Containerization Architect

Certification

The Next-Gen IT Academy from Arcitura is dedicated to providing an ever-growing variety of training courses and accreditations in contemporary technologies and fields of practice within the IT industry. Important and modern innovations that are redefining the IT landscape and that have reached a sufficient state of maturity are researched and documented into sets of courses that form the basis for formal certifications.

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12 Arcitura Certification Programs

Arcitura®
CERTIFIED
Containerization Architect

TRAINING & CERTIFICATION

The Containerization Architect track is comprised of three courses that develop skills in containerization technology and architecture, along with proficiency in assessing, designing and securing highly available container-hosted services and solutions. The final course module consists of a series of lab exercises that require participants to apply their knowledge of the preceding courses in order to fulfill project requirements and solve real world problems. Completion of these courses as part of a virtual or on-site workshop results in each participant receiving an official digital Certificate of Completion, as well as a digital Training Badge from Acclaim/Credly.

To achieve the Containerization Architect Certification, Exam CN90.01 must be completed with a passing grade. A Certified Containerization Architect understands how containerization technology can be utilized to deliver highly available, scalable and optimized business solutions. In addition to a deep understanding of the inner workings of containerized environments and multitenancy technology, the Certified Containerization Architect is proficient with the design of containerization-based technology architectures, including the utilization of container engines, templates and management solutions that encompass monitoring, scheduling, storage management and rapid deployment. Those who achieve this certification receive an official digital Certificate of Excellence, as well as a digital Certification Badge from Acclaim/Credly with an account that supports the online verification of certification status.

For more information, visit: www.arcitura.com/containerization

Acclaim | Credly

EXAM CN90.01

Exam CN90.01 can be taken worldwide at Pearson VUE testing centers or via Pearson VUE online proctoring. To learn more about scheduling this exam, visit www.pearsonvue.com/arcitura. This exam can also be made available for on-site proctoring as part of eligible public or private workshops. To learn more, visit www.arcitura.com/onsite.

It is recommended that you prepare for Exam CN90.01 by acquiring the Containerization Architect Certification eLearning kit bundle or the printed Containerization Architect Certification study kit bundle or by attend ing an instructor-led workshop that includes the Containerization Modules 1, 2 and 3. The current public workshop calendar can be viewed at www.arcitura.com/workshops. To learn more about having a private workshop delivered at your location, visit www.arcitura.com/private.

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Fundamental Containerization

MODULE
01

This course provides comprehensive coverage of containerization models, technologies,mechanisms and environments. How the utilization of containers impacts both the technology and business of an organization are covered, along with many technical features, characteristics and deployment environments.

The following primary topics are covered:

- A Brief History of Containerization
- Traditional Linux Containers and the Evolution of Contemporary Containers
- Containers vs. Virtual Machines and Server Virtualization
- LXC/LDX, Docker and Kubernetes
- Technical and Business Benefits and Challenges of using Containers
- Fundamental Container Architectural Models
- Container Engines, Build Files and Images
- Cloud-based Containers and Container Pods
- Fundamental Container Scalability and Availability
- Container Configuration Management
- Containers and Immutable Infrastructure Resources
- Containers and Infrastructure as Code (IaC) and Configuration as Code (CaC)
- Containerizing Stateful Applications
- Containers and Namespaces
- Fundamental Containerization Patterns and Mechanisms
- Rich Containers and Serverless Deployment
- Container Chains and Sidecars
- Application Mobility with Containers
- How Containers Relate to and Support Microservices and Machine Learning
- Utilizing Containers with DevOps and CI/CD

MORE INFO

For curriculum information, visit:
www.arcitura.com/nextgen

CONTENTS

This course is available as part of an Arcitura Study Kit in full-color printed and eLearning formats. In addition to the base course materials used during training workshops, additional materials designed for self-study purposes are also included.

- Workbook (1 of 3)
- Exam Preparation Guide (1 of 3)
- Mind Map Poster
- Symbol Legend Poster
- Flashcards
- Video Lessons (eLearning only)

eLEARNING

The eLearning kit provides enhanced features for self-study, including custom annotations and commenting, outline-driven navigation, custom bookmarks, multi-document viewing and full-text searching. This environment also enables online and offline access without the need to install any software.

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Containerization Technology & Architecture

MODULE
02

This course provides a deep-dive into containerization architectures, hosting models, deployment models and utilization by services and applications. Numerous advanced topics are covered, including high performance requirements, clustering, security and lifecycle management.

The following primary topics are covered:

- Hyper Containers and Containers Deployment Models
- Customizing and Distributing Container Images
- Container Image Version Control
- Advanced Container Architectural Models
- Container Execution Environments
- Container Networking Model and Overlay Networking
- Managing and Controlling Container Traffic Types
- Container Storage Management and Shared Volume Management
- Container Configuration Descriptor
- Runtime Management and Volatile Configurations
- Container Clustering and Scalable Cluster Architectures
- Container Proxies and APIs
- Container Orchestration and Service Composition
- High-Availability Containers and Advanced Container Scalability
- Self-Healing Applications with Containers
- Container Security Considerations and Digital Certificates
- Container Lifecycle Management and Monitoring Containers
- Container Backup and Recovery
- Advanced Containerization Patterns and Mechanisms
- Single-Node Multi-Containers and Multi-Container Isolation Control
- Leader Node Election and Micro Scatter Gather

MORE INFO

For curriculum information, visit:
www.arcitura.com/nextgen

CONTENTS

This course is available as part of an Arcitura Study Kit in full-color printed and eLearning formats. In addition to the base course materials used during training workshops, additional materials designed for self-study purposes are also included.

- Workbook (2 of 3)
- Exam Preparation Guide (2 of 3)
- Mind Map Poster
- Flashcards
- Video Lessons (eLearning only)

eLEARNING

The eLearning kit provides enhanced features for self-study, including custom annotations and commenting, outline-driven navigation, custom bookmarks, multi-document viewing and full-text searching. This environment also enables online and offline access without the need to install any software.

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Containerization Technology & Architecture Lab

MODULE
03

This course module presents participants with a series of exercises and problems that are designed to test their ability to apply their knowledge of topics covered in previous courses. Completing this lab will help highlight areas that require further attention and will help prove hands-on proficiency in containerization concepts, technologies, architecture models and pattern application, as they are utilized and combined to solve real-world problems.

For instructor-led delivery of this lab course, the Certified Trainer works closely with participants to ensure that all exercises are carried out completely and accurately. Attendees can voluntarily have exercises reviewed and graded as part of the class completion. For individual completion of this course as part of a study kit, a number of supplements are provided to help participants carry out exercises with guidance.

MORE INFO

For curriculum information, visit:
www.arcitura.com/nextgen

CONTENTS

This course is available as part of an Arcitura Study Kit in full-color printed and eLearning formats. In addition to the base course materials used during training workshops, additional materials designed for self-study purposes are also included.

- Workbook (3 of 3)
- Exam Preparation Guide (3 of 3)
- Mind Map Poster
- Flashcards

eLEARNING

The eLearning kit provides enhanced features for self-study, including custom annotations and commenting, outline-driven navigation, custom bookmarks, multi-document viewing and full-text searching. This environment also enables online and offline access without the need to install any software.

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DIGITAL TRANSFORMATION CERTIFICATIONS

DIGITAL TRANSFORMATION PROFESSIONAL ACADEMY

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	Digital Transformation Specialist	Digital Transformation Technology Professional	Digital Transformation Technology Architect	Digital Transformation Data Science Professional	Digital Transformation Data Scientist	Digital Transformation Security Professional	Digital Transformation Security Specialist	Digital Transformation IA Professional	Digital Transformation IA Specialist
MODULE 01 Fundamental Digital Transformation	●	●	●	●	●	●	●	●	●
MODULE 02 Digital Transformation in Practice	●	●	●	●	●	●	●	●	●
MODULE 03 Fundamental Cloud Computing		●	●						
MODULE 04 Fundamental Blockchain		●	●			●	●		
MODULE 05 Fundamental IoT		●	●						
MODULE 06 Cloud Architecture			●						
MODULE 07 Blockchain Architecture			●				●		
MODULE 08 IoT Architecture			●						
MODULE 09 Fundamental Big Data Analysis & Analytics				●	●				
MODULE 10 Fundamental Machine Learning				●	●				
MODULE 11 Fundamental AI				●	●			●	●
MODULE 12 Advanced Big Data Analysis & Analytics					●				
MODULE 13 Advanced Machine Learning					●				
MODULE 14 Advanced AI					●				●
MODULE 15 Fundamental Cybersecurity						●	●		
MODULE 16 Advanced Cybersecurity							●		
MODULE 17 Fundamental RPA								●	●
MODULE 18 Advanced RPA & Intelligent Automation									●

To learn more, visit:
www.arcitura.com/digitaltransformation

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Arcitura® CERTIFIED

NEXT-GEN IT CERTIFICATIONS

NEXT-GEN IT ACADEMY

		Certified DevOps Specialist	Certified Blockchain Architect	Certified Machine Learning Specialist	Certified Artificial Intelligence Specialist	Certified IoT Architect	Certified Cybersecurity Specialist	Certified RPA Specialist	Certified Business Technology Professional	Certified Containerization Architect
DevOps	MODULE 01 Fundamental DevOps	●								
	MODULE 02 DevOps in Practice	●								
	MODULE 03 DevOps Lab	●								
Blockchain	MODULE 01 Fundamental Blockchain		●							
	MODULE 02 Blockchain Technology & Architecture		●							
	MODULE 03 Blockchain Technology & Architecture Lab		●							
Machine Learning	MODULE 01 Fundamental Machine Learning			●						
	MODULE 02 Advanced Machine Learning			●						
	MODULE 03 Machine Learning Lab			●						
Artificial Intelligence	MODULE 01 Fundamental Artificial Intelligence				●					
	MODULE 02 Advanced Artificial Intelligence				●					
	MODULE 03 Artificial Intelligence Lab				●					
Internet of Things	MODULE 01 Fundamental IoT					●				
	MODULE 02 IoT Technology & Architecture					●				
	MODULE 03 IoT Technology & Architecture Lab					●				
Cybersecurity	MODULE 01 Fundamental Cybersecurity						●			
	MODULE 02 Advanced Cybersecurity						●			
	MODULE 03 Cybersecurity Lab						●			
RPA	MODULE 01 Fundamental RPA							●		
	MODULE 02 Advanced RPA & Intelligent Automation							●		
	MODULE 03 RPA Lab							●		
Business Technology	MODULE 01 Business Automation Technology Overview								●	
	MODULE 02 Data Science Technology Overview								●	
	MODULE 03 Digital & Security Technology Overview								●	
Containerization	MODULE 01 Fundamental Containerization									●
	MODULE 02 Containerization Technology & Architecture									●
	MODULE 03 Containerization Technology & Architecture Lab									●

To learn more, visit:
www.arcitura.com/nextgen

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CLOUD CERTIFIED PROFESSIONAL (CCP)

CLOUD SCHOOL

Arcitura® CERTIFIED

	Certified Cloud Professional*	Certified Cloud Technology Professional	Certified Cloud Architect	Certified Cloud Security Specialist	Certified Cloud Governance Specialist	Certified Cloud Storage Specialist	Certified Cloud Virtualization Specialist
MODULE 01 Fundamental Cloud Computing	●	●	●	●	●	●	●
MODULE 02 Cloud Technology Concepts	●	●	●	●	●	●	●
MODULE 03 Cloud Technology Lab		●					
MODULE 04 Fundamental Cloud Architecture			●				
MODULE 05 Advanced Cloud Architecture			●				
MODULE 06 Cloud Architecture Lab			●				
MODULE 07 Fundamental Cloud Security				●			
MODULE 08 Advanced Cloud Security				●			
MODULE 09 Cloud Security Lab				●			
MODULE 10 Fundamental Cloud Governance					●		
MODULE 11 Advanced Cloud Governance					●		
MODULE 12 Cloud Governance Lab					●		
MODULE 13 Fundamental Cloud Storage						●	
MODULE 14 Advanced Cloud Storage						●	
MODULE 15 Cloud Storage Lab						●	
MODULE 16 Fundamental Cloud Virtualization							●
MODULE 17 Advanced Cloud Virtualization							●
MODULE 18 Cloud Virtualization Lab							●

** The Certified Cloud Professional designation is automatically issued when achieving any other CCP certification. It can also be achieved by receiving passing grades on Exams C90.01 + C90.02.*

To learn more,
visit: www.arcitura.com/ccp

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BIG DATA SCIENCE CERTIFIED PROFESSIONAL (BDSCP)

BIG DATA SCIENCE SCHOOL

	Certified Big Data Professional*	Certified Big Data Science Professional	Certified Big Data Scientist	Certified Big Data Consultant	Certified Big Data Engineer	Certified Big Data Architect	Certified Big Data Governance Specialist
MODULE 01 Fundamental Big Data	●	●	●	●	●	●	●
MODULE 02 Big Data Analysis & Technology Concepts	●	●	●	●	●	●	●
MODULE 03 Big Data Analysis & Technology Lab		●		●			
MODULE 04 Fundamental Big Data Analysis & Science			●	●			
MODULE 05 Advanced Big Data Analysis & Science			●				
MODULE 06 Big Data Analysis & Science Lab			●				
MODULE 07 Fundamental Big Data Engineering				●	●		
MODULE 08 Advanced Big Data Engineering					●		
MODULE 09 Big Data Engineering Lab					●		
MODULE 10 Fundamental Big Data Architecture						●	
MODULE 11 Advanced Big Data Architecture						●	
MODULE 12 Big Data Architecture Lab						●	
MODULE 13 Fundamental Big Data Governance							●
MODULE 14 Advanced Big Data Governance							●
MODULE 15 Big Data Governance Lab							●

** The Certified Big Data Professional designation is automatically issued when achieving any other BDSCP certification. It can also be achieved by receiving passing grades on Exams B90.01 + B90.02.*

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SOA Certified Professional (SOACP)

SOA SCHOOL

Arcitura® CERTIFIED

		Certified SOA Professional*	Certified SOA Analyst	Certified SOA Architect	Certified Microservice Architect	Certified Service Tech Consultant	Certified Service API Specialist	Certified Service Governance Specialist	Certified Service Security Specialist
MODULE 01	Fundamental SOA, Services & Microservices	●	●	●	●	●	●	●	●
MODULE 02	Service Technology Concepts	○		●	●	●	●		●
MODULE 03	Design & Architecture w/ SOA, Services & Microservices	○	●	●				●	
MODULE 04	Fundamental SOA Analysis & Modeling w/ Services & Microservices		●						
MODULE 05	Advanced SOA Analysis & Modeling w/ Services & Microservices		●						
MODULE 06	SOA Analysis & Modeling Lab w/ Services & Microservices		●						
MODULE 07	Advanced SOA Design & Architecture w/ Services & Microservices			●					
MODULE 08	SOA Design & Architecture Lab w/ Services & Microservices			●					
MODULE 09	Fundamental Microservice Architecture & Containerization				●	●			
MODULE 10	Advanced Microservice Architecture & Containerization				●				
MODULE 11	Microservice Architecture & Containerization Lab				●				
MODULE 12	Fundamental Service API Design & Management					●	●		
MODULE 13	Advanced Service API Design & Management						●		
MODULE 14	Service API Design & Management Lab						●		
MODULE 15	Fundamental Service Governance & Project Delivery							●	
MODULE 16	Advanced Service Governance & Project Delivery							●	
MODULE 17	Service Governance & Project Delivery Lab							●	
MODULE 18	Fundamental Security for Services, Microservices & SOA					●			●
MODULE 19	Advanced Security for Services, Microservices & SOA								●
MODULE 20	Security Lab for Services, Microservices & SOA								●

** The Certified SOA Professional designation is automatically issued when achieving any other SOACP certification. It can also be achieved by receiving passing grades on Exams S90.01B + S90.02B or S90.01B + S90.03B.*

To learn more, visit:
www.arcitura.com/soacp

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