

# COMPLIANCE STANDARDS

UPDATED DECEMBER 2025



## 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	✓	✓	✓	✓	✓	✓	✓	✓	

## SECURE DEVELOPMENT (Continued)

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 Mitigating OWASP 2021 Vulnerable and Outdated Components		✓	✓	✓					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

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

## SECURITY TESTING

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



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### SECURITY TESTING (Continued)

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

### LEARN LABS

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

## 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 ExternalXML Entity Vulnerabilities	✓	✓	✓						
LAB 241. Defending C# Against ExternalXML 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.			✓						✓

## COURSE TITLE

CWE OWASP NIST\* PCI ISO NERC HIPAA GDPR MITRE

### 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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