

# LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

## ISO 27034 — Application Security

*ISO Certification Programme*



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### LAPT — London Academy of Professional Training

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**Reference** IIT-COD-27034 • ISO IT & Related Technologies

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AT A GLANCE

|               |                                                |
|---------------|------------------------------------------------|
| REFERENCE     | IIT-COD-27034                                  |
| AWARD         | Certificate                                    |
| ASSESSMENT    | 430 marks — 258 to pass (60%)                  |
| PREREQUISITES | None                                           |
| VALIDITY      | Lifetime                                       |
| AWARDING BODY | LAPT — London Academy of Professional Training |

CURRICULUM

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| <div><div>1</div><div>Application Security Fundamentals</div><div>5 chapters · 30 classes 85 marks</div></div> <div><div><div>• 1 Understanding Application Security Principles — 6 classes</div><div><div>› 1.1 Define Application Security and Its Importance</div><div>› 1.2 Identify Key Threats to Application Security</div><div>› 1.3 Explore the Core Principles of Application Security</div><div>› 1.4 Assess Vulnerability Management Techniques</div><div>› 1.5 Implement Security Controls in Application Development</div><div>› 1.6 Evaluate Real-World Application Security Case Studies</div></div></div><div><div>• 2 Security Lifecycle and Risk Management — 6 classes</div><div><div>› 2.1 Understand the Security Lifecycle Stages</div><div>› 2.2 Identify Key Risk Management Concepts</div><div>› 2.3 Analyze Application Vulnerabilities and Threats</div><div>› 2.4 Implement Security Controls in the Development Lifecycle</div><div>› 2.5 Evaluate Risk Assessment Techniques for Applications</div><div>› 2.6 Develop an Application Security Maintenance Plan</div></div></div><div><div>• 3 Secure Coding Practices and Standards — 6 classes</div><div><div>› 3.1 Identify Common Secure Coding Vulnerabilities</div><div>› 3.2 Understand OWASP Top Ten Security Risks</div><div>› 3.3 Implement Input Validation Techniques</div><div>› 3.4 Apply Secure Authentication and Session Management</div><div>› 3.5 Utilize Data Encryption Practices in Code</div><div>› 3.6 Review and Apply Coding Standards and Best Practices</div></div></div><div><div>• 4 Application Security Testing and Assessment Techniques — 6 classes</div><div><div>› 4.1 Identify Key Application Security Testing Techniques</div><div>› 4.2 Analyze the Importance of Threat Modeling in Assessments</div><div>› 4.3 Explore Static Application Security Testing (SAST) Methods</div><div>› 4.4 Implement Dynamic Application Security Testing (DAST) Tools</div><div>› 4.5 Evaluate Manual vs. Automated Application Security Assessments</div><div>› 4.6 Develop a Comprehensive Application Security Testing Strategy</div></div></div><div><div>• 5 Implementing Security Controls and Compliance — 6 classes</div><div><div>› 5.1 Identify Key Security Controls for Applications</div><div>› 5.2 Evaluate Compliance Requirements for Application Security</div><div>› 5.3 Develop a Risk Assessment Framework for Applications</div><div>› 5.4 Implement Security Controls in Application Development</div><div>› 5.5 Monitor and Audit Security Controls Effectiveness</div><div>› 5.6 Prepare for ISO 27034 Certification Audit</div></div></div></div> |
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2

Compliance and Audit Processes

0 chapters 65 marks

3

## ISO 27034 Implementation Strategies

5 chapters · 6 classes

65 marks

## • 1 Overview of ISO 27034 and Its Importance in Application Security

— 6 classes

- › 1.1 Define ISO 27034 and Its Core Components
- › 1.2 Explain the Relevance of ISO 27034 in Today's Digital Landscape
- › 1.3 Identify Key Benefits of Implementing ISO 27034 in Application Security
- › 1.4 Discuss Common Challenges in Implementing ISO 27034
- › 1.5 Explore Real-World Case Studies of ISO 27034 Implementation
- › 1.6 Develop an Action Plan for Adopting ISO 27034 in Your Organization

## • 2 Understanding the ISO 27034 Framework and Key Principles

## • 3 Risk Assessment and Management in the ISO 27034 Context

## • 4 Developing Application Security Policies Aligned with ISO 27034

## • 5 Implementation and Continuous Improvement of ISO 27034 Strategies

4

## Leadership in Application Security

0 chapters

85 marks

5

## Risk Management and Assessment

5 chapters · 30 classes

65 marks

## • 1 Understanding Risk Management Principles in Information Security — 6 classes

- › 1.1 Define Risk Management Concepts in Information Security
- › 1.2 Identify Key Principles of Risk Assessment
- › 1.3 Analyze the Risk Management Process Stages
- › 1.4 Evaluate Common Risk Assessment Frameworks
- › 1.5 Implement Risk Mitigation Strategies
- › 1.6 Assess Risk Management Effectiveness in Applications

## • 2 Identifying Risks in Application Security — 6 classes

- › 2.1 Prioritize Application Security Risks
- › 2.2 Identify Common Vulnerabilities in Applications
- › 2.3 Assess the Impact of Identified Risks
- › 2.4 Evaluate Current Security Measures in Place
- › 2.5 Conduct a Risk Assessment Workshop
- › 2.6 Develop a Risk Mitigation Plan for Applications

## • 3 Analyzing and Evaluating Security Risks — 6 classes

- › 3.1 Identify Key Security Risks in Applications
- › 3.2 Assess Impact and Likelihood of Security Threats
- › 3.3 Utilize Risk Assessment Tools and Techniques
- › 3.4 Analyze Vulnerabilities within Application Architecture
- › 3.5 Evaluate Existing Security Controls Effectiveness
- › 3.6 Develop Risk Mitigation Strategies for Applications

## • 4 Implementing Risk Mitigation Strategies — 6 classes

- › 4.1 Identify Key Risks in Application Security
- › 4.2 Assess Vulnerabilities and Threats to Applications
- › 4.3 Develop Comprehensive Risk Mitigation Strategies
- › 4.4 Implement Risk Mitigation Measures Effectively
- › 4.5 Monitor and Review the Effectiveness of Mitigation Strategies
- › 4.6 Communicate Risk Management Decisions to Stakeholders

## • 5 Monitoring and Reviewing Risk Management Processes — 6 classes

- › 5.1 Identify Key Risk Indicators for Monitoring
- › 5.2 Establish Protocols for Ongoing Risk Assessment
- › 5.3 Implement Tools for Effective Risk Management Monitoring
- › 5.4 Analyze Data Trends in Risk Management Performance
- › 5.5 Evaluate the Effectiveness of Current Risk Management Strategies
- › 5.6 Develop Action Plans for Continuous Risk Process Improvement

**• 1 Fundamentals of Security Control Design** — 6 classes

- › 1.1 Define Security Control Design and Its Importance
- › 1.2 Identify Key Components of Security Control Design
- › 1.3 Analyze Risk Assessment for Security Controls
- › 1.4 Explore Security Control Frameworks and Standards
- › 1.5 Evaluate Security Control Design Strategies
- › 1.6 Implement a Security Control Design Plan

**• 2 ISO 27034 Framework and Compliance** — 6 classes

- › 2.1 Understand the ISO 27034 Framework Components
- › 2.2 Identify Key Compliance Requirements in Application Security
- › 2.3 Examine Roles and Responsibilities in Security Control Design
- › 2.4 Assess Risk Management Strategies within ISO 27034
- › 2.5 Develop a Compliance Checklist for Application Security
- › 2.6 Implement Best Practices for Ongoing Compliance Monitoring

**• 3 Threat Modeling and Risk Assessment Techniques** — 6 classes

- › 3.1 Define Threat Modeling Principles and Concepts
- › 3.2 Identify Common Threats in Application Security
- › 3.3 Analyze System Architecture for Vulnerability Assessment
- › 3.4 Conduct Qualitative Risk Assessment for Applications
- › 3.5 Implement Mitigation Strategies for Identified Risks
- › 3.6 Evaluate Threat Modeling Outcomes and Continuous Improvement

**• 4 Designing Effective Security Controls** — 6 classes

- › 4.1 Understand the Principles of Security Control Design
- › 4.2 Identify Key Security Risks in Application Development
- › 4.3 Evaluate Existing Security Controls and Their Effectiveness
- › 4.4 Design Tailored Security Controls for Specific Applications
- › 4.5 Implement Security Controls into the Development Lifecycle
- › 4.6 Assess and Improve Security Controls Post-Implementation

**• 5 Evaluating and Testing Security Controls** — 6 classes

- › 5.1 Identify Key Security Controls for Applications
- › 5.2 Assess the Effectiveness of Security Controls
- › 5.3 Develop Test Cases for Security Control Verification
- › 5.4 Execute Security Control Tests and Interpret Results
- › 5.5 Identify Gaps and Areas for Improvement in Security Controls
- › 5.6 Document Findings and Recommend Security Enhancements