

ROADMAPS FOR AGILE, DEVOPS, AUTOMATION



Roadmaps are based on:

<https://github.com/anas-qa/Quality-Assurance-Road-Map>

<https://medium.com/tech-tajawal/software-testing-the-road-map-5807a5590886>

FYI : I have just covered the technical part

TEST ROADMAP FOR AGILE, DEVOPS, AUTOMATION

I have just made an example of free resources that test automation learners can use to learn test automation. There is a lot of free resources out there.

Subjects

- **Version control** - Git & Github (Bitbucket)
- **Programming** - Java , Javascript, Python, C# , Json , XML ,Objective-C (Swift)
- **CI/CD** - Jenkins, Teamcity
- **Database** - SQL
- Docker
- **Mobile automation** - Appium
- **Web Automation** - Cucumber, Selenium WebDriver in Java
- TestNG, Protractor, Cypress.IO
- **API Automation** - Postman , SoapUI, ReadyAPI, Protractor, Robot Framework
- JUnit
- Fitnesse
- Devops
- Maven
- Specflow
- Spring
- AI testing, Machine learning, Microservices (Cognitive QA)
- Splunk
- TCP/IP
- Node.js

- Azure, Bash, Linux, TDD, Google, MongoDB
- Kubernetes
- Tosca
- Eggplant, Robot Framework
- Load Testing - JMeter, HP LoadRunner, Visual Studio etc.

There is more tools to learn but what i have seen on linkedin this is the most important things to learn.

Table of Contents

<u>1.BEGINNER JAVA & INTERMEDIATE</u>	<u>4</u>
<u>2.GIT COURSES - BEGINNER</u>	<u>5</u>
<u>3.SELЕНИUM WEBDRIVER - BEGINNER TO ADVANCED - DIFFERENT TUTORIALS</u>	<u>6</u>
<u>4.JENKINS - ABSOLUTE BEGINNER</u>	<u>7</u>
<u>5.SQL FOR BEGINNERS</u>	<u>7</u>
<u>6.DOCKER - BEGINNER</u>	<u>9</u>
<u>7.CUCUMBER - BEGINNER</u>	<u>10</u>
<u>8.DEVOPS - QUICK GUIDE</u>	<u>10</u>
<u>9.JUNIT BEGINNER</u>	<u>11</u>
<u>10.POSTMAN</u>	<u>11</u>
<u>11.JAVASCRIPT</u>	<u>12</u>
<u>12.TESTNG - BEGINNER</u>	<u>12</u>
<u>13.PROTRACTOR - BEGINNER</u>	<u>13</u>
<u>14.MONGODB - BEGINNER TO ADVANCED</u>	<u>13</u>
<u>15.LINUX - BEGINNER</u>	<u>14</u>
<u>16.JSON - BEGINNER</u>	<u>14</u>

<u>17.iOS - DEV - BEGINNER</u>	<u>15</u>
<u>18.CI/CD & Devops - WHAT IS IT? - BEGINNER</u>	<u>15</u>
<u>19.C# - BEGINNER</u>	<u>16</u>
<u>20.XML- BEGINNER</u>	<u>16</u>
<u>21.FITNESSE - BEGINNER</u>	<u>17</u>
<u>22.SPECFLOW - BEGINNER</u>	<u>17</u>
<u>23.SPRING - BEGINNER</u>	<u>18</u>
<u>24.PYTHON - BEGINNER</u>	<u>19</u>
<u>25.TDD</u>	<u>19</u>
<u>26.APPIUM</u>	<u>20</u>
<u>27.AI</u>	<u>20</u>
<u>28.What is an API?</u>	<u>21</u>
<u>29. Maven</u>	<u>21</u>
<u>30. SoapUI</u>	<u>22</u>
<u>31. Splunk</u>	<u>22</u>
<u>32. Node.js</u>	<u>22</u>
<u>33.TCP/IP</u>	<u>23</u>
<u>34.Teamcity</u>	<u>23</u>
<u>35.Tosca</u>	<u>23</u>
<u>36.Eggplant</u>	<u>24</u>
<u>37.Kubernetes</u>	<u>24</u>
<u>38.Robot Framework</u>	<u>25</u>
<u>39. SOGETI/PLURALSIGHT</u>	<u>25</u>
<u>1.Test Automation A & Performance A Curriculum</u>	<u>25</u>
<u>2.Senior Test Automation Curriculum B</u>	<u>31</u>
<u>3.Test Automation Specialist C</u>	<u>33</u>
<u>4. Agile Test Engineer A</u>	<u>34</u>

5.Agile Test Engineer B	37
6.Agile Test Engineer C	40
7.Development Test Engineer A	41
8.Senior Development Test Engineer B	45
9.Development Test Expert C	50

1.BEGINNER JAVA & INTERMEDIATE

Course name	Length	Author
Java (Beginner) Programming Tutorials	84 modules	YouTube
Java Tutorials for Complete Beginners	75 modules	Udemy
Java Video Tutorial	94 modules	Udemy
Java Svenska Spellista	118 modules	YouTube
Java for Absolute Beginners	60 modules	Udemy
Java Programming	5 hours 55 min	TestAutomationU
Java Programming for Software Developers	366 modules	Udemy
Java (Intermediate) Tutorials Java (Intermediate) Tutorials	N/A	Udemy
Learn Java	44 modules	YouTube

Learn Java 8		YouTube
Java Fundamentals		Udacity

2.GIT COURSES - BEGINNER

Course name	Length	Author
Version Control with Git Udacity	4 weeks	Udacity
Version Control with Git Coursera	12 hours	Udacity
Github Guides		Github
Atlassian Git and Github Tutorial		Atlassian
Git Tutorial		Tutorialspoint
Git and Github Crash Course		YouTube
Github Basics		YouTube
Github Tutorial for Beginners		YouTube

3.SELENIUM WEBDRIVER - BEGINNER TO ADVANCED - DIFFERENT TUTORIALS

Course name	Length	Author
Selenium WebDriver with Java	2 hours 20 min	Udemy
Selenium Tutorial for Beginners	21 modules	Guru99

Selenium Webdriver Basics	33 modules	ToolsQA
Selenium Tutorial	53 modules	ArtofTesting
Selenium Webdriver	N/A	Tutorialspoint
Selenium WebDriver - Beginner to Advanced	N/A	Softwaretesting help
Selenium WebDriver - JavaPoint	N/A	Javatpoint
Selenium WebDriver with Java	18 modules	Test Automation University

4.JENKINS - ABSOLUTE BEGINNER

Course name	Length	Author
Jenkins Beginners Tutorial		Guru99
Jenkins Tutorial	26 modules	Tutorialspoint
Jenkins - Udemy	3h 24 min	Udemy
Jenkins - Youtube	19 modules	YouTube
Jenkins - SimpliLearn	1h 12 min	YouTube
Jenkins for Beginners		DevopsLearning
Jenkins Word to Remember		Codeship

5.SQL FOR BEGINNERS

Course name	Length	Author
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SQL Basics Youtube	1 hour	YouTube
SQL Tutorial for Beginners	3 hour 20 min	YouTube
SQL Tutorial - Tutorialpoint		Tutorialspoint
SQL W3schools		W3schools
Learn SQL		Javatpoint
Introduction to Databases and SQL Querying		Click Linksynergy
Oracle SQL - A Complete Introduction		Click Linksynergy
Microsoft SQL Server - An Introduction		Javarevisited
SQL Tutorial		YouTube
MySQL Crash Course		YouTube
MySQL Course		YouTube
MySQL Tutorial for Beginners		YouTube
MySQL Complete Course		YouTube
Learning MySQL		YouTube
What is Database Design?		YouTube
Oracle Tutorial		OracleTutoria l

6.DOCKER - BEGINNER

Course name	Length	Author
From Zero to Docker		YouTube
Docker Curriculum		Docker Curriculum
Docker Tutorial for Beginners		Guru99
Get started with Docker		Docs Docker
Getting Started with Docker		YouTube
Docker Tutorial		Tutorialspoint
Scaling Tests with Docker		TestAutomationU
Interactive Docker Tutorial		Katacoda
Full Docker Tutorial		YouTube

7.CUCUMBER - BEGINNER

Course name	Length	Author
Cucumber Testing tutorial		Guru99
Cucumber Tutorial		Tutorialspoint
Learn Cucumber		ToolsQA
Cucumber tutorial for Beginners		Artoftesting
Cucumber with Selenium		Udemy
Cucumber selenium testing tutorial		Automationtestinghub
Cucumber		Javatpoint

8.DEVOPS - QUICK GUIDE

Course name	Length	Author
Intro to DevOps	3 weeks	Udacity
Devops Tutorial		Guru99
What is Devops		YouTube
What is Devops		YouTube
What is Devops		YouTube
What is Devops		YouTube

9.JUNIT BEGINNER

Course name	Length	Author
JUnit with IntelliJ		YouTube
JUnit with Eclipse		YouTube
JUnit Tutorial with IntelliJ		YouTube
JUnit Tutorial		Tutorialspoint
JUnit Intro		ToolsQA

10.POSTMAN

Course name	Length	Author
The Basics of Using Postman		YouTube
Learn Postman		YouTube
Postman tutorial for Beginners		ToolsQA
How to Send API Requests		YouTube
Getting started with Postman		YouTube

11.JAVASCRIPT

Course name	Length	Author
Basic Javascript		Freecodecamp
Javascript		YouTube
The Modern Javascript Tutorial		Javascript.info
Javascript Tutorial		W3schools
Javascript Tutorial		Tutorialspoint
Learn Javascript Tutorial		Javatpoint
Javascript Intro		

12.TESTNG - BEGINNER

Course name	Length	Author
TestNG Tutorial		Tutorialspoint
What is TestNG		Guru99
TestNG Javapoint		JavatPoint
TestNG Tutorial with Selenium		ToolsQA
TestNG Tutorials for Beginners		Techbeamers

TestNG Tutorial		Softwaretestinghelp
TestNG Anotations		Swtestacademy
TestNG Tutorial		JournalDev

13.PROTRACTOR - BEGINNER

Course name	Length	Rating
Protractor Testing Tool for End to End		Softwaretestinghelp
Protractor Testing tutorial		Guru99
Learn Protractor Testing		Egghead.io

14.MONGODB - BEGINNER TO ADVANCED

Course name	Length	Author
Learn MongoDB		MongoDB University
MongoDB Tutorial		Tutorialspoint
Introduction to MongoDB		YouTube
Learn MongoDB		JavaTpoint
MongoDB Tutorial		QuackIT
MongoDB Tutorial		Studytonight
MongoDB Tutorial		Dataflair Training
MongoDB Tutorial		i2Tutorials

15.LINUX - BEGINNER

Course name	Length	Author
Linux Tutorial - Learn the Bash		Ryanstutorials
Linux - Unix Tutorial		Guru99
Linux Tutorial		Tutorialspoint
Learn Linux		Javatpoint
Linux Beginner Tutorials		Linux
Beginner and Advance Linux		Tecmint
Bash Guide		Machtelt Garrels
Linux Tutorials		Linuxconfig

16.JSON - BEGINNER

Course name	Length	Author
JSON Tutorial		Tutorialspoint
JSON introduction		W3schools
JSON Crash Course		Youtube
JSON Tutorial for Beginners		Youtube
Learn JSON		Javatpoint
The Complete JSON tutorial		Codewall

17.iOS - DEV - BEGINNER

Course name	Length	Author
Swift Programming Tutorial		YouTube
iOS App Development		Udemy
Swift Programming for Beginners		Udemy
Swift for Beginners		Udacity
Programming in Swift Fundamentals		RayWenderLich
Swift from Scratch		Weheartswift

18.CI/CD & Devops - WHAT IS IT? - BEGINNER

Course name	Length	Author
Continuous Integration		Thoughtworks
What is Continuous Integration		Atlassian
What is CI/CD		Nevercode
CI/CD Essentials		Codeship
What is CI/CD		Codemaze
CI/CD Explained		Amazon
Vad är Devops och CI		Rightpeoplegroup

CI, CD, Devops		FrontIT
CI och CD		AddQ

19.C# - BEGINNER

Course name	Length	Author
C# Full Course		YouTube
C# Beginner		Tutorialspoint
C# Tutorial		Guru99
C# Tutorial		W3Schools
Complete C# Tutorial		Csharp
C# Spellista		YouTube
C# Tutorial		ZetCode
Best C# Tutorials		Stackify
Learn C#		Hackr.io

20.XML- BEGINNER

Course name	Length	Author
XML Tutorial		W3Schools
Learn XML		Tutorialspoint
Learn XML		Webucator
XML Tutorial for Beginners		Beginnersbook
XML Tutorial		JavaTpoint
XML Tutorial		XMLMaster

21.FITNESSE - BEGINNER

Course name	Length	Author
Getting started with Fitnesse		DZone
Fitnesse for beginners		Softwaretestinghelp
Fitnesse Userguide		ButUncleBob
Automation using Fitnesse		InfoStretch
Sample project using Fitnesse		AbodeQA
Using Fitnesse with .NET		RedGate

22.SPECFLOW - BEGINNER

Course name	Length	Author
Specflow+ Getting Started		Specflow
Specflow Tutorial		Softwaretestinghelp
Specflow Tutorial with Selenium and C#		ToolsQA
Specflow Beginner Tutorial		Ikeptwalking
Behavior Driven Development - Specflow		Tutorialspoint
Specflow Project Setup		Testautomationtribe

Specflow Tutorial		Softpost
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23.SPRING - BEGINNER

Course name	Length	Author
Spring Tutorial		Tutorialspoint
Learn Spring		JavatPoint
Spring Guides		Spring IO
Spring Tutorial		Baeldung
Spring Core Tutorial		JournalDev
Spring Tutorial - Getting Started		Edureka
Spring Tutorials		HowtoDoinJava
Introduction to Spring Framework		Java2Blog

24.PYTHON - BEGINNER

Course name	Length	Author
Python Tutorial		W3Schools
Python Tutorial		Tutorialspoint
Python the basics		LearnPython
Python Tutorial for Beginners		YouTube
Learn Python		YouTube
Python 3 Tutorial		Programiz
Python Tutorial for Beginners		Guru99
Learn Python Tutorial		JavatPoint
Best Python Tutorials		Freecodecamp
Python Tutorial		JournalDev
Learning Python		Docs Python Guide
Python Tutorial for Beginners		Intellipat
Getting Started with Python		Data Flair Training
Python Basics		Edx

25.TDD

Course name	Length	Author
What is TDD?		Guru99
TDD		Freecodecamp

Introduction to TDD		Hackermoon
What is TDD?		Squash
What is TDD?		Techopedia
What is TDD?		YouTube
TDD - Easy Explained		YouTube
Introduction to TDD		AgileData

26.APPIUM

Course name	Length	Author
Appium Tutorial		ToolsQA
What is Appium?		Guru99
Appium		Swtestacademy
Appium for Beginners		Edureka
Step by Step Appium		Automationtesting
Getting started Appium		Appium

27.AI

Course name	Length	Author
Introduction to AI		Udemy
How to test Software that uses AI and Machine Learning		Dzone
5 Ways AI will change Software testing		Techbeacon

What is AI?		Guru99
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28.What is an API?

Course name	Length	Author
What is an API?		YouTube
Web Services API		Udemy

29. Maven

Course name	Length	Author
Maven Fundamentals		Tutorialspoint
Maven in 5 Minutes		Maven Apache
Apache Maven Tutorial		Baeldung
Learn Maven Tutorial		Javatpoint
Maven Tutorial		Jenkov
Maven Tutorial for Beginners		Guru99
Maven Basics for Java		Devdungeon
How to get Started with Maven		Adityasrdir
Building Java Projects with Maven		Spring.io
Beginners Guide to Creating a project with Maven		Dzone

30. SoapUI

Course name	Length	Author
What is SoapUI?		Guru99

31. Splunk

Course name	Length	Author
Splunk Tutorial		Tutorialspoint
What is Splunk?		Guru99
Splunk Tutorial		Intellipaat
What is Splunk?		Geek University
Splunk		Docs splunk
Splunk Fundamentals		Splunk

32. Node.js

Course name	Length	Author
Node.js		W3Schools
Node.js Tutorial		Tutorialspoint
Learn Node.js in 3 days		Guru99
Learn Node.js		JavatPoint
Node.js Tutorials		Tutorialsteacher
Learn Node.js		YouTube
Node.js Tutorial for Beginners		YouTube

Node.js Tutorial Step By Step		Airpair
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33.TCP/IP

Course name	Length	Author
TCP/IP		Tutorialspoint
IPV6		Tutorialspoint
TCP/IP Basics		Xahlee.info
TCP/IP		W3schools

34. Teamcity

Course name	Length	Author
TeamCity Basic		
Creating a project in Teamcity		
Teamcity Tutorial		
Getting started with Teamcity		
TeamCity User Guide		

35.Tosca

Course name	Length	Author
Tosca Guide		Udemy
Tosca Test Automation Suite		ToolsQA
Tosca TestSuite Tutorial		AutomationTalks

Tricentis Tosca		YouTube
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36.Eggplant

Course name	Length	Author
Eggplant Tutorial		YouTube
Eggplant Training and Certifications		Eggplant
Eggplant Videos		Testplant
An Overview of Eggplant		SearchSoftwareQuality

37.Kubernetes

Course name	Length	Author
Learn Kubernetes Basics		Kubernetes.io
Step By Step Kubernetes		Auth
Kubernetes Tutorial		Tutorialspoint
Kubernetes Tutorial		Guru99
70 Best Kubernets Tutorial		AquaSec
Introduction to Kubernetes		DigitalOcean
Kubernetes - Learn The Basics		Dev.to
Självstudie om Kubernetes		Microsoft

38. Robot Framework

Course name	Length	Author
Robot Framework		Tutorialspoint
Robot Framework Tutorial		Udemy
Robot Framework Tutorial		Testproject.io
RPA		Devopedia
Robot Framework		Testingbot

39. SOGETI/PLURALSIGHT

1. Test Automation A & Performance A Curriculum

Role Description

As a Test Automation Engineer you have a focus on the functional aspects of the test object, as a Performance Tester you focus on the non-functional aspects of the test object, both using latest tooling.

Expected Skills

<u>Skill</u>	<u>Area</u>	<u>Course</u>
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Agile / Scrum	Agile	Introduction to Agile Software Development
	Agile Fundamentals	Agile Fundamentals
	Kanban Fundamentals	Kanban Fundamentals
	Kanban Fundamentals	Kanban Fundamentals: Using Kanban in IT and Software Development
	Scrum Fundamentals	Scrum Fundamentals
	Scrum Fundamentals	Software Practices (SCRUM): SCRUM Roles
Database	SQL	Introduction to SQL
DevOps	DevOps	DevOps Testing and Delivery
	DevOps	DevOps Methodologies and Development
Json	Json	Java: JSON Fundamentals
Performance monitoring and tuning	Performance monitoring and tuning	Java performance tuning
	Performance monitoring and tuning	Windows Performance Monitoring Fundamentals

	Performance monitoring and tuning	SQL server - optimizing stored procedure performance
	Performance monitoring and tuning	Linux Performance Monitoring Fundamentals
	Performance monitoring and tuning	SQL Server: Improving Storage Subsystem Performance
Performance Testing	Cluster Testing	
	Endurance Testing	
	Failover Testing	
	Load Testing	Load Testing with Visual Studio 2013
	Performance Testing	Application performance engineering elements
	Performance Testing	Introduction to performance testing
	Performance Testing	Microsoft Azure performance testing

	Performance Testing	<u>Introduction to Application Performance Engineering</u>
	Performance Testing	<u>Real world web performance</u>
	Performance Testing	<u>Measuring DotNet performance</u>
	Performance Testing	<u>Application performance engineering fundamentals</u>
	Scalability Testing	
	Stress Testing	
	Volume Testing	
Performance testing tools	HP LoadRunner	<u>Web training: HP LoadRunner - Working with Graphs & Reports</u>
	HP LoadRunner	<u>Web training: HP LoadRunner - Enhancing Vuser Scripts</u>
	HP LoadRunner	<u>Web training: HP LoadRunner basics and installation, working with Vugen</u>
	HP LoadRunner	<u>Web training: HP LoadRunner -The Controller & Executing and Analyzing Scenarios</u>
	HP LoadRunner	<u>Web: HP LoadRunner 12 Essentials: Working with Controller and Analysis</u>

	Jmeter	Web training: Comprehensive JMeter Operations
	Jmeter	Web training: Jmeter Architecture and Operations
	Jmeter	Book: Pro Jmeter: Web application performance testing
	JMeter	JMeter: Getting Started
	Jmeter	Book: Jmeter: A practical beginners guide to automated testing and performance measurement for your websites
	Jmeter	Web training: Performance testing and JMeter
Programm ing languages	Python	Python Basics
	Python	Automation Programming With Python
	Testing with Java	Intro to Testing with Java
Script	JavaScri pt	HTML, CSS, and JavaScript: The Big Picture
	JavaScri pt	JavaScript Fundamentals
	JavaScri pt	JavaScript Fundamentals
	JavaScri pt	JavaScript: Using Variables and Working with Numbers and Strings
Test automatio n	Test automati on	Test Automation: End to End

	Test automati on	Automated Web Testing with Selenium and WebDriver Using Java
	Test automati on	Test Automation Patterns
	Test automati on	Getting Started with Web API Test Automation in Java
	Test automati on	Test Automation: The Big Picture
Test Design Technique s	Test Design Techniq ues	Grundläggande testdesign
	Test Design Techniq ues	Tillämpad testdesign
Test Managem ent Tool incl Bug Reporting	Jira getting started	Jira getting started
	Scrum develop ment with jira agile	Scrum development with jira agile
TMAP Suite	TMAP	TMAP Next Test Engineer
Tools	Cucumb er	Beginning Cucumber and Behavior-driven Development

	Jenkins	Working with Jenkins: Fundamentals
	Selenium	Introduction to Automated Testing with Selenium
	Selenium	Selenium and java
	SoapUi	Testautomatisering med soapui
XML *	XML	XML Fundamentals

Expected Certifications

Java

[ISTQB Foundation](#)

[TMAP Next Test Engineer](#)

[ISTQB Certified Performance Tester](#)

2.Senior Test Automation Curriculum B

Role Description

You are an independent Test Automation Engineer. You are involved in the automated verification and validation of products made by engineers in a

development process. Your technical and professional knowledge of Test Automation, programming, test environments and methodologies is solid. With your knowledge and experience with one or more tools and techniques, you can independently design and execute test automation solutions. Obviously you follow the latest developments in your field and you know what is going on.

<u>Skill</u>	<u>Area</u>	<u>Course</u>
CI/CD	CI/CD	Continuous Integration
	CI/CD	Continuous Integration and Continuous Delivery: The Big Picture
	CI/CD (VSTS + Azure)	Continuous Integration and Continuous Deployment
Database	MongoDB	Introduction to MongoDB
	Oracle	Oracle Database 12c Fundamentals
DevOps	DevOps	DevOps Methodologies and Development
Linux	Linux	Getting Started with the Linux Command Line
	Linux	Getting started with Linux
Programming languages	Python	Web Programming with Python and JavaScript
Script	JavaScript	JavaScript Objects and Prototypes
	JavaScript	Practical Design Patterns in JavaScript
	JavaScript	JavaScript Fundamentals
Test automation	Java	Automated Software Testing: Practical Skills for Java Developers
	Test automation	Creating an Automated Testing Framework With Selenium
Tools	Docker	Docker in Production Using Amazon Web Services
	Docker	Docker and Containers: The Big Picture

Jenkins	Working with Jenkins: Fundamentals
Jenkins	Intermediate Jenkins Considerations
Jenkins	Getting Started With Jenkins Continuous Integration

3. Test Automation Specialist C

Role Description

You are a leading Test Automation Engineer who can set up a complete test automation solution at concept level. Your clear vision allows you to persuade colleagues and customers with valid arguments. As Test Automation Specialist you have in-depth knowledge of at least one expertise in the field of test automation tools and techniques. This knowledge enables you to engage in the automated verification and validation of products that engineers have developed.

Expected Skills

<u>Skill</u>	<u>Area</u>	<u>Course</u>
Cloud	AWS	AWS Certified DevOps Engineer: Continuous Delivery and Automation
	Azure	Microsoft Azure Developer: Performing Unit Testing & Integration Testing
	Azure	Microsoft Azure Developer: Performing Data Integrity Testing
	Azure	Microsoft Azure Developer: Performing

		<u>Automated End-to-end Testing</u>
	Google	<u>Google: Professional Cloud Architect</u>
Infra knowledge(container, network technologies)	Docker	<u>Managing Containers with Docker</u>
Test automation	Development	<u>Certified Scrum Developer</u>
	Development	<u>Certified Scrum Professional®</u>
	Java	
	TDD	<u>Modern TDD in .Net</u>
	TDD	<u>TDD – Testdriven utveckling</u>
Test Automation Tools	Jenkins	<u>Building and Administering Complex Jenkins Projects</u>

4. Agile Test Engineer A

Role Description

As an Agile Test Engineer you have completed the basic training and you are actively furthering yourself through assignments and training in the test discipline. The development of your competences in terms of hard skills and soft skills is a priority. Gaining experience in the execution of assignments is essential in this phase of your career.

Expected Skills

<u>Skill</u>	<u>Area</u>	<u>Course</u>
Agile / Scrum	Agile	<u>Introduction to Agile Software Development</u>
	Agile	<u>Agile Vs. DevOps: What's the difference?</u>
	Agile Fundamentals	<u>Agile Fundamentals</u>
	Kanban Fundamentals	<u>Kanban Fundamentals: Using Kanban in IT and Software Development</u>
	Kanban Fundamentals	<u>Kanban Fundamentals</u>
	Scrum Fundamentals	<u>Software Practices (SCRUM): SCRUM Roles</u>
	Scrum Fundamentals	<u>Scrum Fundamentals</u>
DevOps	DevOps	<u>DevOps Testing and Delivery</u>
	DevOps	<u>DevOps Methodologies and Development</u>
Json	Json	<u>Getting Started with JSON in C# Using Json.NET</u>
	Json	<u>Java: JSON Fundamentals</u>
Programming languages	Python	<u>Python Automation Programming 2</u>
	Python	<u>Python Basics</u>

	Testing with Java	Intro to Testing with Java
Risk analysis	Risk Analysis	Product Risk Analysis
SQL	SQL	Introduction to SQL
Test Automation	Test Automation	Test Automation: End to End
	Test Automation	Test Automation Patterns
	Test Automation	Test Automation: The Big Picture
Test automation tools	Cucumber	Beginning Cucumber and Behavior-driven Development
	Selenium	Selenium and java
	Selenium	Introduction to Automated Testing with Selenium
	SoapUI	Testautomatisering med soapui
Test design techniques	Test Design	Grundläggande testdesign
	Test Design	Tillämpad testdesign
Test Management Tool incl Bug Reporting	jira	Scrum development with jira agile
	Jira	Jira getting started
TMAP Suite	TMAP	TMAP Lifecycle

	TMAP	Essentials of TMAP
	TMAP	TMAP Next Test Engineer
XML	XML	XML Fundamentals

Expected Certifications

[ISTQB Foundation Syllabus](#)

[ISTQB Agile Tester](#)

[ISTQB Agile Tester \(MyLearning\)](#)

[ISTQB Acceptance Testing](#)

[TMAP Next Test Engineer](#)

5. Agile Test Engineer B

Role Description

You are an experienced Agile Test Engineer who can work in various environments. You have demonstrable relevant work experience in Agile projects for clients for at least 3 years. Automation plays an important role in your test activities and you understand and use the tooling to support this.

Expected Skills

<u>Skill</u>	<u>Area</u>	<u>Course</u>
Agile / Scrum	Scrum	Scrum Master Fundamentals - Foundations
Coaching*	Developing Successful Coaching Relationships	Developing Successful Coaching Relationships

	Driving Change with Coaching	Driving Change with Coaching
Cognitive QA	AI	Microsoft Azure Cognitive Services: Face API
	AI	Getting Started with Building Bots with Microsoft's Bot Framework
	AI	Microsoft Azure Cognitive Services: The Big Picture
	Machine Learning	Getting Started with Azure Machine Learning
	Machine Learning	Understanding Machine Learning with Python
	Machine Learning	Understanding Machine Learning
Program Languages	Python	Web Programming with Python and JavaScript
Risk analysis	Product Risk Analysis	Product Risk Analysis
Test automation	Test automation	Test Automation: The Big Picture
	Test automation	Test Automation: End to End
	Test automation	Test Automation Patterns
Test automation tools	Cucumber	Beginning Cucumber and Behavior-driven Development

	Selenium	Introduction to Automated Testing with Selenium
	Selenium	Selenium and java
	SoapUI	Testautomatisering med soapui
Test Management	Master Test Plan	Master Test Plan
	Test Metrics	Test Metrics
	Test Planning & Management	Test Planning & Management
	Testing & Politics	Testing & Politics
	Thinking Strategically as a Manager	Thinking Strategically as a Manager
Test Management Tool incl Bug Reporting	Jira	Scrum development with jira agile
	Jira	Jira getting started
TMAP Suite	Essentials of TMAP	Essentials of TMAP
	TMAP Lifecycle	TMAP Lifecycle
	TMAP Next Test Engineer	TMAP Next Test Engineer
Expected Certifications		
		Scrum master certification

6. Agile Test Engineer C

Role Description

You are a very experienced Agile Test Engineer with respect and influence on customers and colleagues. You have experience with coaching, supervision of Agile Test Professionals and various test methods and test organizations.

Expected Skills

<u>Skill</u>	<u>Area</u>	<u>Course</u>
Agile/Scrum	Agile	PMI-ACP®: Agile Development, Quality, and Testing Practices
	Scrum	Certified Scrum Professional®-ScrumMaster
	Scrum	Advanced Certified ScrumMaster
	Scrum	Certified Scrum Product Owner
	Scrum	Advanced Certified Scrum Product Owner
	Scrum	Certified Scrum Professional®-Product Owner
BDD	BDD	Java: BDD Fundamentals
Continuous integration and QA	Continuous Testing	Continuous Testing
TDD	TDD	Test-driven Development: The Big Picture
	TDD	Outside-In Test Driven Development SPA Edition

Expected Certifications

[ISTQB Advanced Level Test Manager](#)

[Lean Six Sigma Green Belt](#)

[SAFe Overview](#)

[PMI Agile Certified Practitioner \(PMI-ACP\)®](#)

7. Development Test Engineer A

Function DevOps QA A

Role Development Test Engineer

Role Description

Your ambition goes more towards DevOps Engineer than Test Engineer. Testing is for you a focus on quality in automation, programming and deploying software. Working with the latest tooling is natural for you. You have experience in modern environments.

Expected Skills

<u>Skill</u>	<u>Area</u>	<u>Course</u>
Agile / DevOps	DevOps	<u>Implementing DevOps in the Real World</u>
	DevOps	<u>DevOps: The Big Picture</u>
Agile / Devops	DevOps	<u>Agile Vs. DevOps: What's the difference?</u>

Continuous integration technologies	AWS	Getting Started with Amazon Web Services
	Azure	Introduction to Azure App Services
	Azure	Microsoft Azure: The Big Picture
	Azure	Azure Functions Fundamentals
	GIT	How Git Works
	GIT	Git Fundamentals
	GIT	Getting Started with Git
	Google	Introduction to Google Cloud
	Google	Google Cloud Platform Fundamentals
	Google	Google Cloud Functions: Getting Started
Databases	Maven	Maven Fundamentals
	Oracle	Oracle Database 12c Fundamentals
Dev tools	SQL	Introduction to SQL
	Eclipse	Eclipse Guided Tour for Java
	Visual Studio	Visual Studio 2019
Exploratory test	Testing	What is Exploratory Testing
Infra knowledge(contai	Managing Containers	Managing Containers with Docker

ner, network technologies)	with Docker	
	TCP/IP	TCP/IP Networking for Developers
Pipelines	CI/CD	Continuous Integration
	CI/CD	Continuous Integration and Continuous Delivery: The Big Picture
	Microservices	Microservices Deployment and Continuous Integration
Programming languages	Java	Java Fundamentals: The Core Platform
	Java	Getting Started with Web API Test Automation in Java
	Java	Java Fundamentals: The Java Language
	Java	Java Fundamentals: Generics
	Python	Python: Getting Started
	Python	Python: Variables, Data Types, and Conditionals
	Python	Python: The Big Picture
	Python	Python Fundamentals
Test automation	Postman	Postman Fundamentals
	Selenium	Selenium automated web testing fundamentals
	SoapUI	Guru99 SoapUI Intro

Tools	Test Automation	<u>Automated Testing: End to End</u>
	XML	<u>XML Fundamentals</u>
	Docker	<u>Docker and Containers: The Big Picture</u>
	Docker	<u>Introduction to Docker on Windows with Visual Studio 2017</u>
	Jenkins	<u>Working with Jenkins: Fundamentals</u>
	Jenkins	<u>Getting Started With Jenkins Continuous Integration</u>
	Jenkins 2	<u>Getting Started with Jenkins 2</u>
	Jira	<u>Jira: Getting Started</u>
	Jira	<u>JIRA Fundamentals</u>
	Splunk	<u>Using your Data with Splunk</u>
	Splunk	<u>Analyzing Machine Data with Splunk</u>
	Splunk	<u>Splunk Visualizations and Dashboards</u>
	Splunk	<u>Splunk administration</u>
	Splunk	<u>Splunk Fundamentals</u>
	TeamCity	<u>Getting Started with TeamCity</u>
	Trello	<u>Trello: Sign in & Setup</u>
	Trello	<u>Trello: Managing Cards</u>

Trello	Trello: Creating teams and boards
Trello	Trello: Finding & Sharing info

Expected Certifications

[ISTQB Agile Tester Foundation](#)

[Java Foundation OCA Java SE8 Programmer 1](#)

[TMap test engineer](#)

8.Senior Development Test Engineer B

Function	DevOps QA B
Role	Senior Development Test Engineer

Role Description

Testing means for you having a focus on quality in automation, programming and deploying software. Working with the latest tooling is natural for you. You consider yourself more as a Dev Engineer than Test Engineer. You have experience in modern environments.

Expected Skills

<u>Skill</u>	<u>Area</u>	<u>Course</u>
Agile / DevOps	DevOps	DevOps Skills for Developers with Visual Studio and TFS 2017
	DevOps	Implementing DevOps in the Real World
	Scrum	Scrum Master Fundamentals - Foundations

CI/CD	CI/CD	<u>Building a Continuous Delivery Pipeline with TFS and Visual Studio 2015</u>
	CI/CD	<u>Building an Azure Continuous Integration Pipeline</u>
	CI/CD	<u>Feature Toggles, Package Management and Versioning in Microsoft TFS and VSTS 2017</u>
	CI/CD	<u>Continuous Delivery and DevOps with Azure DevOps: The Big Picture</u>
	CI/CD	<u>Source Control with Microsoft TFS/VSTS and Visual Studio 2017</u>
	CI/CD	<u>Continuous Delivery and DevOps with TFS and VSTS 2018, Managing Builds</u>
	CI/CD	<u>Continuous Integration and Continuous Delivery: The Big Picture</u>
	CI/CD	<u>Continuous Delivery and DevOps with TFS and VSTS 2018, Release Management</u>
	CI/CD	<u>Building a Deployment Pipeline for .NET Applications</u>
	DevOps	<u>Continuous Delivery and DevOps with TFS and VSTS 2018, Release Management</u>
	DevOps	<u>DevOps Skills for Developers with Visual Studio and TFS 2017</u>

Cloud	DevOps	<u>Securing Cloud DevOps in PaaS, IaaS, and SaaS Settings</u>
	AWS	<u>AWS Certified Developer - Associate</u>
	Azure	<u>Microsoft Azure Developer: Performing Unit Testing & Integration Testing</u>
	Azure	<u>Microsoft Azure for Developers: What to Use When</u>
	Google	<u>Google Cloud Functions Fundamentals</u>
	Google	<u>Deploying Containerized Workloads Using Google Cloud Kubernetes Engine</u>
	Google	<u>Choosing and Implementing Google Cloud Compute Engine Solutions</u>
Cognitive QA	Google	<u>Using Google's Cloud For Developers - Google BigQuery</u>
	AI	<u>Microsoft Azure Cognitive Services: The Big Picture</u>
	AI	<u>Microsoft Azure Cognitive Services: Face API</u>
	AI	<u>Getting Started with Building Bots with Microsoft's Bot Framework</u>
	Continuous testing	<u>Continuous Testing with Ncrunch</u>
	Machine Learning	<u>Understanding Machine Learning</u>

	Machine Learning	Getting Started with Azure Machine Learning
	Machine Learning	Understanding Machine Learning with Python
	Microservices	Google Cloud Functions Fundamentals
Dev		
Infra knowledge(container, network technologies)	Managing Containers with Docker	Managing Containers with Docker
	TCP/IP	Docker Networking
Programming languages	Node.JS	Advanced Node.js
	Python	Web Programming with Python and JavaScript
	Python	Web Programming with Python and JavaScript
SQL	SQL	SQL Server: Understanding and Using Azure SQL Database
	SQL	Advanced SQL Queries in Oracle and SQL Server
Test automation	Azure	Microsoft Azure Developer: Performing Automated End-to-end Testing
	Azure	Microsoft Azure Developer: Performing Data Integrity Testing
	DevOps	Test-driven Development: The Big Picture
	DevOps	Testing Automation: The Big Picture

Tools	Json	<u>Getting Started with JSON in C# Using Json.NET</u>
	Json	<u>Java: JSON Fundamentals</u>
	Selenium	<u>Creating an Automated Testing Framework With Selenium</u>
	Selenium	<u>Automated Web Testing with Selenium and WebDriver Using Java</u>
	XML	<u>XML Fundamentals</u>
	Docker	<u>Docker in Production Using Amazon Web Services</u>
	Docker	<u>Continuous Delivery Using Docker And Ansible</u>
	Docker	<u>Docker and Containers: The Big Picture</u>
	Jenkins	<u>Intermediate Jenkins Considerations</u>
	JMeter	<u>Performance Testing and JMeter</u>
	Splunk	<u>Using Splunk for Data Analysis</u>

Expected Certifications

[ISTQB Agile Tester](#)

[Java Professional Certification OCA](#)

9. Development Test Expert C

Function DevOps QA C

Role Development Test Expert

Role Description

You are a very experienced Dev Test Engineer with respect and influence on customers and colleagues. You have experience with coaching and setting up new DevOps teams. Testing means for you a focus on quality in automation, programming and deploying software. Setting up the latest tooling is natural for you. You consider yourself more as a Dev Engineer than Test Engineer. You have several years of experience in modern environments with various clients.

Expected Skills

<u>Skill</u>	<u>Area</u>	<u>Course</u>
Cloud	AWS	<u>AWS Certified DevOps Engineer: Continuous Delivery and Automation</u>
	AWS	<u>DevOps Engineering on AWS</u>
	Google	<u>Google: Professional Cloud Architect</u>
Infra knowledge(container, network technologies)	Docker	<u>Managing Containers with Docker</u>

Test automation	Development	<u>Certified Scrum Professional®</u>
	Development	<u>Certified Scrum Developer</u>
	DevOps	<u>Orchestration and Automation: The Big Picture</u>
	DevOps	<u>Continuous Monitoring: The Big Picture</u>
	Testing	<u>DevOps Testing</u>
Tools	Jenkins	<u>Building and Administering Complex Jenkins Projects</u>

Expected Certifications

[Microsoft Azure DevOps Solutions](#)

[Microsoft Certified: Azure DevOps Engineer Expert](#)

[AWS Certified DevOps Engineer - Professional](#)