

# COMPLIANCE STANDARDS

UPDATED 5/6/2024



## COURSE TITLE

CWE OWASP NIST\* PCI ISO NERC HIPAA GDPR MITRE

### SECURITY PRINCIPLES

COURSE TITLE	CWE	OWASP	NIST*	PCI	ISO	NERC	HIPAA	GDPR	MITRE
AWA 101. Fundamentals of Application Security	✓	✓		✓			✓	✓	
AWA 102. Secure Software Concepts	✓	✓	✓	✓	✓	✓		✓	
COD 102. Challenges in Application Security	✓	✓							
COD 103. Creating Software Security Requirements	✓	✓	✓	✓	✓	✓			
COD 104. Designing Secure Software	✓	✓	✓	✓	✓	✓			
COD 105. Secure Software Development	✓	✓	✓	✓	✓	✓			
COD 106. The Importance of Integration and Testing	✓		✓	✓	✓	✓			
COD 107. Secure Software Deployment			✓	✓	✓	✓			
COD 108. Software Operations and Maintenance			✓	✓	✓	✓			
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 Incident Response			✓						
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		✓	✓					✓	

# COURSE TITLE

CWE OWASP NIST\* PCI ISO NERC HIPAA GDPR MITRE

## SECURE DEVELOPMENT

COURSE TITLE	CWE	OWASP	NIST*	PCI	ISO	NERC	HIPAA	GDPR	MITRE
API 210. Mitigating APIs Lack of Resources & Rate Limiting		✓	✓						
API 211. Mitigating APIs Broken Object Level Authorization		✓	✓						
API 213. Mitigating APIs Mass Assignment		✓	✓						
API 214. Mitigating APIs Improper Asset Management		✓	✓						
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 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 Platforms 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	✓	✓		✓					



## COURSE TITLE

CWE OWASP NIST\* PCI ISO NERC HIPAA GDPR MITRE

### SECURE DEVELOPMENT (continued)

COURSE TITLE	CWE	OWASP	NIST*	PCI	ISO	NERC	HIPAA	GDPR	MITRE
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 271. OWASP M1: Mitigating Improper Platform Usage		✓							
DES 272. OWASP M2: Mitigating Insecure Data Storage		✓							
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		✓							

## COURSE TITLE

CWE OWASP NIST\* PCI ISO NERC HIPAA GDPR MITRE

### SECURE DEVELOPMENT (continued)

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		✓	✓						

### 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 202. Cryptographic Suite Services: Encoding, Encrypting and Hashing	✓	✓	✓	✓	✓	✓	✓	✓	✓
DES 203. Cryptographic Components: Randomness, Algorithms, & Key Management	✓	✓	✓	✓	✓	✓	✓	✓	✓
DES 204. The Role of Cryptography in Application Development	✓	✓	✓	✓	✓	✓	✓	✓	✓
DES 205. Message Integrity Cryptographic Functions	✓	✓	✓	✓	✓	✓	✓	✓	✓
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	✓	✓	✓	✓					✓





# COURSE TITLE

CWE OWASP NIST\* PCI ISO NERC HIPAA GDPR MITRE

## SECURITY TESTING (continued)

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	✓	✓		✓						
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			✓							





## COURSE TITLE

CWE OWASP NIST\* PCI ISO NERC HIPAA GDPR MITRE

### LEARN LABS (continued)

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		✓	✓							
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	✓	✓	✓							✓

# COURSE TITLE

CWE OWASP NIST\* PCI ISO NERC HIPAA GDPR MITRE

## SKILL LABS (continued)

COURSE TITLE	CWE	OWASP	NIST*	PCI	ISO	NERC	HIPAA	GDPR	MITRE
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	✓	✓	✓						
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	✓	✓							



# COURSE TITLE

CWE OWASP NIST\* PCI ISO NERC HIPAA GDPR MITRE

## SKILL LABS (continued)

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	✓	✓								✓
LAB 328. Defending C++ Applications Against Path Traversal	✓	✓								✓
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 624. ATT&CK: Exploiting Java Web Application Server Misconfiguration	✓	✓	✓							✓

## COURSE TITLE

CWE OWASP NIST\* PCI ISO NERC HIPAA GDPR MITRE

### SKILL LABS (continued)

LAB 625. ATT&CK: Exploit Public-Facing Application (Advanced)			✓						✓
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 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									✓

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