



# Certificate in Microservices Security Testing

**Vskills Certifications**

Vskills Brochure



## Certificate in Microservices Security Testing

The Microservices are the new dominating architecture which enables the rapid, frequent and reliable delivery of large, complex applications. Security of Microservices has also emerged as a crucial part of Microservices testing.

With Microservices, however, each service has its own attack surface, but of lesser size. Hence, Microservices Security Testing is of prime importance to identify security risks and vulnerabilities in Microservices.

### Why should one take Certificate in Microservices Security?

Microservices Security Testing is prominent software testing aspect of Microservices Testing and especially due to COVID pandemic and work from home has made Microservices more crucial.

Vskills Certificate in Microservices Security Testing provides a hands-on approach to understand the nuances of Microservices, Security and software testing to design and execute test cases for Microservices.

The certification attests to your skills and knowledge in Microservices Security Testing.

The certification covers

- Microservices Basics
- Microservices Testing Design
- Microservices Test Execution

### Who will benefit from taking Certificate in Microservices Security?

Microservices developers, software testing professional, engineers, team leads, senior QA engineers, managers will benefit immensely by opting for Vskills Certificate in Microservices Security Testing to gain an edge in the Microservices Security Testing and be noticeable amongst their colleagues as well as make progress in their respective careers.

Students taking the certification also gain by showcasing their understanding of Microservices Security Testing and are able to increase their job opportunities.

## Certificate in Microservices Security Testing

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### Test Details

- **Duration:** 60 minutes
- **No. of questions:** 50
- **Maximum marks:** 50, Passing marks: 25 (50%)

There is no negative marking in this module.

### Fee Structure

Rs. 3,499/- (Excludes taxes)\*

\*Fees may change without prior notice, please refer <http://www.vskills.in> for updated fees

### Companies that hire Vskills Certificate in Microservices Security Professionals

Companies specializing in web development or software testing or software development are constantly hiring skilled Microservices Security Testers. IT companies, MNCs hire Microservices Security Testing professionals for Microservices testing related tasks. Companies employing Microservices Security Testing professionals include Google, TCS, Accenture, IBM, Tech Mahindra, GE, Amex, Deloitte, Wipro, TCS, etc.

# Table of Contents

## **1. Web Technology Basics**

- 1.1 Web Application
- 1.2 HTML
- 1.3 CSS
- 1.4 JavaScript
- 1.5 Document Object Model (DOM)
- 1.6 XPath
- 1.7 Popular Web Browsers
- 1.8 Inspecting Elements in Browser
- 1.9 TCP/IP Protocol Architecture
- 1.10 Internet Protocol
- 1.11 Transport Layer

## **2. Software Testing Basics**

- 2.1 Scope
- 2.2 Functional vs. Non-Functional testing
- 2.3 Defects and Failures
- 2.4 Finding Faults Early
- 2.5 Compatibility
- 2.6 Input Combinations and Preconditions
- 2.7 Static vs. Dynamic Testing
- 2.8 Software Verification and Validation
- 2.9 The Software Testing Team
- 2.10 Software Quality Assurance (SQA)
- 2.11 Testing Methods - The box approach

## **3. Security Concepts**

- 3.1 Security Principles
- 3.2 Identification and Authentication
- 3.3 Attack Types
- 3.4 Social Engineering
- 3.5 Steganography

## **4. Microservices Basics**

- 4.1 What is a Microservice?
- 4.2 Conway's Law
- 4.3 Microservices Communication
- 4.4 Microservices Security Vulnerabilities, Examples and Solutions

## **5. Microservices Testing Design**

- 5.1 Test Design
- 5.2 Microservices Testing Challenges
- 5.3 Testing Requirements Gathering
- 5.4 Testing High Level Design
- 5.5 Testing Low level Design
- 5.6 Securing Microservices
- 5.7 Microservice Security Information Collection

## **6. Microservices Test Execution**

- 6.1 Unit Testing
- 6.2 Component Testing
- 6.3 Integration Testing
- 6.4 Contract Testing
- 6.5 End-to-end Testing
- 6.6 Performance Testing
- 6.7 Microservices Security Testing
- 6.8 Test Development
- 6.9 Testing Defects
- 6.10 Defects Reporting
- 6.11 Testing Best Practices

## **7. Microservices Security Testing Tools**

- 7.1 SAST
- 7.2 DAST
- 7.3 Postman
- 7.4 nmap
- 7.5 The Metasploit Framework

## Certifications

- ▶ **Accounting, Banking & Finance**
  - Certified GST Professional
  - Certified AML-KYC Compliance Officer
  - Certified Business Accountant
  - Certified BASEL III Professional
  - Certified GAAP Accounting Standards Professional
  - Certified Treasury Markets Professional
- ▶ **Big Data**
  - Certified Hadoop and Mapreduce Professional
- ▶ **Cloud Computing**
  - Certified Cloud Computing Professional
- ▶ **Design**
  - Certified Interior Designer
- ▶ **Digital Media**
  - Certified Social Media Marketing Professional
  - Certified Inbound Marketing Professional
  - Certified Digital Marketing Professional
- ▶ **Foreign Trade**
  - Certified Export Import (Foreign Trade) Professional
- ▶ **Health, Nutrition and Well Being**
  - Certified Fitness Instructor
- ▶ **Hospitality**
  - Certified Restaurant Team Member (Hospitality)
- ▶ **Human Resources**
  - Certified HR Compensation Manager
  - Certified HR Staffing Manager
  - Certified Human Resources Manager
  - Certified Performance Appraisal Manager
- ▶ **Office Skills**
  - Certified Data Entry Operator
  - Certified Office Administrator
- ▶ **Project Management**
  - Certified Master in Project Management
  - Certified Scrum Specialist
- ▶ **Real Estate**
  - Certified Real Estate Consultant
- ▶ **Marketing**
  - Certified Marketing Manager
- ▶ **Quality**
  - Certified Six Sigma Green Belt Professional
  - Certified Six Sigma Black Belt Professional
  - Certified TQM Professional
- ▶ **Logistics & Supply Chain Management**
  - Certified International Logistics Professional
  - Certified Logistics & SCM Professional
  - Certified Supply Chain Management Professional
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  - Certified IPR & Legal Manager
  - Certified Labour Law Analyst
  - Certified Business Law Analyst
  - Certified Corporate Law Analyst
- ▶ **Information Technology**
  - Certified Angular JS Professional
  - Certified Basic Network Support Professional
  - Certified Business Intelligence Professional
  - Certified Core Java Developer
  - Certified E-commerce Professional
  - Certified IT Support Professional
  - Certified PHP Professional
  - Certified Selenium Professional
- ▶ **Mobile Application Development**
  - Certified Android Apps Developer
  - Certified iPhone Apps Developer
- ▶ **Security**
  - Certified Ethical Hacking and Security Professional
  - Certified Network Security Professional
- ▶ **Management**
  - Certified Corporate Governance Professional
  - Certified Corporate Social Responsibility Professional
  - Certified Leadership Skills Professional
- ▶ **Life Skills**
  - Certified Business Communication Specialist
  - Certified Public Relations Officer
- ▶ **Media**
  - Certified Advertising Manager
  - Certified Advertising Sales Professional
- ▶ **Sales, BPO**
  - Certified Sales Manager
  - Certified Telesales Executive

& many more job related certifications

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