

SOA DESIGN & ARCHITECTURE

WITH SERVICES & MICROSERVICES COURSE

SOA ARCHITECT CERTIFICATION



PROFESSIONAL
CERTIFICATION
COALITION



Pearson | VUE

onVUE



Arcitura[®]
OFFICIAL GUIDE

Service Technology School

The Service Technology School from Arcitura provides a formal education and accreditation program dedicated to the fields of Microservices, Service APIs and SOA, including analysis, modeling, design, architecture, security and governance.

For more information and to download the academy catalog, visit the Service Technology School home page:

arcitura.com/st



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SELF-STUDY WITH ELEARNING



eLearning Made Easy

Helping you achieve success in your education and career goals is our top priority. At Arcitura, we understand that everyone has different requirements and preferences when it comes to self-study.



All Arcitura courses are available for self-study via eLearning.



Upon purchasing a course, you receive access via an online interactive eLearning platform.



To provide you with the greatest flexibility, you will be offered the option of also accessing the course materials via two additional eLearning formats.



The additional eLearning formats are provided to you upon request and at no extra cost.

arcitura.com/elearning

eLearning Formats



For Everyday Learning

An online interactive eLearning platform with individual lessons, as well as interactive and automatically graded exercises and practice questions.



For Learning On-the-Go

A study kit platform with access to full course documents that support online/offline synching, annotations, comments and custom bookmarks.



For Your Reference

A set of printable PDF documents that you can keep (for all course workbooks and posters).

Each Arcitura eLearning course includes a self-test to help you assess your readiness to take a certification exam. Separate Exam Prep Kits are also available with additional online interactive practice questions that are automatically graded.

INSTRUCTOR-LED TRAINING & COACHING



Arcitura works closely with its network of authorized training partners to provide online and onsite instructor-led training workshops to organizations throughout the world, including many corporations, federal government agencies and numerous Fortune 500 organizations.

Arcitura and its partners have Certified Trainers and supporting staff that are highly experienced in the planning, delivery and management of private and public training events that can be tailored to your learning objectives and scheduling preferences.

arcitura.com/training

Instructor-Led Services



Online Training

Training workshops for Arcitura courses can be delivered by Certified Trainers online via virtual classrooms.



Onsite Training

Training workshops for Arcitura courses can be delivered by Certified Trainers onsite at your location or at an external venue.



Online Coaching

Certified Trainers are available to provide virtual coaching services that can be scheduled on an hourly basis.

For Groups & Individuals



Workshops for Groups or Individuals

Training workshops can be delivered for small and large groups. Online training workshops can also be arranged for individuals.



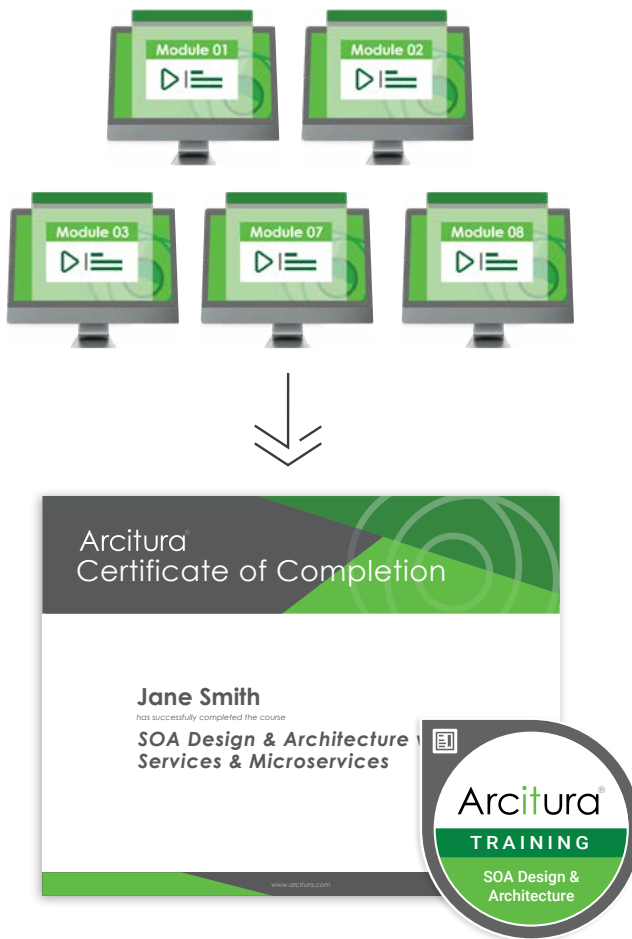
Coaching for Groups or Individuals

Virtual coaching sessions can be arranged for groups and individuals to provide supplementary guidance and to assist with exam preparation.



Training Programs for Multiple Groups

Larger training programs involving multiple groups can be managed and coordinated and further supplemented with ongoing reporting.



HOW TO GET STARTED

The SOA Design & Architecture with Services & Microservices course provides in-depth coverage of service-oriented technology and architecture models, design patterns and integration techniques. It explores essential service architecture topics, including service-orientation principles and designing with REST and Web services. The course further delves into the mechanics of service-oriented technology architecture, covering messaging, microservice deployments, service contracts, API gateways and containerization.

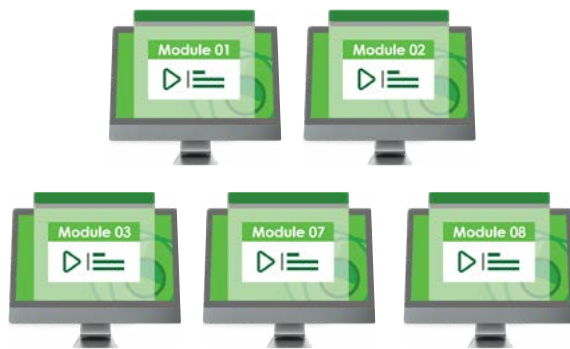
The course is comprised of a set of modules. Each module has a set of lessons and is further supplemented with exercises to help reinforce your understanding of key topics.

Upon completing the course you can obtain a digital certificate of completion, as well as a digital training badge from Acclaim/Credly, with an account that supports the online verification of your course completion status.

Additional resources are available to assist you with completing this course, including downloadable digital course files, printed course materials, coaching hours and instructor-led training services.

The SOA Design & Architecture with Services & Microservices course can be used to prepare for the SOA Architect Certification exam, as explained on the following page.

For more course details, including individual course module topic outlines, visit the [Course & Certification webpage](https://arcitura.com/courses) via arcitura.com/courses.



HOW TO GET CERTIFIED

The SOA Design & Architecture with Services & Microservices course prepares you for the official SOA Architect Certification exam.

Upon attaining a passing grade on the certification exam you will receive an official digital accreditation certificate and a digital certification badge from Acclaim/Credly, with an account that supports the online verification of your certification status.

Additional resources are available to assist you with preparing for the certification exam, including practice exam questions, downloadable digital course files, printed course materials, coaching hours and instructor-led training services.

To learn more about the SOA Architect certification bundle that includes the course, exam and practice questions at a discount, visit the [Course & Certification webpage](#) via arcitura.com/store.



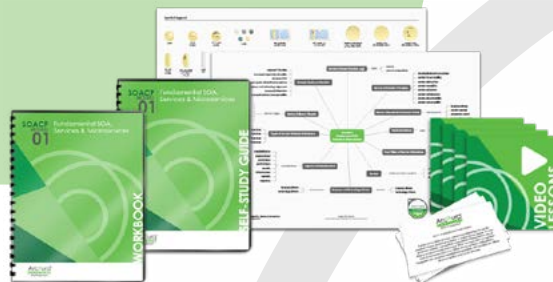
SOA DESIGN & ARCHITECTURE WITH SERVICES & MICROSERVICES COURSE

The SOA Design & Architecture with Services & Microservices course provides in-depth coverage of service-oriented technology and architecture models, design patterns and integration techniques. It explores essential service architecture topics, including service-orientation principles and designing with REST and Web services. The course further delves into the mechanics of service-oriented technology architecture, covering messaging, microservice deployments, service contracts, API gateways and containerization.

The SOA Design & Architecture with Services & Microservices course is comprised of 5 course modules. Each has an estimated completion time of 10 hours. Shown here are the contents of each course module, followed by the individual course module outlines.

MODULE 01:

Fundamental SOA,
Services & Microservices



- Workbook Lessons (100+ pages)
- Video Lessons (for all topics)
- Interactive Exercises
- Mind Map Poster
- Symbol Legend Poster
- Practice Exam Questions
- PDFs of Workbook and Posters (printable)

MODULE 02:

Microservice Technology
Concepts



- Workbook Lessons (100+ pages)
- Video Lessons (for all topics)
- Interactive Exercises
- Mind Map Poster
- Practice Exam Questions
- PDFs of Workbook and Poster (printable)

MODULE 03:

Design & Architecture
with SOA, Services &
Microservices



- Workbook Lessons (100+ pages)
- Video Lessons (for all topics)
- Interactive Exercises
- Mind Map Posters
- Practice Exam Questions
- PDFs of Workbook and Posters (printable)

MODULE 07:

Advanced SOA Design & Architecture With Services & Microservices



- Workbook Lessons (100+ pages)
- Video Lessons (for all topics)
- Interactive Exercises
- Mind Map Poster
- Practice Exam Questions
- PDFs of Workbook and Poster (printable)

MODULE 08:

SOA Design & Architecture Lab With Services & Microservices

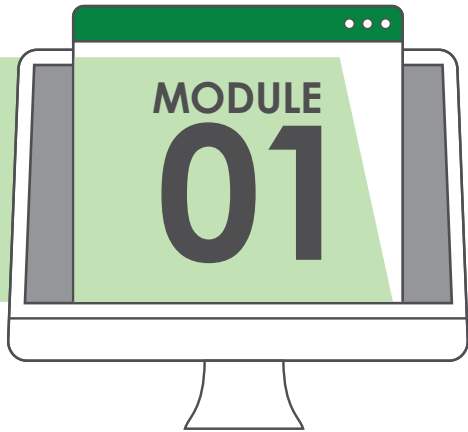


- Lab Exercise Booklet
- Mind Map Poster
- Practice Exam Questions
- PDFs of Exercise Booklet and Poster (printable)

/ Partial Course Available

For those of you that have already completed some of the modules in this course (most likely because they were also part of a different course you completed), a partial version of this course is available. Visit the [Partial Courses & Certification Bundles webpage](#) for more information about partial courses.

Fundamental SOA, Services & Microservices

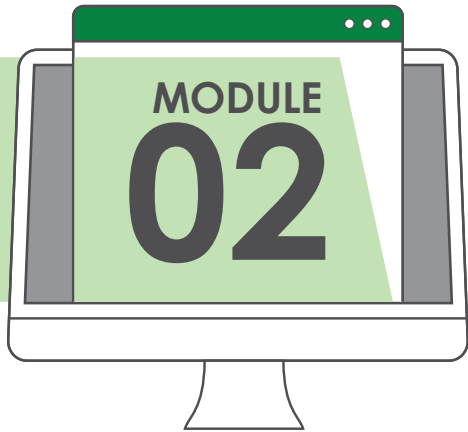


This course module provides an easy to understand, end-to-end overview of contemporary service-oriented computing, including concepts and technologies pertaining to modern-day services and microservices, as well as business and technology-related topics pertaining to service-oriented architecture (SOA).

The following primary topics are covered:

- Business and Technology Drivers for SOA, Services and Microservices
- Strategic Goals and Benefits of Service-Oriented Computing
- Plain English Introduction to Services and Microservices
- Fundamental Characteristics of a Service-Oriented Architecture
- Understanding Service-Oriented as a Design Paradigm, including coverage of the Four Pillars of Service-Oriented
- Introduction to Service Layers, Service Models and Service Compositions
- Service Inventories, Service Layers and Service API Governance and Management
- Introduction to Common Service Technologies, including API Gateways, Virtualization, Containerization
- Introduction to Cloud Computing and Cloud Services
- Adoption Impacts and Requirements, including considerations for Governance, Infrastructure, Performance and Standardization

Microservice Technology Concepts

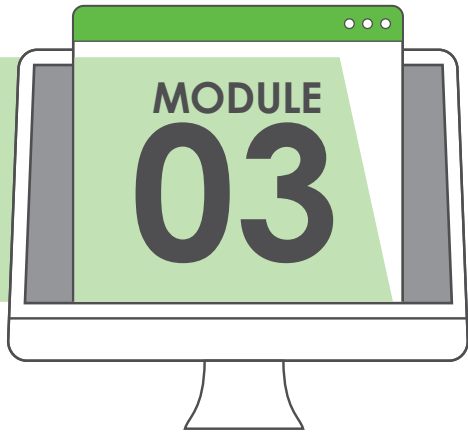


This course module focuses on modern service technologies, models and concepts that have established de facto implementation mediums for building contemporary services-based solutions. Also covered are fundamental terms, concepts and models pertaining to cloud computing and cloud-based services.

The following primary topics are covered:

- Comparing Service Implementation Mediums
- Service Roles and Service Agents
- Message Exchange Patterns and Service Activities
- Basic XML, XML Schema, JSON and JSON Schema Concepts
- HTTP Methods, Response Codes and Headers
- Basic REST Service Concepts, including Properties and Constraints
- REST Services, Contracts, Resources and Messaging
- Hypermedia and Late Binding
- Basic WSDL and SOAP Concepts
- WS-* Technologies
- Web Service Contracts, Messaging and Registries
- Cloud Computing Concepts
- Vertical and Horizontal Scaling
- Multitenancy, Elasticity and Resiliency
- On-Demand Usage, Ubiquitous Access and Measured Usage
- Public, Private and Hybrid Clouds
- IaaS, PaaS and SaaS

Design & Architecture with SOA, Services & Microservices



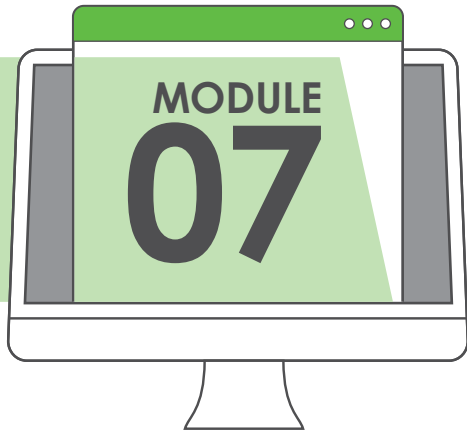
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This course module delves into the service-oriented architectural model and the service-orientation design paradigm and establishes the unique characteristics and dynamics that constitute service-oriented solution logic. The module raises a series of distinct considerations for designing service-oriented solutions with microservices, as well as REST services and Web services.

The following primary topics are covered:

- Fundamental Application Design with SOA
- Service-Orientation vs. “Silo”-Based Design
- Service-Oriented Application Design with Microservices
- Understanding Services and Service Capabilities
- Understanding the Functional Context of Microservices
- Complex Service Composition Design, Composition Runtime Roles and Responsibilities
- Composition with Microservices
- Distinguishing Characteristics of the SOA Model
- The Eight Design Principles of Service-Orientation
- Contract-First Design, Standardized Service Contracts and Uniform Contracts
- Service Loose Coupling and Coupling Types, Service Abstraction and Information Hiding
- Service Reusability and Agnostic Design, Service Autonomy and Runtime Control
- Service Statelessness and State Deferral, Service Discoverability and Interpretability
- Design Guidelines for REST Services
- Design Guidelines for Web Services
- Design Guidelines for Microservices

Advanced SOA Design & Architecture with Services & Microservices

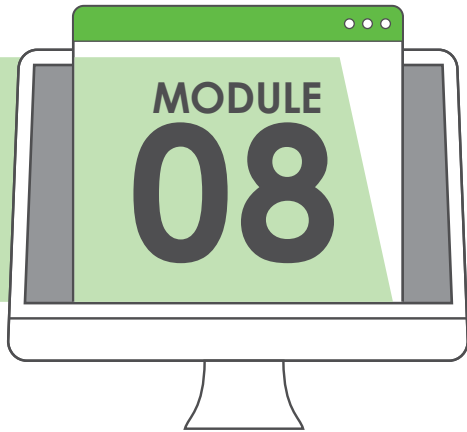


This course module provides an in-depth exploration of the overarching models and underlying mechanics of service-oriented technology architecture. A wide range of topic areas is covered to provide techniques, insights and perspectives of the inner workings of service and composition architectures, including messaging, microservice deployments, service contracts, API gateways, containerization and many more.

The following primary topics are covered:

- SOA vs. Traditional Architectures
- Understanding Service and Composition Architectures
- Logic Centralization, Schema Centralization and Canonical Schemas
- Dual Protocols, Canonical Resources and Inventory Endpoints
- Contract Centralization, Official Endpoints and Services with Concurrent Contracts
- Lightweight Endpoints, Reusable and Uniform Contracts
- Service Façades, Legacy Wrappers and Service Data Replication
- Microservice Deployments and Containerization
- Redundant Implementations, Content Negotiation and Idempotent Capabilities
- Messaging Metadata, State Messaging and Event-Driven Messaging
- Service Instance Routing, Endpoint Redirection, Service Agents and Intermediate Routing
- API Gateways and Asynchronous Queuing
- Data Format Transformation, Data Model Transformation and Protocol Bridging
- Service Brokers and the Enterprise Service Bus
- Orchestration and Compensating Service Transactions
- Composition Autonomy, Entity Linking and State Repositories

SOA Design & Architecture Lab with Services & Microservices



As a continuation of course modules 3 and 7, this hands-on workshop allows attendees to apply the technologies, concepts, techniques, patterns and principles previously covered in order to complete a set of design exercises.

Participants are required to study case study backgrounds and carry out a series of exercises to solve a number of inter-related problems, with the ultimate goal of applying design patterns to design their own services and service-oriented solutions.

For individual completion of this module as part of the Study Kit, a number of supplements are provided to help participants carry out exercises with guidance and numerous resource references.

The following exercises are provided:

- Reading Exercise 8.1: Case Study Background E-Commerce Assist (ECA)
- Lab Exercise 8.2: Shopping Platform Upgrades
- Lab Exercise 8.3: Re-Modeling Web Services as REST Services
- Lab Exercise 8.4: API Gateway and Inventory Endpoint Design
- Reading Exercise 8.5: Case Study Background FRC
- Lab Exercise 8.6: Flight Plan Service Re-Design
- Lab Exercise 8.7: Platform Upgrades
- Lab Exercise 8.8: Regulatory Compliance Service Architecture
- Reading Exercise 8.9: Case Study Background Alleywood and Tri-Fold
- Lab Exercise 8.10: GetERPInvData Service Re-Design



COMPLETE & PARTIAL EXAMS

To attain the SOA Architect Certification requires a passing grade on the complete SOA Architect Certification Exam or a passing grade on the partial SOA Architect Certification Exam and the attainment of the Microservice Professional Certification, as explained below.

Complete Exam Details

The complete SOA Architect certification exam covers topics from all 5 modules in the SOA Architect certification track. Purchase this exam if you've taken the SOA Design & Architecture with Services & Microservices course and would like to pursue certification as an SOA Architect, or if you would like to retake this exam to improve your grade.

Because this complete exam encompasses course modules from two certifications, upon passing the exam you will receive official digital certificates and digital certification badges for both the Microservice Professional and SOA Architect accreditations. If you've already achieved the Microservice Professional certification, then you do not need to take this complete exam. Instead, you can take the partial SOA Architect exam.



Partial Exam Details

The partial SOA Architect certification exam covers topics from Modules 3, 7 and 8 in the SOA Architect certification track.

Purchase this exam if:

- you've taken the complete or partial SOA Design & Architecture with Services & Microservices course and
- you would like to pursue certification as an SOA Architect and
- you've already achieved the Microservice Professional certification.

If you are already a certified Microservice Professional and you pass this exam, you will receive an official digital certificate and a digital certification badge for the SOA Architect accreditation.



MORE INFO

Contact us at: info@arcitura.com

ABOUT THE ARCITURA CURRICULUM



The Arcitura headquarters in Vancouver, Canada from 2012 until the COVID-19 pandemic. Since then, Arcitura staff collaborate remotely, geographically distributed over three continents.

Courses and Modules

➤ Arcitura's curriculum is comprised of over 50 courses and over 120 course modules.

➤ Every Arcitura course is comprised of multiple course modules.

➤ Each course corresponds to a professional certification.



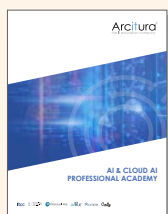
For each course, a separate Official Guide PDF is available for download on the course description page.

arcitura.com/courses

arcitura.com/tracks

Programs, Tracks and Certifications

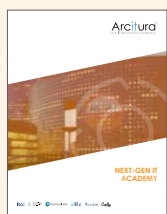
Arcitura's library of courses and modules is organized into the following programs:



AI & Cloud AI
Professional
Academy



Digital
Transformation
Professional
Academy



Next-Gen IT
Academy



Next-Gen
Data Science
Academy

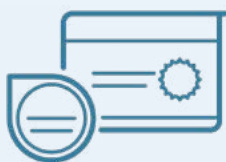


Cloud
Computing
School



Service
Technology
School

Within each program, modules are organized into tracks. Every course has a track that indicates the order in which course modules should be completed. Each track also corresponds to a professional certification. There are over 50 professional certifications, each of which can be attained by passing a certification exam.



Digital Certificates and Badges

➤ Upon fulfilling the completion requirements for a course via eLearning or an instructor-led workshop, you receive a digital Certificate of Completion and a digital Training Badge from Acclaim/Credly.

➤ Upon attaining a certification, you also receive an official digital Accreditation Certificate and a digital Certification Badge from Acclaim/Credly.

arcitura.com/certifications

| COURSES | | Essential AI | Predictive AI | Generative AI | Agentic AI | Predictive AI Engineering | Generative AI Engineering | AI Architecture & Design | AI Professional Consulting | AI Governance & Ethics | Cloud AI Technology & Automation | Cloud AI Architecture & Design |
|----------------|---------------------------------------|-----------------|--------------------------|--------------------------|-----------------------|---------------------------|---------------------------|--------------------------|----------------------------|-----------------------------------|----------------------------------|--------------------------------|
| CERTIFICATIONS | | AI Professional | Predictive AI Specialist | Generative AI Specialist | Agentic AI Specialist | Predictive AI Engineer | Generative AI Engineer | AI Architect | AI Consultant | AI Governance & Ethics Specialist | Cloud AI Professional* | Cloud AI Architect* |
| MODULE 01 | Fundamental Predictive AI | ● | ● | | | ● | | ● | ● | ● | ● | ● |
| MODULE 02 | Advanced Predictive AI | | ● | | | ● | | | | | | |
| MODULE 03 | Predictive AI Lab | | ● | | | | | | | | | |
| MODULE 04 | Fundamental Generative AI | ● | | ● | | | ● | ● | ● | ● | ● | ● |
| MODULE 05 | Advanced Generative AI | | | ● | | | ● | | | | | |
| MODULE 06 | Generative AI Lab | | | ● | | | | | | | | |
| MODULE 07 | Fundamental Predictive AI Engineering | | | | | ● | | | ● | | | |
| MODULE 08 | Advanced Predictive AI Engineering | | | | | ● | | | | | | |
| MODULE 09 | Predictive AI Engineering Lab | | | | | ● | | | | | | |
| MODULE 10 | Fundamental Generative AI Engineering | | | | | | ● | | ● | | | |
| MODULE 11 | Advanced Generative AI Engineering | | | | | | ● | | | | | |
| MODULE 12 | Generative AI Engineering Lab | | | | | | ● | | | | | |
| MODULE 13 | Fundamental AI Architecture & Design | | | | | | | ● | ● | | | |
| MODULE 14 | Advanced AI Architecture & Design | | | | | | | ● | | | | |
| MODULE 15 | AI Architecture & Design Lab | | | | | | | ● | | | | |
| MODULE 16 | Fundamental Agentic AI | | | | ● | | | | | | | |
| MODULE 17 | Advanced Agentic AI | | | | ● | | | | | | | |
| MODULE 18 | Agentic AI Lab | | | | ● | | | | | | | |
| MODULE 19 | Fundamental AI Governance & Ethics | | | | | | | | | ● | | |
| MODULE 20 | Advanced AI Governance & Ethics | | | | | | | | | ● | | |
| MODULE 21 | AI Governance & Ethics Lab | | | | | | | | | ● | | |
| MODULE 22 | Cloud AI Technology & Automation | | | | | | | | | | ● | ● |
| MODULE 23 | Cloud AI Architecture & Design | | | | | | | | | | | ● |
| MODULE 24 | Cloud AI Architecture & Design Lab | | | | | | | | | | | ● |

* The prerequisite for Cloud AI certifications is the attainment of the Cloud Professional certification. See the Arcitura Cloud Computing School curriculum for more information.

Data Science, Big Data & Machine Learning courses are part of the Arcitura Next-Gen Data Science Academy curriculum. Intelligent Automation with AI and RPA courses are part of the Arcitura Digital Transformation Professional Academy curriculum.

Attaining a certification that encompasses all of the course modules also associated with another certification results in the other certification also being automatically awarded.

| COURSES | | Digital Transformation | Digital Transformation: Fundamental Technology | Digital Transformation: Advanced Technology & Architecture | Digital Transformation: Fundamental Data Science | Digital Transformation: Advanced Data Science | Digital Transformation: Fundamental Security | Digital Transformation: Advanced Security | Digital Transformation: Fundamental Intelligent Automation | Digital Transformation: Advanced Intelligent Automation |
|----------------|---|-----------------------------------|--|--|--|---|--|--|--|--|
| CERTIFICATIONS | | 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 Intelligent Automation Professional | Digital Transformation Intelligent Automation Specialist |
| MODULE 01 | Fundamental Digital Transformation | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| MODULE 02 | Digital Transformation in Practice | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| MODULE 03 | Fundamental Cloud Computing | | ● | ● | | | | | | |
| MODULE 04 | Fundamental Blockchain | | ● or ● | ● or ● | | | ● | ● | | |
| MODULE 05 | Fundamental IoT | | | | | | | | | |
| MODULE 06 | Cloud Architecture | | | ● | | | | | | |
| MODULE 07 | Blockchain Architecture | | | ● or ● | | | | ● | | |
| MODULE 08 | IoT Architecture | | | | | | | | | |
| MODULE 09 | Fundamental Big Data Analysis & Analytics | | | | ● | ● | | | | |
| MODULE 10.A | Fundamental Machine Learning | | | | ● or ● | ● or ● | | | | |
| MODULE 10.B | Fundamental Predictive AI | | | | | | | | ● | ● |
| MODULE 11 | Fundamental Generative AI | | | | ● | ● | | | | |
| MODULE 12 | Advanced Big Data Analysis & Analytics | | | | | ● | | | | |
| MODULE 13.A | Advanced Machine Learning | | | | | ● or ● | | | | |
| MODULE 13.B | Advanced Predictive AI | | | | | | | | | |
| MODULE 14 | Advanced Generative AI | | | | | ● | | | | |
| MODULE 15 | Fundamental Cybersecurity | | | | | | ● | ● | | |
| MODULE 16 | Advanced Cybersecurity | | | | | | | ● | | |
| MODULE 17 | Fundamental Agentic AI | | | | | | | | | ● |
| MODULE 18 | Fundamental RPA | | | | | | | | ● | ● |
| MODULE 19 | Advanced RPA & Intelligent Automation | | | | | | | | | ● |
| MODULE 20 | Fundamental AI Architecture | | ● | ● | | | | | | |
| MODULE 21 | Advanced AI Architecture | | | ● | | | | | | |

Attaining a certification that encompasses all of the course modules also associated with another certification results in the other certification also being automatically awarded.

| COURSES | | DevOps | Blockchain Architecture | IoT Architecture | Cybersecurity | Robotic Process Automation | Digital Business Technology | Containerization Architecture | Quantum Computing |
|-----------------------------|--|-------------------|-------------------------|------------------|--------------------------|----------------------------|--|-------------------------------|------------------------------|
| CERTIFICATIONS | | DevOps Specialist | Blockchain Architect | IoT Architect | Cybersecurity Specialist | RPA Specialist | Digital Business Technology Professional | Containerization Architect | Quantum Computing Specialist |
| 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 | | ● | | | | | | |
| 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 | | | | ● | | | | |
| Robotic Process Automation | MODULE 01 Fundamental RPA | | | | | ● | | | |
| | MODULE 02 Advanced RPA & Intelligent Automation | | | | | ● | | | |
| | MODULE 03 RPA Lab | | | | | ● | | | |
| Digital 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 | | | | | | | ● | |
| Quantum Computing | MODULE 01 Fundamental Quantum Computing | | | | | | | | ● |
| | MODULE 02 Advanced Quantum Computing | | | | | | | | ● |
| | MODULE 03 Quantum Computing Lab | | | | | | | | ● |

| COURSES | | Essential Big Data & Data Science | Big Data Analytics & Fundamental Data Science | Big Data Analysis & Advanced Data Science | Big Data Professional Consulting | Data Science Professional Consulting | Machine Learning | Big Data Engineering | Big Data Architecture | Data Science Governance |
|----------------|--|-----------------------------------|---|---|----------------------------------|--------------------------------------|-----------------------------|----------------------|-----------------------|------------------------------------|
| CERTIFICATIONS | | Big Data Professional | Big Data Science Professional | Big Data Scientist | Big Data Consultant | Data Science Consultant | Machine Learning Specialist | Big Data Engineer | Big Data Architect | Data Science Governance Specialist |
| MODULE 01 | Fundamental Big Data Science & Analytics | ● | ● | ● | ● | ● | | ● | ● | ● |
| MODULE 02 | Big Data Analysis & Technology Concepts | ● | ● | ● | ● | ● | | ● | ● | ● |
| MODULE 03 | Big Data Analysis & Technology Lab | | ● | | ● | ● | | | | |
| MODULE 04 | Big Data Analysis & Science | | | ● | ● | | | | | |
| MODULE 05 | Advanced Big Data Analysis & Science | | | ● | | | | | | |
| MODULE 06 | Big Data Analysis & Science Lab | | | ● | | | | | | |
| MODULE 07 | Fundamental Machine Learning | | | | | ● | ● | | | |
| MODULE 08 | Advanced Machine Learning | | | | | | ● | | | |
| MODULE 09 | Machine Learning Lab | | | | | | ● | | | |
| MODULE 10 | Fundamental Predictive & Generative AI | | | | | ● | | | | |
| MODULE 11 | Fundamental Big Data Engineering | | | | ● | | | ● | | |
| MODULE 12 | Advanced Big Data Engineering | | | | | | | ● | | |
| MODULE 13 | Big Data Engineering Lab | | | | | | | ● | | |
| MODULE 14 | Fundamental Big Data Architecture | | | | | | | | ● | |
| MODULE 15 | Advanced Big Data Architecture | | | | | | | | ● | |
| MODULE 16 | Big Data Architecture Lab | | | | | | | | ● | |
| MODULE 17 | Fundamental Data Science Governance | | | | | | | | | ● |
| MODULE 18 | Advanced Data Science Governance | | | | | | | | | ● |
| MODULE 19 | Data Science Governance Lab | | | | | | | | | ● |

Artificial Intelligence (AI) courses are part of the Arcitura AI & Cloud AI Professional Academy curriculum. Intelligent Automation with AI and RPA courses are part of the Arcitura Digital Transformation Professional Academy curriculum.

Attaining a certification that encompasses all of the course modules also associated with another certification results in the other certification also being automatically awarded.

| COURSES | | Essential Cloud Computing | Cloud Computing Concepts & Technology | Cloud Computing Professional Consulting | Cloud Architecture | Cloud Security | Cloud Governance | Cloud Storage | Cloud Virtualization | Cloud AI Technology & Automation | Cloud AI Architecture & Design |
|----------------|----------------------------------|---------------------------|---------------------------------------|---|--------------------|---------------------------|-----------------------------|--------------------------|---------------------------------|--|--|
| CERTIFICATIONS | | Cloud Professional | Cloud Technology Professional | Cloud Computing Consultant | Cloud Architect | Cloud Security Specialist | Cloud Governance Specialist | Cloud Storage Specialist | Cloud Virtualization Specialist | Cloud AI Professional* | Cloud AI Architect* |
| MODULE 01 | Fundamental Cloud Computing | ● | ● | ● | ● | ● | ● | ● | ● | This track has the following additional modules from the AI & Cloud AI Professional Academy curriculum: 1, 4, 19 | This track has the following additional modules from the AI & Cloud AI Professional Academy curriculum: 1, 4, 19, 20, 21 |
| 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 | | | | | | | | ● | | |

* Cloud AI certifications are part of the Arcitura AI & Cloud AI Professional Academy curriculum. The prerequisite for these certifications is the attainment of the Cloud Professional certification from the Arcitura Cloud Computing School curriculum.

Attaining a certification that encompasses all of the course modules also associated with another certification results in the other certification also being automatically awarded.

| COURSES | | Fundamental Microservices & Service Technology | Fundamental SOA Design with Services & Microservices | SOA Analysis & Modeling with Services & Microservices | SOA Design & Architecture with Services & Microservices | Microservice Design & Architecture | Microservice Professional Consulting | Service API Design & Management | Service Governance & Project Delivery | Security for Microservices & SOA |
|----------------|---|---|--|---|---|--|--|---------------------------------------|--|--|
| CERTIFICATIONS | | Microservice Professional | SOA Professional | SOA Analyst | SOA Architect | Microservice Architect | Microservice Consultant | Service API Specialist | Service Governance Specialist | Service Security Specialist |
| MODULE 01 | Fundamental SOA, Services & Microservices | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| MODULE 02 | Microservice Technology Concepts | ● | | | ● | ● | ● | ● | | ● |
| MODULE 03 | Design & Architecture with SOA, Services & Microservices | | ● | ● | ● | | | | ● | |
| MODULE 04 | Fundamental SOA Analysis & Modeling with Services & Microservices | | | ● | | | | | | |
| MODULE 05 | Advanced SOA Analysis & Modeling with Services & Microservices | | | ● | | | | | | |
| MODULE 06 | SOA Analysis & Modeling Lab with Services & Microservices | | | ● | | | | | | |
| MODULE 07 | Advanced SOA Design & Architecture with Services & Microservices | | | | ● | | | | | |
| MODULE 08 | SOA Design & Architecture Lab with 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 | | | | | | | | | ● |

Attaining a certification that encompasses all of the course modules also associated with another certification results in the other certification also being automatically awarded.

THE ARCITURA DIFFERENCE

Regardless of whether you are an individual looking to boost your career or an organization looking to up-skill a team, Arcitura courses and certifications provide a sound investment.

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- Arcitura is dedicated to excellence in content quality, which is why courses and exams undergo a common development process and are authored by a dedicated team in collaboration with subject matter experts.

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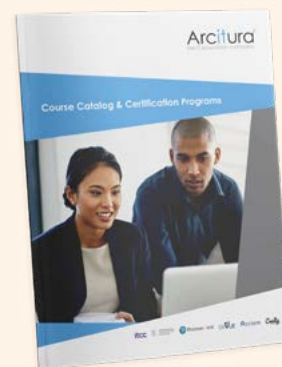
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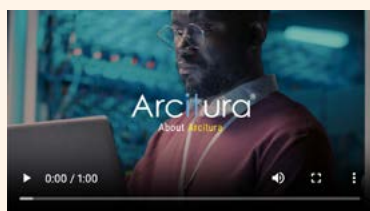
Courses also include interactive and graded exercises, interactive and graded self-tests and other supplements.

What's in an Arcitura Course

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