWASP M6: Mitigating Insecure Authorization	✓					
DES 277. OWASP M7: Mitigating Client Code Quality	✓					
DES 278. OWASP M8: Mitigating Code Tampering	✓					
DES 279. OWASP M9: Mitigating Reverse Engineering	✓					
DES 280. OWASP M10: Mitigating Extraneous Functionality	✓					
DES 281. OWASP IoT1: Mitigating Weak, Guessable or Hardcoded Passwords	✓					
DES 282. OWASP IoT2: Mitigating Insecure Network Services	✓					
DES 283. OWASP IoT3: Mitigating Insecure Ecosystem Interfaces	✓					
DES 284. OWASP IoT4: Mitigating Lack of Secure Update Mechanism	✓					
DES 285. OWASP IoT5: Mitigating Use of Insecure or Outdated Components	✓					
DES 286. OWASP IoT6: Mitigating Insufficient Privacy Protection	✓					
DES 287. OWASP IoT7: Mitigating Insecure Data Transfer and Storage	✓					✓
DES 288. OWASP IoT8: Mitigating Lack of Device Management	✓					
DES 289. OWASP IoT9: Mitigating Insecure Default Settings	✓					
DES 290. OWASP IoT10: Mitigating Lack of Physical Hardening	✓					
DES 361. Mitigating LCNC (Low-Code/No-Code) Account Impersonation	✓	✓				
DES 362. Mitigating LCNC (Low-Code/No-Code) Authorization Misuse	✓	✓				
DES 364. Mitigating LCNC Authentication and Secure Communication Failures	✓	✓				
DES 283. OWASP IoT3: Mitigating Insecure Ecosystem Interfaces	✓					
DES 284. OWASP IoT4: Mitigating Lack of Secure Update Mechanism	✓					
DES 285. OWASP IoT5: Mitigating Use of Insecure or Outdated Components	✓					
DES 286. OWASP IoT6: Mitigating Insufficient Privacy Protection	✓					
DES 287. OWASP IoT7: Mitigating Insecure Data Transfer and Storage	✓					✓
DES 288. OWASP IoT8: Mitigating Lack of Device Management	✓					
DES 289. OWASP IoT9: Mitigating Insecure Default Settings	✓					
DES 290. OWASP IoT10: Mitigating Lack of Physical Hardening	✓					
DES 361. Mitigating LCNC (Low-Code/No-Code) Account Impersonation	✓	✓				
DES 362. Mitigating LCNC (Low-Code/No-Code) Authorization Misuse	✓	✓				
DES 364. Mitigating LCNC Authentication and Secure Communication Failures	✓	✓				

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SECURE DESIGN

CYB 210. Cybersecurity Incident Response					✓				
CYB 211. Identifying and Protecting Assets Against Ransomware					✓				
CYB 212. Fundamentals of Security Information & Event Management (SIEM)					✓				
DES 101. Fundamentals of Secure Architecture					✓	✓	✓		✓
DES 151. Fundamentals of the PCI Secure SLC Standard	✓				✓	✓			
DES 200. Fundamentals of Cryptography, Key Management and Digital Certificates	✓	✓	✓	✓	✓	✓	✓	✓	✓
DES 201. Securing Applications and their Data with Cryptography	✓	✓	✓	✓	✓	✓	✓	✓	✓
DES 206. Meeting Cloud Governance and Compliance Requirements					✓				
DES 209. Authentication and Lifecycle Management					✓				
DES 255. Securing the IoT Update Process			✓	✓					
DES 262. Securing Enterprise Low-Code Application Platforms					✓				
DES 305. Blockchain Security - Protecting Existing Blockchain Assets	✓	✓	✓	✓					✓
DES 311. Creating Secure Application Architecture					✓	✓	✓	✓	✓
DES 312. Protecting Cardholder Data						✓			
DES 313. Hardening a Kubernetes Cluster					✓				
ENG 191. Introduction to the Microsoft SDL					✓	✓	✓	✓	
ENG 192. Implementing the MS SDL Optimization Model					✓	✓	✓	✓	✓
ENG 193. Implementing the Agile MS SDL					✓	✓	✓	✓	✓
ENG 194. Implementing MS SDL Line of Business					✓	✓	✓	✓	✓
ENG 195. Implementing the MS SDL Threat Modeling Tool					✓	✓	✓	✓	✓
ENG 205. Fundamentals of Threat Modeling									✓
ENG 211. How to Create Application Security Design Requirements			✓	✓	✓			✓	✓
ENG 212. Implementing Secure Software Operations	✓	✓	✓	✓	✓				
ENG 251. Risk Management Foundations					✓				
ENG 311. Attack Surface Analysis and Reduction			✓		✓				✓
ENG 312. How to Perform a Security Code Review	✓	✓	✓	✓	✓				
ENG 320. Using Software Composition Analysis to Secure Open-Source Components	✓	✓	✓	✓	✓				
ENG 351. Preparing the Risk Management Framework					✓				
ENG 352. Categorizing Systems and Information within the RMF					✓	✓			✓
ENG 353. Selecting, Implementing, and Assessing Controls within the RMF	✓	✓	✓	✓					✓
ENG 354. Authorizing and Monitoring System Controls within the RMF	✓	✓	✓	✓					✓

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INFRASTRUCTURE SECURITY

API 250. Controlling Access to the Kubernetes API		✓	✓								
API 251. Implementing Web Application and API Protection (WAAP)		✓	✓								
CYB 251. Securing the AI/ML Infrastructure				✓							✓
CYB 350. AI Driven Incident Analysis Techniques		✓	✓								
DES 210. Hardening Linux/Unix Systems	✓	✓	✓	✓					✓	✓	
DES 212. Architecture Risk Analysis and Remediation		✓	✓	✓	✓	✓	✓	✓	✓	✓	
DES 214. Securing Infrastructure Architecture			✓	✓							
DES 215. Defending the Infrastructure			✓	✓			✓				
DES 216. Protecting Cloud Infrastructure			✓								
DES 217. Securing Terraform Infrastructure and Resources			✓								
DES 218. Protecting Microservices, Containers, and Orchestration			✓							✓	
DES 219. Securing Google's Firebase Platform			✓		✓						
DES 220. Secure AWS CloudFormation Configuration		✓	✓								
DES 260. Fundamentals of IoT Architecture and Design	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
DES 261. Securing Serverless Environments		✓	✓								
DES 306. Creating a Secure Blockchain Network	✓	✓	✓	✓						✓	
DES 314. Hardening the Docker Engine			✓								
ICS 210. ICS/SCADA Security Essentials			✓								
ICS 310. Protecting Information and System Integrity in Industrial Control System Environments			✓								

DevSecOps

CYB 213. Generative AI Privacy & Cybersecurity Risk		✓	✓							✓	
CYB 310. Using Cyber Supply Chain Risk Management to Mitigate Threats to IT/OT			✓								
CYB 311. Threat Analysis with Artificial Intelligence			✓								
DSO 201. Fundamentals of Secure DevOps			✓	✓	✓						
DSO 205. Securing the COTS Supply Chain	✓	✓	✓								
DSO 206. Securing the Open Source Software Supply Chain		✓	✓								
DSO 211. Identifying Threats to Containers and Data in a DevSecOps Framework	✓	✓	✓	✓	✓						
DSO 212. Fundamentals of Zero Trust Security			✓								
DSO 253. DevSecOps in the AWS Cloud		✓	✓							✓	
DSO 254. DevSecOps in the Azure Cloud		✓	✓							✓	
DSO 256. DevSecOps in the Google Cloud Platform		✓	✓							✓	

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DevSecOps (Continued)

DSO 301. Orchestrating Secure System and Service Configuration		✓	✓	✓					
DSO 302. Automated Security Testing			✓	✓					
DSO 303. Automating Security Updates	✓		✓	✓					
DSO 304. Securing API Gateways in a DevSecOps Framework	✓	✓	✓						
DSO 305. Automating CI/CD Pipeline Compliance		✓	✓						✓
DSO 306. Implementing Infrastructure as Code			✓						
DSO 307. Secure Secrets Management			✓	✓					

SECURITY TESTING

ATK 201. Fundamentals of Security Testing	✓	✓	✓						✓
CYB 250. Cyber Threat Hunting: Tactics, Techniques, and Procedures (TTP)			✓						✓
CYB 301. Fundamentals of Ethical Hacking			✓	✓					✓
SDT 301. Testing for Injection	✓	✓	✓	✓	✓	✓	✓	✓	
SDT 302. Testing for Identification and Authentication Failures	✓	✓	✓	✓	✓	✓	✓	✓	
SDT 303. Testing for Cryptographic Failures	✓	✓	✓	✓	✓	✓	✓	✓	
SDT 304. Testing for Insecure Design	✓	✓	✓	✓	✓	✓	✓	✓	
SDT 305. Testing for Broken Access Control	✓	✓	✓	✓	✓	✓	✓	✓	
SDT 306. Testing for Security Misconfiguration	✓	✓	✓	✓	✓	✓	✓	✓	
SDT 307. Testing for Server-Side Request Forgery	✓	✓	✓	✓	✓	✓	✓	✓	
SDT 308. Testing for Software and Data Integrity Failures	✓	✓	✓	✓	✓	✓	✓	✓	
SDT 309. Testing for Vulnerable and Outdate Components	✓	✓	✓	✓	✓	✓	✓	✓	
SDT 310. Testing for Security Logging and Monitoring Failures		✓	✓	✓	✓	✓	✓	✓	
SDT 311. Testing for Integer Overflow or Wraparound	✓	✓	✓	✓					
SDT 312. Testing for Path Traversal	✓								
SDT 313. Testing for Cross Site Request Forgery	✓								
SDT 314. Testing for Unrestricted Upload of File with Dangerous Type	✓	✓							
SDT 315. Testing for Incorrect Permission Assignment for Critical Resource	✓	✓							
SDT 316. Testing for Use of Hard-Coded Credentials	✓								
SDT 317. Testing for Improper Control of Generation of Code ("Code Injection")	✓	✓			✓				
SDT 318. Testing for Insufficiently Protected Credentials	✓	✓			✓				
SDT 319. Testing for Out-of-bound Read	✓	✓			✓				
SDT 320. Testing for Out-of-bounds Write	✓	✓			✓				

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SECURITY TESTING (Continued)

SDT 321. Testing for Uncontrolled Resource Consumption	✓	✓		✓					
SDT 322. Testing for Improper Privilege Management	✓	✓		✓					
SDT 323. Testing for Improper Input Validation	✓	✓		✓					
SDT 324. Testing for Improper Restriction of Operations within the Bounds of a Memory Buffer	✓	✓		✓					
SDT 325. Testing for NULL Pointer Dereference	✓	✓		✓					
SDT 326. Testing for Use After Free	✓	✓		✓					
TST 101. Fundamentals of Security Testing	✓	✓	✓	✓	✓	✓		✓	✓
TST 202. Penetration Testing Fundamentals			✓	✓					
TST 205. Performing Vulnerability Scans	✓		✓						
TST 206. ASVS Requirements for Developers		✓		✓					
TST 301. Infrastructure Penetration Testing	✓		✓	✓				✓	
TST 302. Application Penetration Testing	✓		✓	✓				✓	
TST 303. Penetration Testing for Google Cloud Platform			✓						
TST 304. Penetration Testing for AWS Cloud			✓						
TST 305. Penetration Testing for Azure Cloud			✓						
TST 351. Penetration Testing for TLS Vulnerabilities	✓	✓	✓						
TST 352. Penetration Testing for Injection Vulnerabilities	✓	✓	✓						
TST 353. Penetration Testing for SQL Injection		✓							
TST 354. Penetration Testing for Memory Corruption Vulnerabilities	✓		✓						
TST 355. Penetration Testing for Authorization Vulnerabilities	✓	✓	✓						
TST 356. Penetration Testing for XSS	✓	✓							
TST 357. Penetration Testing for Hardcoded Secrets	✓		✓						
TST 358. Penetration Testing Wireless Networks	✓		✓						
TST 359. Penetration Testing Network Infrastructure	✓		✓						
TST 360. Penetration Testing for Authentication Vulnerabilities	✓		✓						

LEARN LABS

LAB 111. Identifying Server-Side Request Forgery	✓	✓	✓					✓
LAB 113. Identifying Cryptographic Failures	✓	✓	✓					✓
LAB 114. Identifying Cookie Tampering	✓	✓	✓					✓
LAB 115. Identifying Reflective Cross-Site Scripting (XSS)	✓	✓	✓					✓
LAB 116. Identifying Forceful Browsing	✓	✓	✓					✓

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LEARN LABS (Continued)

LAB 117. Identifying Hidden Form Field	✓	✓	✓				✓
LAB 118. Identifying Weak File Upload Validation	✓	✓	✓				✓
LAB 119. Identifying Persistent Cross-Site Scripting (XSS)	✓	✓	✓				✓
LAB 120. Identifying XML Injection	✓	✓	✓				✓
LAB 121. Identifying Vulnerable and Outdated Components		✓	✓				✓
LAB 122. Identifying Insecure APIs		✓	✓				✓
LAB 123. Identifying Vertical Privilege Escalation		✓	✓				✓
LAB 124. Identifying Horizontal Privilege Escalation	✓	✓	✓				✓
LAB 125. Identifying Buffer Overflow	✓	✓	✓				✓
LAB 126. Identifying Information Leakage	✓	✓	✓				✓
LAB 127. Identifying Security Logging and Monitoring Failures	✓	✓					
LAB 128. Identifying Unverified Password Change	✓	✓					
LAB 129. Identifying Error Message Containing Sensitive Information	✓	✓					
LAB 130. Identifying Generation of Predictable Numbers or Identifiers	✓	✓					
LAB 131. Identifying Improper Restriction of XML External Entity Reference	✓	✓					✓
LAB 132. Identifying Exposed Services							✓
LAB 133. Identifying Exposure of Sensitive Information Through Environmental Variables	✓	✓	✓				✓
LAB 134. Identifying Plaintext Storage of a Password	✓	✓	✓				✓
LAB 135. Identifying URL Redirection to Untrusted Site	✓	✓	✓				✓
LAB 136. Identifying Improper Neutralization of Script in Attributes in a Web Page	✓	✓	✓				✓
LAB 137. Identifying Improper Authorization	✓	✓	✓				✓
LAB 138. Identifying Authorization Bypass Through User-Controlled Key	✓	✓	✓				
LAB 139. Identifying Use of a Key Past its Expiration Date	✓	✓	✓				✓

SKILL LABS

LAB 201. Defending Java Applications Against Canonicalization	✓	✓					
LAB 202. Defending Python Applications Against Canonicalization	✓	✓					
LAB 203. Defending C# Applications Against Canonicalization	✓	✓					
LAB 204. Defending Node.js Applications Against Canonicalization	✓	✓					
LAB 205. Defending Java Applications Against XPath Injection		✓	✓				
LAB 206. Defending Python Applications Against XPath Injection		✓	✓				
LAB 207. Defending Node.js Applications Against XPath Injection		✓	✓				

SKILL LABS (Continued)

LAB 208. Defending C# Applications Against XPath Injection	✓	✓				
LAB 211. Defending Java Applications Against Credentials in Code Medium	✓	✓	✓			✓
LAB 212. Defending Python Applications Against Credentials in Code Medium	✓	✓	✓			✓
LAB 213. Defending Node.js Applications Against Credentials in Code Medium	✓	✓	✓			✓
LAB 214. Defending C# Applications Against Credentials in Code Medium	✓	✓	✓			✓
LAB 215. Defending Java Applications Against Business Logic Error for Input Validation	✓	✓	✓			✓
LAB 216. Defending Python Applications Against Business Logic Error for Input Validation	✓	✓	✓			✓
LAB 217. Defending Node.js Applications Against Business Logic Error for Input Validation	✓	✓	✓			✓
LAB 218. Defending C# Applications Against Business Logic Error for Input Validation	✓	✓	✓			✓
LAB 220. Defending Against Hard-Coded Secrets (HTML5)	✓	✓				
LAB 221. Defending C# Against SQL Injection	✓	✓	✓			
LAB 224. Defending Java Applications Against Forceful Browsing	✓	✓	✓			✓
LAB 225. Defending Python Applications Against Forceful Browsing	✓	✓	✓			✓
LAB 226. Defending Node.js Applications Against Forceful Browsing	✓	✓	✓			✓
LAB 227. Defending C# Applications Against Forceful Browsing	✓	✓	✓			✓
LAB 222. Defending Python Against SQL Injection	✓	✓	✓			
LAB 223. Defending Node.js Against SQL Injection	✓	✓	✓			
LAB 228. Defending Java Applications Against Weak AES ECB Mode Encryption	✓	✓				
LAB 229. Defending Java Applications Against Weak PRNG	✓	✓				
LAB 230. Defending Java Against Cross-Site Scripting (XSS)	✓	✓				
LAB 231. Defending Python Against Cross-Site Scripting (XSS)	✓	✓				
LAB 232. Defending C# Against Cross-Site Scripting (XSS)	✓	✓				
LAB 233. Defending Node.js Against Cross-Site Scripting (XSS)	✓	✓				
LAB 234. Defending Java Applications Against Parameter Tampering	✓	✓	✓			
LAB 235. Defending Java Applications Against Plaintext Password Storage	✓	✓	✓			
LAB 236. Defending Java Applications Against Sensitive Information in Error Messages	✓	✓				
LAB 237. Defending Java Against SQL Injection	✓	✓				
LAB 238. Defending C# Applications Against Weak AES ECB Mode Encryption	✓	✓	✓			
LAB 239. Defending C# Applications Against Weak PRNG	✓	✓	✓			
LAB 240. Defending Java Against External XML Entity Vulnerabilities	✓	✓	✓			
LAB 241. Defending C# Against External XML Entity Vulnerabilities	✓	✓	✓			

SKILL LABS (Continued)

LAB 242. Defending Node.js Against ExternalXML Entity Vulnerabilities	✓	✓	✓				
LAB 243. Defending Python Against ExternalXML Entity Vulnerabilities	✓	✓	✓				
LAB 244. Defending Java Against Security Misconfiguration	✓	✓	✓				
LAB 245. Defending Node.js Applications Against Plaintext Password Storage	✓	✓	✓				
LAB 246. Defending Node.js Applications Against Weak AES ECB Mode Encryption	✓	✓	✓				
LAB 247. Defending Node.js Applications Against Weak PRNG	✓	✓	✓				
LAB 248. Defending Node.js Applications Against Parameter Tampering	✓	✓	✓				
LAB 249. Defending Python Applications Against Plaintext Password Storage	✓	✓	✓				
LAB 250. Defending C# Applications Against Parameter Tampering	✓	✓	✓				
LAB 251. Defending C# Applications Against Plaintext Password Storage	✓	✓	✓				
LAB 252. Defending Python Applications Against Weak AES ECB Mode Encryption	✓	✓	✓				
LAB 253. Defending Python Applications Against Weak PRNG	✓	✓	✓				
LAB 254. Defending Python Applications Against Parameter Tampering	✓	✓	✓				
LAB 260. Defending C# Applications Against Sensitive Information in Error Messages	✓	✓					
LAB 261. Defending Python Applications Against Sensitive Information in Error Messages	✓	✓					
LAB 262. Defending Node.js Applications Against Sensitive Information in Error Messages	✓	✓					
LAB 263. Defending Java Applications Against Sensitive Information in Log Files	✓	✓					
LAB 264. Defending Python Applications Against Sensitive Information in Log Files	✓	✓					
LAB 265. Defending Node.js Applications Against Sensitive Information in Log Files	✓	✓					
LAB 266. Defending C# Applications Against Sensitive Information in Log Files	✓	✓					
LAB 267. Defending Java Applications Against Deserialization of Untrusted Data	✓	✓					
LAB 268. Defending Python Applications Against Deserialization of Untrusted Data	✓	✓					
LAB 269. Defending Node.js Applications Against Deserialization of Untrusted Data	✓	✓					
LAB 270. Defending C# Applications Against Deserialization of Untrusted Data	✓	✓					
LAB 271. Defending Java Applications Against SSRF	✓	✓					
LAB 272. Defending Python Applications Against SSRF	✓	✓					
LAB 273. Defending Node.js Applications Against SSRF	✓	✓					
LAB 274. Defending C# Applications Against SSRF	✓	✓					
LAB 275. Defending Java Applications Against Command Injection	✓	✓	✓				
LAB 276. Defending Python Applications Against Command Injection	✓	✓	✓				
LAB 277. Defending Node.js Applications Against Command Injection	✓	✓	✓				

SKILL LABS (Continued)

LAB 278. Defending C# Applications Against Command Injection	✓	✓	✓			
LAB 279. Defending Java Applications Against Dangerous File Upload	✓	✓	✓			
LAB 280. Defending Python Applications Against Dangerous File Upload	✓	✓	✓			
LAB 281. Defending Node.js Against Dangerous File Upload	✓	✓	✓			
LAB 282. Defending C# Applications Against Dangerous File Upload	✓	✓	✓			
LAB 283. Defending Java Applications Against RegEx DoS	✓	✓	✓			
LAB 284. Defending Python Applications Against RegEx DoS	✓	✓	✓			
LAB 285. Defending Node.js Applications Against RegEx DoS	✓	✓	✓			
LAB 286. Defending C# Applications Against RegEx DoS	✓	✓	✓			
LAB 287. Defending Java Applications Against Null Pointer Dereference	✓	✓	✓			
LAB 288. Defending C# Applications Against Null Pointer Dereference	✓	✓	✓			
LAB 289. Defending Java Applications Against Path Traversal	✓	✓	✓			
LAB 290. Defending Python Applications Against Path Traversal	✓	✓	✓			
LAB 291. Defending Node.js Applications Against Path Traversal	✓	✓	✓			
LAB 292. Defending C# Applications Against Path Traversal	✓	✓	✓			
LAB 293. Defending Java Applications Against Integer Overflow	✓	✓	✓			
LAB 294. Defending C# Applications Against Integer Overflow	✓	✓	✓			
LAB 301. Defending Java Applications Against Open Redirect	✓	✓				✓
LAB 302. Defending Python Applications Against Open Redirect	✓	✓				✓
LAB 303. Defending C# Applications Against Open Redirect	✓	✓				✓
LAB 304. Defending Node.js Applications Against Open Redirect	✓	✓				✓
LAB 305. Defending Java Applications Against Weak Password Reset	✓	✓				✓
LAB 306. Defending Python Applications Against Weak Password Reset	✓	✓				✓
LAB 307. Defending C# Applications Against Weak Password Reset	✓	✓				✓
LAB 308. Defending Node.js Applications Against Weak Password Reset	✓	✓				✓
LAB 309. Defending TypeScript Applications Against Unrestricted Upload of File with Dangerous Type	✓	✓				✓
LAB 314. Defending TypeScript Applications Against SSRF	✓	✓				✓
LAB 316. Defending TypeScript Applications Against Hard-coded Credentials	✓	✓				✓
LAB 320. Defending TypeScript Applications Against Code Injection	✓	✓				✓
LAB 325. Defending TypeScript Applications Against CSRF	✓	✓				✓
LAB 326. Defending TypeScript Applications Against Path Traversal	✓	✓				✓
LAB 327. Defending C Applications Against Path Traversal	✓	✓				✓

SKILL LABS (Continued)

LAB 328. Defending C++ Applications Against Path Traversal	✓	✓					✓
LAB 329. Defending Go Applications Against SSRF	✓	✓	✓				
LAB 333. Defending Go Applications Against Hard-coded credentials	✓	✓	✓				
LAB 338. Defending Go Applications Against CSRF	✓	✓	✓				
LAB 339. Defending Go Applications Against Path Traversal	✓	✓	✓				
LAB 340. Defending C Applications Against Use After Free	✓	✓	✓				
LAB 341. Defending C ++ Applications Against Use After Free	✓	✓	✓				
LAB 342. Defending TypeScript Applications Against Command Injection	✓	✓	✓				
LAB 343. Defending GO Applications Against Command Injection	✓	✓	✓				
LAB 344. Defending TypeScript Applications Against Incorrect Authorization.	✓	✓	✓				
LAB 345. Defending GO Applications Against Incorrect Authorization.	✓	✓	✓				
LAB 346. Defending TypeScript Applications Against Deserialization of Untrusted Data.	✓	✓	✓				
LAB 347. Defending C Applications Against Null Pointer Dereference.	✓	✓	✓				
LAB 348. Defending C++ Applications Against Null Pointer Dereference	✓	✓					✓
LAB 349. Defending TypeScript Applications Against SQL Injection	✓	✓					✓
LAB 350. Defending Go Applications Against SQL Injection	✓	✓					✓
LAB 351. Defending TypeScript Applications Against Cross-Site Scripting	✓	✓					✓
LAB 352. Defending Go Applications Against Cross-Site Scripting	✓	✓					✓
LAB 353. Defending TypeScript Applications Against Improper Authentication	✓	✓					✓
LAB 354. Defending Go Applications Against Improper Authentication	✓	✓					✓
LAB 355. Defending C Applications Against Stack-based Buffer Overflow	✓						✓
LAB 356. Defending Python APIs from Broken Object Level Authorization		✓					
LAB 357. Defending Python APIs from Broken Authentication		✓					
LAB 358. Defending Python APIs from Broken Object Property Level Authorization		✓					
LAB 359. Defending Python APIs from Unrestricted Resource Consumption		✓					
LAB 360. Defending Python APIs from Broken Function Level Authorization		✓					
LAB 361. Defending Python APIs from Unrestricted Access to Sensitive Business Flows		✓					
LAB 362. Defending Python APIs from Server Side Request Forgery		✓					
LAB 363. Defending Python APIs from Security Misconfiguration		✓					
LAB 364. Defending Python APIs from Improper Inventory Management		✓					
LAB 365. Defending Python APIs from Unsafe Consumption of APIs		✓					
LAB 366. Defending Python AI Applications from Prompt Injection		✓					

SKILL LABS (Continued)

LAB 367. Defending Python AI Applications from Sensitive Information Disclosure	✓				
LAB 368. Defending Python AI Applications from Supply Chain Compromise	✓				
LAB 369. Defending Python AI Applications from Data and Model Poisoning	✓				
LAB 370. Defending Python AI Applications from Improper Output Handling	✓				
LAB 371. Defending Python AI Applications from Excessive Agency	✓				
LAB 372. Defending Python AI Applications from System Prompt Leakage	✓				
LAB 373. Defending Python AI Applications from Vector and Embedding Weaknesses	✓				
LAB 374. Defending Python AI Applications from Misinformation	✓				
LAB 375. Defending Python AI Applications from Unbounded Consumption	✓				
LAB 376. Defending Node.js AI Applications from Prompt Injection	✓				
LAB 377. Defending Node.js AI Applications from Improper Output Handling	✓				
LAB 378. Defending Node.js AI Applications from System Prompt Leakage	✓				
LAB 379. Defending Node.js AI Applications from Misinformation	✓				
LAB 380. Defending Node.js AI Applications from Unbounded Consumption	✓				
LAB 610. ATT&CK: File and Directory Permissions Modification	✓	✓	✓		✓
LAB 611. ATT&CK: File and Directory Discovery	✓	✓	✓		✓
LAB 612. ATT&CK: Testing for Network Services Identification			✓		✓
LAB 613. ATT&CK: Testing for Vulnerability Identification Using Vulnerability Databases			✓		✓
LAB 615. ATT&CK: Updating Vulnerable Java Web Application Server Software	✓	✓	✓		✓
LAB 616. ATT&CK: Host Vulnerability Scanning			✓		✓
LAB 617. ATT&CK: Testing for Plaintext Secrets in Files			✓		✓
LAB 618. ATT&CK: Log Analysis			✓		✓
LAB 619. ATT&CK: Exfiltration Over C2 Channel			✓		✓
LAB 620. ATT&CK: Exploitation of Remote Services (Advanced)			✓		✓
LAB 621. ATT&CK: Password Cracking	✓	✓			✓
LAB 622. ATT&CK: Exploiting Windows File Sharing Server with External Remote Services		✓			✓
LAB 623. ATT&CK: Exploiting Vulnerable Java Web Application Server Software	✓	✓	✓		✓
LAB 625. ATT&CK: Exploit Public-Facing Application (Advanced)			✓		✓
LAB 624. ATT&CK: Exploiting Java Web Application Server Misconfiguration	✓	✓	✓		✓
LAB 626. Using an Exploit Framework for SQL Injection	✓	✓	✓		✓
LAB 627. Using an Exploit Framework for Port Scanning.			✓		✓

SKILL LABS (Continued)

LAB 628. Using an Exploit Framework for SMB Version Scanning.			✓			✓
LAB 629. Using an Exploit Framework for SNMP Scanning.			✓			✓
LAB 630. ATT&CK: Exploiting Java SQL Injection to Extract Password Hashes	✓	✓				✓
LAB 631. ATT&CK: Network Service Discovery	✓	✓				✓
LAB 632. ATT&CK: Network Share Discovery	✓	✓				✓
LAB 633. Using an Exploit Framework for Web Application Scanning			✓			✓
LAB 634. ATT&CK: Create Account	✓	✓				✓
LAB 635. ATT&CK: Unsecured Credentials	✓	✓				✓
LAB 636. ATT&CK: Data from Local System						✓
LAB 637. ATT&CK: Valid Accounts						✓
LAB 638. Using Mimikatz			✓			✓
LAB 639. Using an Exploit Framework via Command Line Interface			✓			✓
LAB 640. ATT&CK: Search Victim-Owned Websites						✓
LAB 641. ATT&CK: Password Policy Discovery						✓
LAB 642. ATT&CK: Permission Groups Discovery						✓
LAB 643. Response: Detecting a Malicious Windows Service						✓
LAB 644. Response: Detecting Malware in the Windows Startup Folder						✓
LAB 645. Response: Detecting Malware in the Registry Run Keys						✓
LAB 646. Response: Detecting a JSP Backdoor						✓
LAB 647. Response: Investigating an Antimalware Alert						✓
LAB 648. Response: Detecting a Malicious Windows Scheduled Task						✓

*Our NIST courses that map to 800-53 and 800-171 publications. To understand how courses map to specific requirements, please contact us.

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