Cloud Security Specialist

Certification

Arcitura CERTIFIED
Cloud Security Specialist

Pearson | VUE

Arcitura On-Site EXAM PROCTORING

Acclaim Credly

The Cloud Certified Professional (CCP) program from Arcitura provides formal education and accreditation programs dedicated to fields of practice associated with Cloud Computing, including architecture, security, governance and specialized areas of cloud technology.

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Arcitura®
CERTIFIED
Cloud Security Specialist

TRAINING & CERTIFICATION

The Cloud Security Specialist track is comprised of CCP Modules 1, 2, 7, 8 and 9, the outlines for which are provided in the upcoming pages. 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.

A Certified Cloud Security Specialist has detailed knowledge of common security threats, security controls and associated technologies and practices related to securing cloud platforms, cloud services and associated cloud-based resources and infrastructure. Depending on the exam format chosen, attaining the Cloud Security Specialist Certification can require passing a single exam or multiple exams. 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/ccp/security.

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EXAM(S)

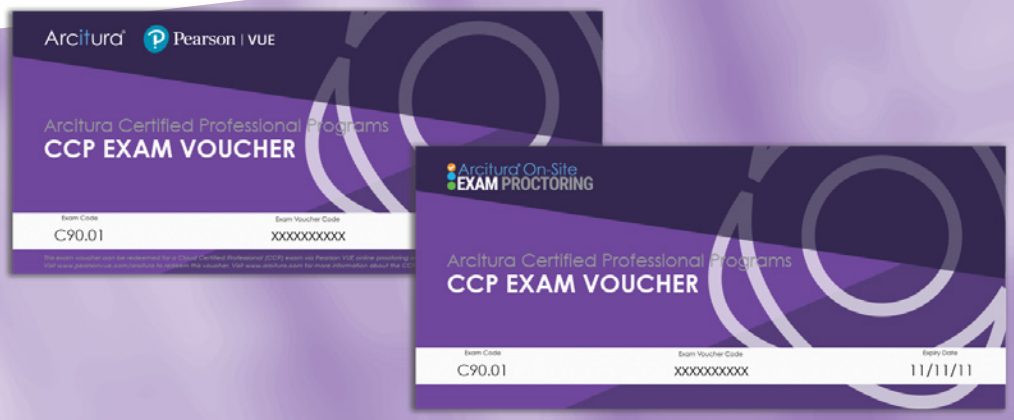
You can take exams anywhere in the world via Pearson VUE testing centers, Pearson VUE online proctoring and Arcitura on-site exam proctoring at your location.

You are provided with three flexible exam format options:

- Complete Exam C90.CSP, a single combined exam for the entire Cloud Security Specialist certification track. Recommended for those who want to only take a single exam that encompasses all course modules within this track.
- Complete the partial version of Exam C90.CSP. Recommended for those who have already obtained a CCP certification and would like to achieve the Cloud Security Specialist Certification without having to be retested on CCP Modules 1 and 2.
- Complete one module-specific exam for each course module in Cloud Security Specialist Certification track. This is recommended for those who want to progress gradually through the track and who would like to be assessed after each course module before proceeding to the next.

Visit www.arcitura.com/ccp/exams for more information. (Note that not all exam formats may be available via all exam delivery options.)

It is recommended that you prepare for the exam(s) by acquiring the Cloud Security Specialist Certification eLearning kit bundle or the printed Cloud Security Specialist Certification study kit bundle or by attending an instructor-led workshop that includes CCP Modules 1, 2, 7, 8 and 9. 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 Cloud Computing

MODULE
01

This foundational course provides end-to-end coverage of fundamental cloud computing topics as they pertain to both technology and business considerations. The course content is divided into a series of modular sections, each of which is accompanied by one or more hands-on exercises.

The following primary topics are covered:

- Fundamental Cloud Computing Terminology and Concepts
- Basics of Virtualization
- Specific Characteristics that Define a Cloud
- Understanding Elasticity, Resiliency, On-Demand and Measured Usage
- Benefits, Challenges and Risks of Contemporary Cloud Computing Platforms and Cloud Services
- Cloud Resource Administrator and Cloud Service Owner Roles
- Cloud Service and Cloud Service Consumer Roles
- Understanding the Software as a Service (SaaS) Cloud Delivery Model
- Understanding the Platform as a Service (PaaS) Cloud Delivery Model
- Understanding the Infrastructure as a Service (IaaS) Cloud Delivery Model
- Combining Cloud Delivery Models
- Public Cloud, Private Cloud, Hybrid Cloud and Community Cloud Deployment Models
- Business Cost Metrics and Formulas for Comparing and Calculating Cloud and On-Premise Solution Costs
- Formulas for Calculating and Rating SLA Quality of Service Characteristics

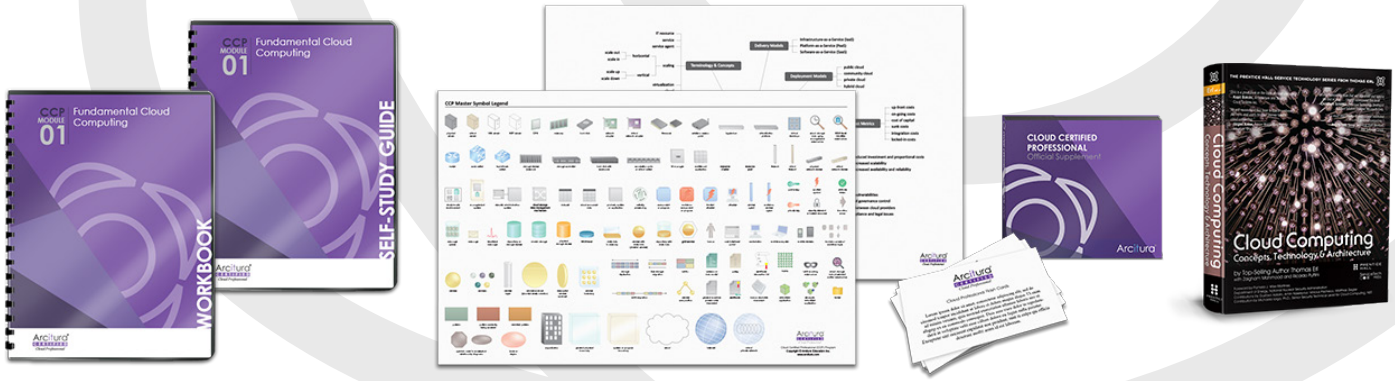
MORE INFO

For curriculum information, visit www.arcitura.com/ccp.

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
- Self-Study Guide
- Symbol Legend Poster
- Mind Map Poster
- Flashcards
- Cloud Computing eBook
- Audio Tutor Recordings (usb)



eLEARNING

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Cloud Technology Concepts

MODULE
02

This course explores a range of the most important and relevant technology-related topics that pertain to contemporary cloud computing platforms. The course content does not get into implementation or programming details, but instead keeps coverage at a conceptual level, focusing on topics that address cloud service architecture, cloud security threats and technologies, virtualization and containerization.

Proven technologies are defined and classified as concrete architectural building blocks called “mechanisms”. The purpose of this course is to introduce cloud computing-related technology topics in a manner that is accessible to a wide range of IT professionals, as well as to empower participants with an understanding of the fundamental mechanics of a cloud platform, how the different “moving parts” can be combined, and how to address common threats and pitfalls.

The following primary topics are covered:

- Cloud Computing Mechanisms that Establish Architectural Building Blocks
- Virtual Servers, Containers, Ready-Made Environments, Failover Systems and Pay-Per-Use Monitors
- Automated Scaling Listeners, Multi-Device Brokers and Resource Replication
- Understanding How Individual Cloud Computing Mechanisms Support Cloud Characteristics
- An Introduction to Containerization, Container Hosting and Logical Pod Containers
- A Comparison of Containerization and Virtualization
- Cloud Balancing and Cloud Bursting Architectures
- Common Risks, Threats and Vulnerabilities of Cloud-based Services and Cloud-hosted Solutions
- Cloud Security Mechanisms used to Counter Threats and Attacks
- Understanding Cloud-Based Security Groups and Hardened Virtual Server Images
- Cloud Service Implementation Mediums (including Web Services and REST Services)
- Cloud Storage Benefits and Challenges, Cloud Storage Services, Technologies and Approaches
- Non-Relational (NoSQL) Storage Compared to Relational Storage
- Cloud Service Testing Considerations and Testing Types
- Service Grids and Autonomic Computing
- Cloud Computing Industry Standards Organizations

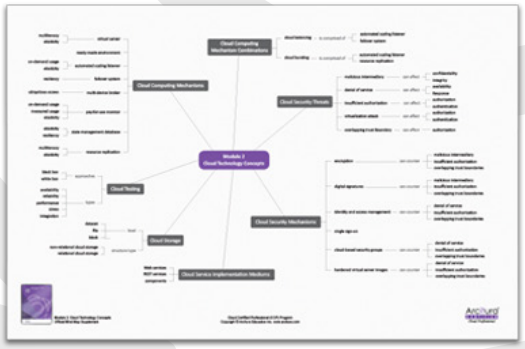
MORE INFO

For curriculum information, visit www.arcitura.com/ccp.

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
- Self-Study Guide
- Vendor Examples Supplement
- Mind Map Poster
- Flashcards
- Audio Tutor Recordings (usb)



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Fundamental Cloud Security

MODULE
07

This foundational course provides a well-rounded, end-to-end presentation of essential techniques, mechanisms, patterns and industry technologies for establishing cloud-based security controls and security architectures. The cloud security fundamentals covered in Module 2 are continued by introducing threat categorizations and new cloud security mechanisms.

The course then delves into a series of cloud security mechanisms and associated architectural patterns that explore a variety of topics, including cloud network security, identity and access management, and trust assurance.

The following primary topics are covered:

- Cloud Security Basics
- Common Cloud Security Mechanisms
- Cloud Security Threats
- Cloud Security Threat Categorization Methodology
- Identification and Treatment of Common Threats
- Cloud Network Security Patterns and Supporting Mechanisms
- Securing Network Connections and Cloud Authentication Gateways
- Collaborative Monitoring and Logging
- Independent Cloud Auditing
- Cloud Identity and Access Management Patterns and Supporting Mechanisms
- Federating and Enabling Secure Interoperability among Cloud Consumers
- Trust Assurance Patterns and Supporting Mechanisms
- Trust Attestation and Establishing Trustworthiness

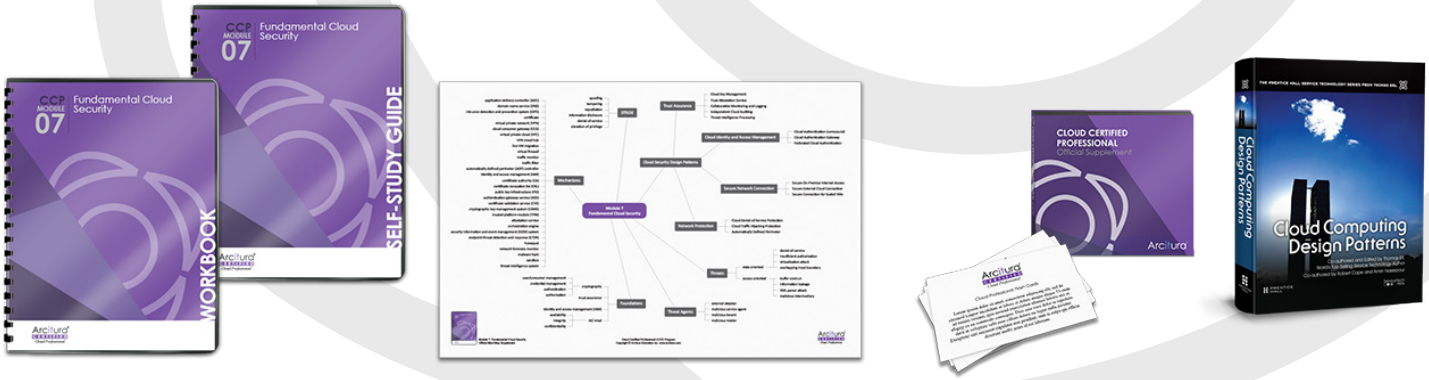
MORE INFO

For curriculum information, visit www.arcitura.com/ccp.

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
- Self-Study Guide
- Mind Map Poster
- Flashcards
- Cloud Computing Design Patterns Textbook
- Audio Tutor Recordings (usb)



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Advanced Cloud Security

MODULE
08

This advanced course covers cloud security mechanisms and architectural design patterns that address data and access control security for virtual machines, as well as trust boundaries, geotagging and BIOS security.

The course also explains common methods used by attackers to breach organizational resources and provides a methodology for countering such attacks. The course concludes by demonstrating the relationship between threats, attacks, and risks via threat modeling.

The following primary topics are covered:

- Cloud Service Security Patterns and Supporting Mechanisms
- Virtual Machine Platform Protection Patterns
- Considerations for Setting Up Secure Ephemeral Perimeters
- Trusted Cloud Resource Pools and Cloud Resource Access Control
- Permanent Data Access Loss Protection
- Cloud Data Breach Protection
- Isolated Trust Boundaries
- The Attack Lifecycle and the Security Lifecycle
- Proactive Mitigation vs. Incidence Response
- Threats, Vulnerabilities, Impacts from Exploitation
- Threat Modeling, Threats and Mitigations

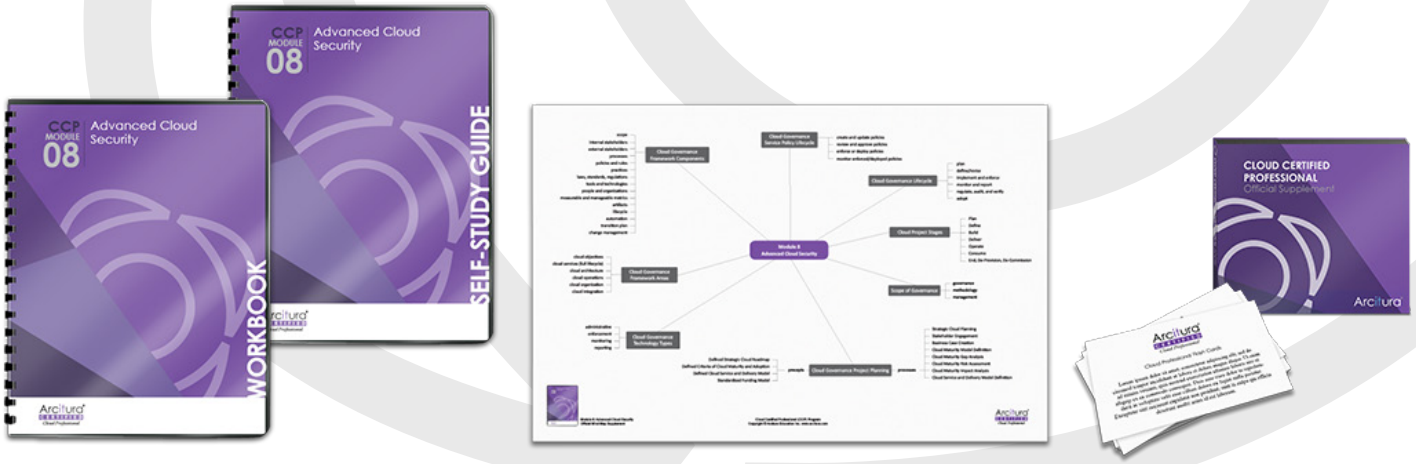
MORE INFO

For curriculum information, visit www.arcitura.com/ccp.

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
- Self-Study Guide
- Mind Map Poster
- Flashcards
- Audio Tutor Recordings (usb)



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Cloud Security Lab

MODULE
09

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 previously in course modules 7 and 8. Completing this lab will help highlight areas that require further attention and will further prove hands-on proficiency in cloud computing security practices, mechanisms and architectural patterns as they are applied and combined to solve real-world problems.

As a hands-on lab, this course provides a set of detailed exercises that require participants to solve a number of inter-related problems, with the ultimate goal of evaluating, designing and correcting cloud security technology architectures to fulfill specific sets of solution and business automation requirements.

For instructor-led delivery of this lab course, the Certified Cloud 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 the Module 9 Study Kit, a number of supplements are provided to help participants carry out exercises with guidance and resource references.

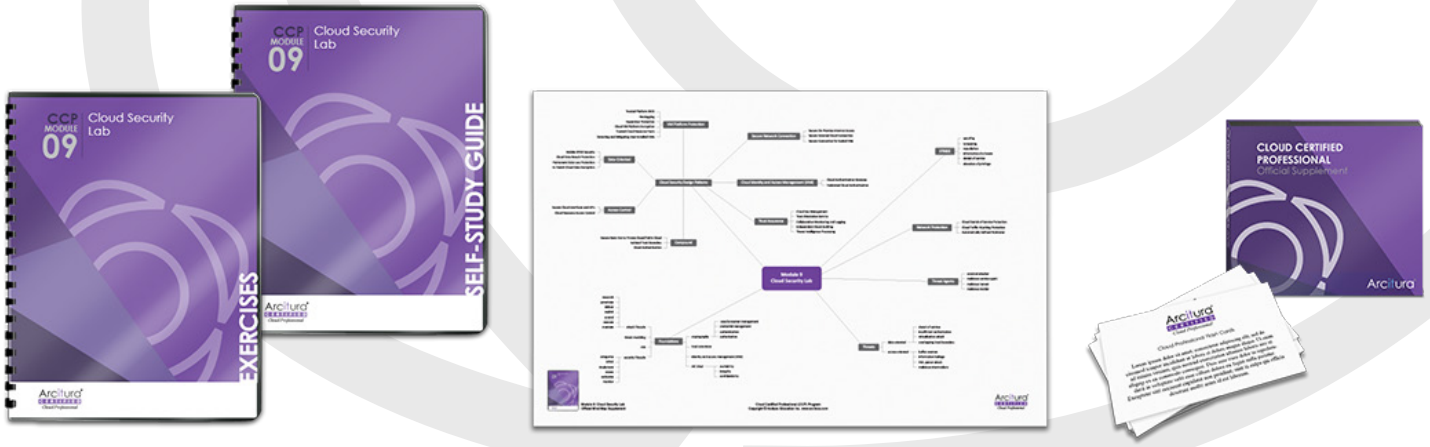
MORE INFO

For curriculum information, visit www.arcitura.com/ccp.

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.

- Lab Exercises Booklet
- Self-Study Guide
- Mind Map Poster
- Flashcards
- Audio Tutor Recording (usb)



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Next-Gen IT Academy Certifications

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		Certified DevOps Specialist	Certified Blockchain Architect	Certified Machine Learning Specialist	Certified Artificial Intelligence Specialist	Certified IoT Architect	Certified Containerization Architect
DEVOPS MODULE 01	Fundamental DevOps	●					
DEVOPS MODULE 02	DevOps in Practice	●					
DEVOPS MODULE 03	DevOps Lab	●					
BLOCKCHAIN MODULE 01	Fundamental Blockchain		●				
BLOCKCHAIN MODULE 02	Blockchain Technology & Architecture		●				
BLOCKCHAIN MODULE 03	Blockchain Technology & Architecture Lab		●				
MACHINE LEARNING MODULE 01	Fundamental Machine Learning			●			
MACHINE LEARNING MODULE 02	Advanced Machine Learning			●			
MACHINE LEARNING MODULE 03	Machine Learning Lab			●			
AI MODULE 01	Fundamental Artificial Intelligence				●		
AI MODULE 02	Advanced Artificial Intelligence				●		
AI MODULE 03	Artificial Intelligence Lab				●		
IoT MODULE 01	Fundamental IoT					●	
IoT MODULE 02	IoT Technology & Architecture					●	
IoT MODULE 03	IoT Technology & Architecture Lab					●	
CONTAINERIZATION MODULE 01	Fundamental Containerization						●
CONTAINERIZATION MODULE 02	Containerization Technology & Architecture						●
CONTAINERIZATION MODULE 03	Containerization Technology & Architecture Lab						●

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

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Arcitura® CERTIFIED *Cloud Professional*

CLOUD CERTIFIED PROFESSIONAL (CCP)

CLOUD SCHOOL

	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

Arcitura® CERTIFIED *Big Data Professional*

	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.*

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

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Arcitura On-Site EXAM PROCTORING

Arcitura® CERTIFIED *SOA Professional*

SOA Certified Professional (SOACP)

SOA SCHOOL

		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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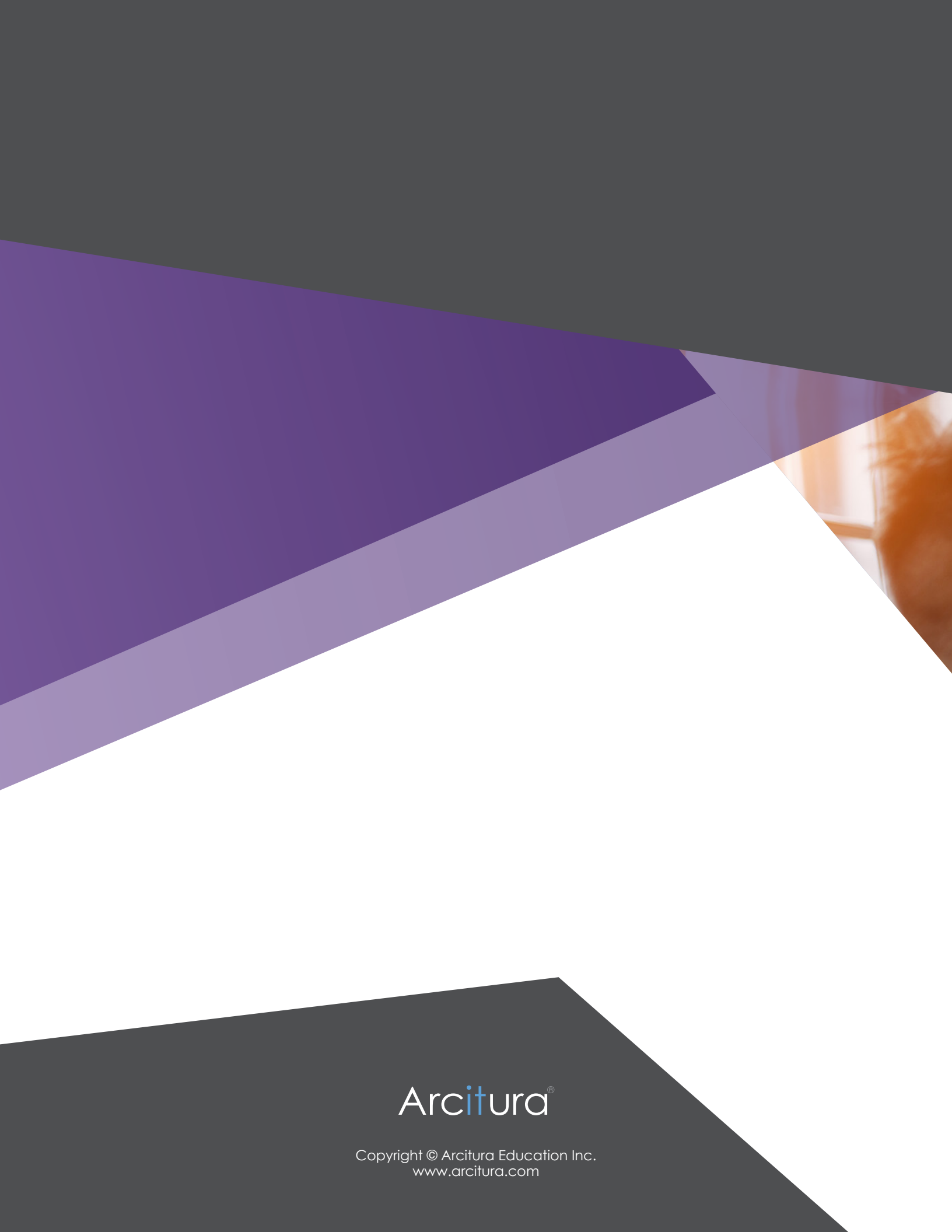

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