Arcitura®
the IT education company

Course Catalog & Certification Programs
2025

AI & CLOUD AI
PROFESSIONAL ACADEMY

The AI & Cloud AI Professional Academy from Arcitura provides a formal education and accreditation program dedicated to contemporary AI technology and practices, including predictive AI, generative AI and cloud-based AI, as well as AI engineering and architecture.

DIGITAL TRANSFORMATION
PROFESSIONAL ACADEMY

The Digital Transformation Professional Academy from Arcitura provides a formal education and accreditation program dedicated to industry-standard Digital Transformation, including technology, architecture, data science, security and intelligent automation.

NEXT-GEN IT ACADEMY

The Next-Gen IT Academy from Arcitura provides a formal education and accreditation program focused on contemporary technologies and fields of practice, including:

/ Digital Business Technology
/ Robotic Process Automation (RPA)
/ Cybersecurity
/ Containerization
/ Internet of Things (IoT)
/ Blockchain
/ DevOps
/ Quantum Computing

NEXT-GEN
DATA SCIENCE ACADEMY

The Next-Gen Data Science Academy from Arcitura provides a formal education and accreditation program dedicated to the fields of Artificial Intelligence, Machine Learning, Big Data and general Data Science, including analytics and analysis, decisioning, architecture, engineering and governance.

CLOUD COMPUTING SCHOOL

The Cloud Computing School from Arcitura provides a formal education and accreditation program dedicated to fields of practice associated with Cloud Computing, including technology architecture, security, governance and specialized areas of cloud technology.

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.

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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.

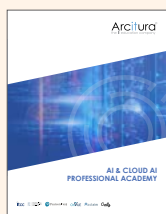> Each course corresponds to a professional certification.

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.
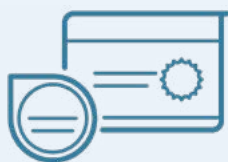
Digital Certificates and Badges

> 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

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, custom bookmarks and cross-document searches.

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.

Arcitura®

Training Workshops & Optional Exams

Online Exam Proctoring
Exams can be taken online during or after a training workshop via Pearson VUE online proctoring and/or Arcitura direct online proctoring.

Onsite Exam Proctoring at Testing Center
Proctored exams can be taken in-person at Pearson VUE testing centers worldwide subsequent to workshop completion.

Onsite Exam Proctoring during Workshop
Paper-based exams can be taken during an onsite training workshop, either after each workshop day or subsequent to workshop completion.

Workshop Management Features & Benefits

Flexible Scheduling
Training workshop agendas can be tailored to your scheduling requirements.

Blended Learning Options
Blended learning models are supported to combine eLearning self-study with instructor-led training and/or virtual coaching.

Dedicated Workshop Monitors
For larger workshop groups, a dedicated monitor is assigned to facilitate the event in support of the instructor.

Multi-Platform Support
For online workshops, virtual classroom can be provided using a range of platforms, such as Zoom, WebEx and MS Teams.

Training Program Reporting
For groups and larger training programs, regular progress reporting can be provided.

External Venue Management
External venues, such as hotel conference rooms and schools, can be arranged to host onsite workshop events.

Workshop Provisioning Features & Benefits

Complimentary eLearning Accounts
Workshop participants can receive eLearning accounts with course materials, videos and many study resources.

Course Document PDFs for Participants to Keep
In addition to eLearning access, workshop participants can receive and keep printable PDF files of workshop course documents.

Optional Printed Course Materials
Onsite workshops can be provisioned with full-color printed course booklets and reference posters.

Complimentary Evaluation Courses
Workshop participants can receive free access to new courses that complement workshop course topics.

Complimentary Training Badges
Workshop participants can receive official digital training badges from Acclaim/Credly.

Complimentary Certificates of Completion
Workshop participants can receive official digital certificates of completion.

Arcitura®
CERTIFIED

The AI & Cloud AI Professional Academy from Arcitura provides formal education and accreditation dedicated to contemporary Artificial Intelligence (AI) practices and technologies.

The AI & Cloud AI Professional Academy from Arcitura provides formal education and accreditation programs dedicated to contemporary AI technology and practices, including predictive AI, generative AI and cloud-based AI, as well as AI engineering and architecture. Exams are available worldwide via online proctoring and on-site delivery by Certified Trainers. Achieving a passing grade on the required exam(s) achieves a certification for which a digital accreditation certificate is automatically issued by Arcitura and a digital certification badge is issued by Acclaim/Credly.

www.arcitura.com/ai
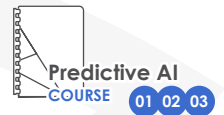
Arcitura CERTIFIED
AI Professional

A Certified AI Professional has a proven understanding of the concepts, technologies and business applications of generative AI and predictive AI solutions, as well as related models and data training and management processes.

Essential AI
COURSE 01 04

Arcitura CERTIFIED
Predictive AI Specialist

A Certified Predictive AI Specialist has gained a proven understanding of predictive AI practices and systems, including model training, learning techniques and neural networks.

Predictive AI
COURSE 01 02 03

Arcitura CERTIFIED
Generative AI Specialist

A Certified Generative AI Specialist understands the training, utilization and management of generative AI systems, as well as related algorithms and models.

Generative AI
COURSE 04 05 06

Arcitura CERTIFIED
Agentic AI Specialist

A Certified Agentic AI Specialist understands the principles, methodologies and technologies involved in the creation and management of autonomous and interactive agentic AI systems.

Agentic AI
COURSE 16 17 18

Arcitura CERTIFIED
Predictive AI Engineer

A Certified AI Predictive Engineer has proven knowledge of engineering practices associated with a broad range of predictive AI models and neural networks, including practices for AI model training, optimization and retraining.

Predictive AI Engineering
COURSE 01 02 07 08 09

Arcitura CERTIFIED
Generative AI Engineer

A Certified Generative AI Engineer has proven knowledge of established models and neural networks used for content generation, including practices associated with natural language processing.

Generative AI Engineering
COURSE 04 05 10 11 12

Arcitura CERTIFIED
AI Architect

A Certified AI Architect has proven knowledge of predictive AI and generative AI systems technology architecture, implementation and infrastructure requirements, as well as integration techniques of both systems and supporting data management platforms.

AI Architecture & Design
COURSE 01 04 13 14 15

Arcitura CERTIFIED
AI Consultant

A Certified AI Consultant has proven knowledge in the most important aspects of predictive AI and generative AI utilization, implementation and architecture.

AI Professional Consulting
COURSE 01 04 07 10 13

Arcitura CERTIFIED
AI Governance & Ethics Specialist

A Certified AI Governance & Ethics Specialist has a proven understanding of governing predictive and generative AI systems throughout their lifecycles, with an emphasis on incorporating controls to ensure fairness, transparency and compliance.

AI Governance & Ethics
COURSE 01 04 19 20 21

Arcitura CERTIFIED
Cloud AI Professional

A Certified Cloud AI Professional has a proven understanding of cloud-based AI technology, infrastructure, automation and services, in support of model training, as well as AI system and data management.

Cloud AI Technology & Automation
COURSE* 01 02 01 04 22

Arcitura CERTIFIED
Cloud AI Architect

A Certified Cloud AI Architect has in-depth, proven knowledge of AI-specific cloud architectural models, design patterns and infrastructure to help realize the design, implementation and integration of enterprise- grade, cloud-based AI solutions.

Cloud AI Architecture & Design
COURSE* 01 02 01 04 22 23 24

* This course encompasses Modules 1 and 2 from the Cloud Computing School curriculum.

Essential AI Course

AI Professional Certification

The Essential AI course provides coverage of predictive AI and generative AI concepts, benefits, challenges and risks. Suitable for IT and business professionals that would like to receive a fundamental understanding of how contemporary AI works and how it can be applied in the real world. This course can be used to prepare for the AI Professional Certification exam.

Request this Guide

01

Module 01 | Fundamental Predictive AI

Illustrates how predictive AI can be used and applied in a range of business applications, as well as essential coverage of predictive AI practices and systems. The module explores the most common learning approaches and functional areas that AI systems are used for. All of the content is authored in easy-to-understand, plain English.

04

Module 04 | Fundamental Generative AI

Explores the application of generative AI within a range of business scenarios and provides fundamental coverage of generative AI concepts, models, best practices and neural networks, including Generative Adversarial Networks (GANs), Variational Encoders (VAEs) and Transformer models. All of the content is authored in easy-to-understand, plain English.

Predictive AI Course
Predictive AI Specialist Certification

The Predictive AI course provides essential coverage of predictive AI concepts, models and best practices. Common AI analysis and analytics practices are explored within a range of business scenarios, and in-depth coverage of predictive AI model training, learning and data filtering and processing techniques is provided. This course can be used to prepare for the Predictive AI Specialist Certification exam.

Request this Guide

Module 01 | Fundamental Predictive AI

Illustrates how predictive AI can be used and applied in a range of business applications, as well as essential coverage of predictive AI practices and systems. The module explores the most common learning approaches and functional areas that AI systems are used for. All of the content is authored in easy-to-understand, plain English.

Module 02 | Advanced Predictive AI

Provides insight into how predictive AI systems work by exploring common techniques for learning, data processing and manipulation, and AI system performance management. The course module does not cover any mathematical formulas or programming and is intended for general IT professionals.

Module 03 | Predictive AI Lab

Provides a series of case-study driven, lab-style exercises and problems that are designed to test your ability to apply your knowledge of topics covered in previous modules. Completing this lab helps reinforce understanding of preceding topics and further demonstrates how different practices and technologies can be applied together as part of greater solutions.

Generative AI Course
Generative AI Specialist Certification

The Generative AI course provides essential coverage of generative AI concepts, models, best practices, and neural networks, including Generative Adversarial Networks (GANs), Variational Encoders (VAEs) and Transformer models. The course is focused on exploring the application of generative AI within a range of business scenarios. This course can be used to prepare for the Generative AI Specialist Certification exam.

Request this Guide

Module 04 | Fundamental Generative AI

Explores the application of generative AI within a range of business scenarios and provides fundamental coverage of generative AI concepts, models, best practices and neural networks, including Generative Adversarial Networks (GANs), Variational Encoders (VAEs) and Transformer models. All of the content is authored in easy-to-understand, plain English.

Module 05 | Advanced Generative AI

Covers a range of common generative AI networks, models and techniques, including specialized neural networks and practices for managing and optimizing generative AI systems and model training processes. The course module does not cover any mathematical formulas or programming and is intended for general IT professionals.

Module 06 | Generative AI Lab

Provides a series of case-study driven, lab-style exercises and problems that are designed to test your ability to apply your knowledge of topics covered in previous modules. Completing this lab helps reinforce understanding of preceding topics and further demonstrates how different practices and technologies can be applied together as part of greater solutions.

CONTINUED »

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AI and Cloud AI courses are available via online study, as well as in-person or virtual instructor-led training and coaching.

Agentic AI *Course*
Agentic AI Specialist Certification

The Agentic AI course dives into the world of agentic AI, starting with fundamental concepts and progressing to advanced strategies and applications. Core principles of intelligent agents are covered, including their architecture, perception, reasoning and action, along with essential knowledge representation and basic planning. Next, sophisticated agent types and architectures are explored, including multi-agent systems, advanced reasoning techniques like reinforcement learning, as well as real-world implementations across various industries. Key challenges are also explained, ranging from scalability and reliability to ethical concerns. This course can be used to prepare for the Agentic AI Specialist Certification exam.

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Module 16 | Fundamental Agentic AI

Establishes the core concepts behind intelligent AI agents that can perceive, reason and act autonomously. Key components of agentic systems are covered, including agentic system components, as well as agent types (such as reactive, deliberative and hybrid). The module also explains essential concepts like environments, sensors, actuators and the agent-environment interaction loop, along with the basics of knowledge representation for agents and how agents plan and make decisions at a high level.

Module 17 | Advanced Agentic AI

Delves into the complexities and applications of agentic AI by exploring techniques for agent collaboration and coordination, as well as methods for enhancing agent reasoning and decision-making. The module examines planning algorithms, reinforcement learning for policy optimization and techniques for handling uncertainty, and further explains real-world applications of agentic AI across various domains, including robotics, autonomous systems, complex problem-solving and creative tasks. Key challenges are also tackled, including scalability, robustness, interpretability and ethical considerations.

Module 18 | Agentic AI Lab

Provides a series of case-study driven, lab-style exercises and problems that are designed to test your ability to apply your knowledge of topics covered in previous modules. Completing this lab helps reinforce understanding of preceding topics and further demonstrates how different practices and technologies can be applied together as part of greater solutions.

Predictive AI Engineering *Course*
Predictive AI Engineer Certification

The Predictive AI Engineering course covers numerous fundamental and advanced AI engineering topics specific to predictive AI systems, including a neural network design, model training approaches, data preprocessing and feature engineering, model evaluation, validation, scaling, optimization, data bias avoidance, and many more. This course can be used to prepare for the Predictive AI Engineer Certification exam.

Request this Guide

Module 01 | Fundamental Predictive AI

Illustrates how predictive AI can be used and applied in a range of business applications, as well as essential coverage of predictive AI practices and systems. The module explores the most common learning approaches and functional areas that AI systems are used for. All of the content is authored in easy-to-understand, plain English.

Module 02 | Advanced Predictive AI

Provides insight into how predictive AI systems work by exploring common techniques for learning, data processing and manipulation, and AI system performance management. The course module does not cover any mathematical formulas or programming and is intended for general IT professionals.

Module 07 | Fundamental Predictive AI Engineering

Delves into a range of predictive AI engineering practices and techniques, and further provides a detailed introduction of neural network architecture components. The course module illustrates how and when different practices and components of AI systems with neural networks need to be defined and applied. Finally, the module provides a set of key principles and best practices for carrying out AI engineering techniques.

Module 08 | Advanced Predictive AI Engineering

Covers a series of practices for preparing and working with data for training and running contemporary predictive AI systems and neural networks. It further provides techniques for designing and optimizing neural networks, including approaches for measuring and tuning neural network model performance. The practices and techniques can be applied individually or in different combinations to address a range of common predictive AI system problems and requirements.

Module 09 | Predictive AI Engineering Lab

Provides a series of case-study driven, lab-style exercises and problems that are designed to test your ability to apply your knowledge of topics covered in previous modules. Completing this lab helps reinforce understanding of preceding topics and further demonstrates how different practices and technologies can be applied together as part of greater solutions.

Generative AI Engineering *Course*
Genderative AI Engineer Certification

The Generative AI Engineering course covers a wide range fundamental and advanced AI engineering topics specific to the unique requirements of generative AI systems and on-demand content creation. Topics include generative neural network design, model training approaches, creative content manipulation, model evaluation, validation, scaling, optimization, data bias and concept drift avoidance, and many more. This course can be used to prepare for the Generative AI Engineer Certification exam.

Request this Guide

Module 04 | Fundamental Generative AI

04

Explores the application of generative AI within a range of business scenarios and provides fundamental coverage of generative AI concepts, models, best practices and neural networks, including Generative Adversarial Networks (GANs), Variational Encoders (VAEs) and Transformer models. All of the content is authored in easy-to-understand, plain English.

Module 05 | Advanced Generative AI

05

Covers a range of common generative AI networks, models and techniques, including specialized neural networks and practices for managing and optimizing generative AI systems and model training processes. The course module does not cover any mathematical formulas or programming and is intended for general IT professionals.

Module 10 | Fundamental Generative AI Engineering

10

Provides in-depth coverage of essential engineering practices for training and operating generative AI systems, including various data processing, filtering and management techniques specific to creative content generation. The module further covers commonly related topics, such as natural language processing (NLP), transfer learning and the use of pre-trained models.

Module 11 | Advanced Generative AI Engineering

11

Covers a series of techniques for working with GANs, VAEs, diffusion models, autoregressive models, transforms, as well as transfer learning and reinforcement learning. Topics include managing large datasets, managing iterative model training cycles, fostering creative content output and working with different data formats for content generation purposes. The techniques can be applied individually or in different combinations to address a range of common generative AI system problems and requirements.

Module 12 | Generative AI Engineering Lab

12

Provides a series of case-study driven, lab-style exercises and problems that are designed to test your ability to apply your knowledge of topics covered in previous modules. Completing this lab helps reinforce understanding of preceding topics and further demonstrates how different practices and technologies can be applied together as part of greater solutions.

AI Architecture & Design *Course*
AI Architect Certification

The AI Architecture & Design course covers fundamental and advanced AI systems and technology architecture topics, including design principles, distributed AI computing and scalability and reliability infrastructure, decision-making logic, performance optimization, security and enterprise architecture integration. This course can be used to prepare for the AI Architect Certification exam.

Request this Guide

Module 01 | Fundamental Predictive AI

01

Illustrates how predictive AI can be used and applied in a range of business applications, as well as essential coverage of predictive AI practices and systems. The module explores the most common learning approaches and functional areas that AI systems are used for. All of the content is authored in easy-to-understand, plain English.

Module 04 | Fundamental Generative AI

04

Explores the application of generative AI within a range of business scenarios and provides fundamental coverage of generative AI concepts, models, best practices and neural networks, including Generative Adversarial Networks (GANs), Variational Encoders (VAEs) and Transformer models. All of the content is authored in easy-to-understand, plain English.

Module 13 | Fundamental AI Architecture & Design

13

Provides an essential understanding of AI system and solution architecture. This course module explains the different AI system architecture types, scopes and modes and provides detailed coverage of core AI system modules (including data ingestion, data preprocessing, feature engineering, inference engine and model repository) and monitors (including operations, data, model and ancillary monitors).

Module 14 | Advanced AI Architecture & Design

14

Explores a range of techniques and complex topics dedicated to AI system design and technology architecture, including scalability models, performance and optimization techniques and resiliency architectures.

Module 15 | AI Architecture & Design Lab

15

Provides a series of case-study driven, lab-style exercises and problems that are designed to test your ability to apply your knowledge of topics covered in previous modules. Completing this lab helps reinforce understanding of preceding topics and further demonstrates how different practices and technologies can be applied together as part of greater solutions.

AI and Cloud AI courses are available via online study, as well as in-person or virtual instructor-led training and coaching.

AI Professional Consulting *Course*
AI Consultant *Certification*

The AI Professional Consulting course provides essential coverage of the most important and relevant topics associated with predictive AI, generative AI, as well as fundamental AI engineering and architecture. Also includes business case development techniques for AI projects and change management and AI adoption strategies. This course can be used to prepare for the AI Consultant Certification exam.

Request this Guide

01 — **Module 01 | Fundamental Predictive AI**
Illustrates how predictive AI can be used and applied in a range of business applications, as well as essential coverage of predictive AI practices and systems. The module explores the most common learning approaches and functional areas that AI systems are used for. All of the content is authored in easy-to-understand, plain English.

04 — **Module 04 | Fundamental Generative AI**
Explores the application of generative AI within a range of business scenarios and provides fundamental coverage of generative AI concepts, models, best practices and neural networks, including Generative Adversarial Networks (GANs), Variational Encoders (VAEs) and Transformer models. All of the content is authored in easy-to-understand, plain English.

07 — **Module 07 | Fundamental Predictive AI Engineering**
Delves into a range of predictive AI engineering practices and techniques, and further provides a detailed introduction of neural network architecture components. The course module illustrates how and when different practices and components of AI systems with neural networks need to be defined and applied. Finally, the module provides a set of key principles and best practices for carrying out AI engineering techniques.

10 — **Module 10 | Fundamental Generative AI Engineering**
Covers core frameworks and technology architecture and infrastructure of predictive and generative AI system implementations. The module includes coverage of neural networks processing requirements and computational considerations pertaining to AI system model training and production processing, as well as AI system data flow and processing optimization and scalability.

13 — **Module 13 | Fundamental AI Architecture & Design**
Provides an essential understanding of AI system and solution architecture. This course module explains the different AI system architecture types, scopes and modes and provides detailed coverage of core AI system modules (including data ingestion, data preprocessing, feature engineering, inference engine and model repository) and monitors (including operations, data, model and ancillary monitors).

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TRAINING
AI Professional Consulting

Arcitura®
CERTIFIED
AI Consultant

AI Governance & Ethics *Course*
AI Governance & Ethics Specialist *Certification*

The AI Governance & Ethics course establishes the foundations of AI governance with precepts, processes and roles that address the on-going governance of predictive and generative AI systems. The governance of training and production data is covered, along with controls and considerations associated with ethical practice, model explainability and regulatory compliance. This course further extends AI governance practices and considerations in cloud-based environments. This course can be used to prepare for the AI Governance & Ethics Specialist Certification exam.

Request this Guide

01 — **Module 01 | Fundamental Predictive AI**
Illustrates how predictive AI can be used and applied in a range of business applications, as well as essential coverage of predictive AI practices and systems. The module explores the most common learning approaches and functional areas that AI systems are used for. All of the content is authored in easy-to-understand, plain English.

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19 — **Module 19 | Fundamental AI Governance & Ethics**
Introduces the essential components of AI governance and explores the ethical considerations surrounding the usage and management of predictive and generative AI systems. Topics include fairness, transparency, privacy and accountability, as well as potential risks and biases within AI models. A vanilla governance framework is introduced, along with common precepts and processes for the governance of training data, production data, and cloud-based AI environments in addition to embedding ethical and responsible practices and monitoring agents into AI system designs.

20 — **Module 20 | Advanced AI Governance & Ethics**
Delves deeper into predictive and generative AI governance frameworks by introducing common roles and additional processes for areas such as bias mitigation, explainability and long-term AI oversight. Additional topics addressed include aligning AI development with social values, responsible use and regulatory requirements, as well as advanced methods for data monitoring, management and filtering. Further cloud computing-related topics are included to address data privacy, regional data storage and other common data-related policies.

21 — **Module 21 | AI Governance & Ethics Lab**
Provides a series of case-study driven, lab-style exercises and problems that are designed to test your ability to apply your knowledge of topics covered in previous modules. Completing this lab helps reinforce understanding of preceding topics and further demonstrates how different practices and technologies can be applied together as part of greater solutions.

Arcitura®
TRAINING
AI Governance & Ethics

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CERTIFIED
AI Governance & Ethics Specialist

Cloud AI Technology & Automation *Course*
Cloud AI Professional Certification

The Cloud AI Technology & Automation course provides essential coverage of concepts and technologies for cloud-based AI systems, including infrastructure resources for reliability and scaling, AI data management, AI system deployment models, using containerization with AI systems, cloud AI serverless architecture, as well as integration of AI services with cloud-native applications. This course can be used to prepare for the Cloud AI Professional Certification exam.

Request this Guide

01
Module 01 | Fundamental Predictive AI
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22
Module 22 | Cloud AI Technology & Automation
Focuses on cloud computing technology, infrastructure and practices specific to establishing and running cloudbased predictive AI and generative AI solutions. Topics include GPU and TPU for AI learning workloads, cloud-based AI services such as AWS SageMaker, Azure Machine Learning and Google AI Platform for model development, training and deployment, as well as mechanisms for scaling AI applications in the cloud, data storage and pipeline options.

Arcitura TRAINING Cloud AI Technology & Automation

Arcitura CERTIFIED Cloud AI Professional

Cloud AI Course & Certification Prerequisite

If you are new to cloud computing, it is recommended that you complete the Essential Cloud Computing course from the Cloud Computing School program prior to starting a Cloud AI course. The attainment of the corresponding Cloud Professional certification is a prerequisite for taking Cloud AI certification exams. The Essential Cloud Computing course and the Cloud Professional certification encompass Modules 1 and 2 of the Cloud Computing School curriculum.

Visit arcitura.com/cc for further details.

Cloud AI Architecture & Design *Course*
Cloud AI Architect Certification

The Cloud AI Architecture & Design course covers the technology architecture of cloud-based AI systems, including cloud automation and infrastructure relevant to AI processing, serverless architectural models for AI, AI system monitoring, logging and auditing, AI in multi-cloud and hybrid architectures, as well as AI-related cloud services and infrastructure models. This course can be used to prepare for the Cloud AI Architect Certification exam.

Request this Guide

01
Module 01 | Fundamental Predictive AI
Illustrates how predictive AI can be used and applied in a range of business applications, as well as essential coverage of predictive AI practices and systems. The module explores the most common learning approaches and functional areas that AI systems are used for. All of the content is authored in easy-to-understand, plain English.
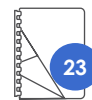
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23
Module 23 | Cloud AI Architecture & Design
Explores cloud-based architectural models and design patterns specific to predictive AI and generative AI applications, including the selection and configuration of specialized cloud AI infrastructure, AI-optimized compute instances and network topologies for data-intensive workloads, as well as strategies for integrating AI services within existing cloud environments. Topics also include the utilization of containerization and multi-clouds, as well as scalability, failover and security considerations.

24
Module 24 | Cloud AI Architecture & Design Lab
Provides a series of case-study driven, lab-style exercises and problems that are designed to test your ability to apply your knowledge of topics covered in previous modules. Completing this lab helps reinforce understanding of preceding topics and further demonstrates how different practices and technologies can be applied together as part of greater solutions.

Arcitura TRAINING Cloud AI Architecture & Design

Arcitura CERTIFIED Cloud AI Architect

The Digital Transformation Professional Academy from Arcitura provides formal education and accreditation programs dedicated to industry-standard Digital Transformation.

The Digital Transformation Professional Academy curriculum is comprised of 21 course modules and 9 certification tracks. This extensive program encompasses a number of specialized tracks for IT professionals, each of which addresses a specific skillset for a common profession associated with Digital Transformation projects. Fields of practice covered by the Digital Transformation Professional Academy curriculum include Digital Transformation technology, architecture, data science, security and intelligent automation.

Several of the certification tracks leverage course modules in other Arcitura programs. Exams are available worldwide via online proctoring and on-site delivery by Certified Trainers. Achieving a passing grade on the required exam(s) achieves a certification for which a digital accreditation certificate is automatically issued by Arcitura and a digital certification badge is issued by Acclaim/Credly.

www.arcitura.com/dt

QUESTIONS?
Contact us at: info@arcitura.com

itcc PCC | PROFESSIONAL CERTIFICATION COALITION P Pearson | VUE OnVUE ⩓cclaim Credly by Pearson

Arcitura CERTIFIED
Digital Transformation Specialist

A Certified Digital Transformation Specialist has an understanding of digital transformation as a formal field of practice, along with knowledge of associated impacts, processes, technologies and business models.

Digital Transformation
COURSE 01 02

Arcitura CERTIFIED
Digital Transformation Technology Professional

A Certified Digital Transformation Technology Professional has essential knowledge of the core digital transformation technologies and further understands how these technologies can be positioned and utilized in relation to each other as part of greater digital solutions and enterprise environments.

Digital Transformation: Fundamental Technology
COURSE 01 02 03 04/05 20

Arcitura CERTIFIED
Digital Transformation Technology Architect

A Certified Digital Transformation Technology Architect has detailed knowledge of the technology architectures behind the core technologies essential to digital solutions and digital enterprises.

Digital Transformation: Advanced Technology & Architecture
COURSE 01 02 03 04/05 06 07/08 20 21

Arcitura CERTIFIED
Digital Transformation Data Science Professional

A Certified Digital Transformation Data Science Professional has an understanding of essential concepts, techniques and models associated with modern data science practices, including big data, machine learning and artificial intelligence.

Digital Transformation: Fundamental Data Science
COURSE 01 02 09 10 11

Arcitura CERTIFIED
Digital Transformation Data Scientist

A Certified Digital Transformation Data Scientist has detailed knowledge of modern data science analytics and analysis practices, including those associated with big data, machine learning and artificial intelligence, and further understands how these practices can be utilized as part of a digital enterprise.

Digital Transformation: Advanced Data Science
COURSE 01 02 09 10 11 12 13 14

Arcitura CERTIFIED
Digital Transformation Security Professional

A Certified Digital Transformation Security Professional has an understanding of technology cyber threats, contemporary cybersecurity and blockchain technologies, as well as modern security controls and counter-measures relevant to digital solution environments.

Digital Transformation: Fundamental Security
COURSE 01 02 04 15

Arcitura CERTIFIED
Digital Transformation Security Specialist

A Certified Digital Transformation Security Specialist has a detailed understanding of cybersecurity threats, countermeasures and practices, as well as knowledge of establishing controls for the protection of data and digital assets, including the use of blockchain immutable storage technology.

Digital Transformation: Advanced Security
COURSE 01 02 04 07 15 16

Arcitura CERTIFIED
Digital Transformation IA Professional

A Certified Digital Transformation IA Professional has knowledge of artificial intelligence (AI) techniques, practices and learning methods together with technologies, business automation models and integration options provided by robotic process automation (RPA).

Digital Transformation: Fundamental Intelligent Automation
COURSE 01 02 10 18

Arcitura CERTIFIED
Digital Transformation IA Specialist

A Certified Digital Transformation IA Specialist has an understanding of how to design intelligent automation solutions comprised of robotic process automation (RPA) and artificial intelligence (AI) systems.

Digital Transformation: Advanced Intelligent Automation
COURSE 01 02 10 17 18 19

Digital Transformation *Course*

Digital Transformation Specialist *Certification*

The Digital Transformation course provides a clear understanding of Digital Transformation from both business and technical perspectives and further develop fundamental skills in Digital Transformation practices and technologies. This course can be used to prepare for the Digital Transformation Specialist Certification exam.

Request this Guide

Module 01 | Fundamental Digital Transformation

Introduces Digital Transformation and provides detailed coverage of associated practices, models and technologies, along with coverage of Digital Transformation benefits, challenges and business and technology drivers. Also explained are common Digital Transformation domains, digital capabilities and adoption considerations.

Module 02 | Digital Transformation in Practice

Delves into the application of Digital Transformation by exploring a series of contemporary technologies associated with carrying out Digital Transformation projects and further demonstrating how the adoption of Digital Transformation practices and technologies can lead to business process improvements and optimization.

Digital Transformation: Fundamental Technology *Course*

Digital Transformation Technology Professional *Certification*

The Digital Transformation: Fundamental Technology cours urse can be used to prepare for the Digital Transformation Technology Professional Certification exam.

Request this Guide

Module 01 | Fundamental Digital Transformation

Introduces Digital Transformation and provides detailed coverage of associated practices, models and technologies, along with coverage of Digital Transformation benefits, challenges and business and technology drivers. Also explained are common Digital Transformation domains, digital capabilities and adoption considerations.

Module 02 | Digital Transformation in Practice

Delves into the application of Digital Transformation by exploring a series of contemporary technologies associated with carrying out Digital Transformation projects and further demonstrating how the adoption of Digital Transformation practices and technologies can lead to business process improvements and optimization.

Module 03 | Fundamental Cloud Computing

Provides end-to-end coverage of fundamental Cloud Computing topics relevant to Digital Transformation, including an exploration of technology-related topics that pertain to contemporary Cloud Computing platforms.

Module 04 | Fundamental Blockchain

Provides a clear, end-to-end understanding of how Blockchain works. It breaks down Blockchain technology and architecture in easy-to-understand concepts, terms and building blocks. Industry drivers and impacts of Blockchain are explained, followed by plain English descriptions of each primary part of a Blockchain system and step-by-step descriptions of how these parts work together.

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Module 05 | Fundamental IoT

Covers the essentials of the field of Internet of Things (IoT) from both business and technical aspects. Fundamental IoT use cases, concepts, models and technologies are covered in plain English, along with introductory coverage of IoT architecture and IoT messaging with REST, HTTP and CoAp.

Module 20 | Fundamental AI Architecture

Provides an essential understanding of AI system and solution architecture. This course module explains the different AI system architecture types, scopes and modes and provides detailed coverage of core AI system modules (including data ingestion, data preprocessing, feature engineering, inference engine and model repository) and monitors (including operations, data, model and ancillary monitors).

Arcitura TRAINING — Digital Transformation Technology

Arcitura CERTIFIED — Digital Transformation Technology Professional

Digital Transformation: Advanced Technology & Architecture *Course*

Digital Transformation Technology Architect *Certification*

The Digital Transformation: Advanced Technology & Architecture course drills-down into the technology architecture and inner workings of primary Digital Transformation technologies and develop skills associated with their application. This course can be used to prepare for the Digital Transformation Technology Architect Certification exam.

Request this Guide

Module 01 | Fundamental Digital Transformation

Introduces Digital Transformation and provides detailed coverage of associated practices, models and technologies, along with coverage of Digital Transformation benefits, challenges and business and technology drivers. Also explained are common Digital Transformation domains, digital capabilities and adoption considerations.

Module 02 | Digital Transformation in Practice

Delves into the application of Digital Transformation by exploring a series of contemporary technologies associated with carrying out Digital Transformation projects and further demonstrating how the adoption of Digital Transformation practices and technologies can lead to business process improvements and optimization.

Module 03 | Fundamental Cloud Computing

Provides end-to-end coverage of fundamental Cloud Computing topics relevant to Digital Transformation, including an exploration of technology-related topics that pertain to contemporary Cloud Computing platforms.
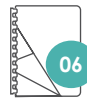
Module 04 | Fundamental Blockchain

Provides a clear, end-to-end understanding of how Blockchain works. It breaks down Blockchain technology and architecture in easy-to-understand concepts, terms and building blocks. Industry drivers and impacts of Blockchain are explained, followed by plain English descriptions of each primary part of a Blockchain system and step-by-step descriptions of how these parts work together.

——— or ———

Module 05 | Fundamental IoT

Covers the essentials of the field of Internet of Things (IoT) from both business and technical aspects. Fundamental IoT use cases, concepts, models and technologies are covered in plain English, along with introductory coverage of IoT architecture and IoT messaging with REST, HTTP and CoAp.

Module 06 | Cloud Architecture

Provides a technical drill-down into the inner workings and mechanics of foundational Cloud Computing platforms. Private and public cloud environments are dissected into concrete, componentized building blocks that individually represent platformv feature-sets, functions and/or artifacts, and are collectively applied to establish distinct technology architecture layers. Building upon these foundations, SaaS, PaaS and IaaS environments are further explored.
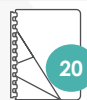
Module 07 | Blockchain Architecture

Delves into Blockchain technology architecture and the inner workings of blockchains by exploring a series of key design patterns, techniques and related architectural models, along with common technology mechanisms used to customize and optimize Blockchain application designs in support of fulfilling business requirements.

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Module 08 | IoT Architecture

Provides a drill-down into key areas of IoT technology architecture and enabling technologies by breaking down IoT environments into individual building blocks via design patterns and associated implementation mechanisms. Layered architectural models are covered, along with design techniques and feature-sets covering the processing of telemetry data, positioning of control logic, performance optimization, as well as addressing scalability and reliability concerns.

Module 20 | Fundamental AI Architecture

Provides an essential understanding of AI system and solution architecture. This course module explains the different AI system architecture types, scopes and modes and provides detailed coverage of core AI system modules (including data ingestion, data preprocessing, feature engineering, inference engine and model repository) and monitors (including operations, data, model and ancillary monitors).

Module 21 | Advanced AI Architecture

Explores a range of techniques and complex topics dedicated to AI system design and technology architecture, including scalability models, performance and optimization techniques and resiliency architectures.

Arcitura TRAINING — Digital Transformation Technology Architecture

Arcitura CERTIFIED — Digital Transformation Technology Architect

CONTINUED »

Digital Transformation: Fundamental Data Science Course

Digital Transformation Data Science Professional Certification —

The Digital Transformation: Fundamental Data Science course provides comprehensive coverage of contemporary data science and analysis practices and technology essential to Digital Transformation. This course can be used to prepare for the Digital Transformation Data Science Professional Certification exam.

Request this Guide

01 — **Module 01 | Fundamental Digital Transformation**

Introduces Digital Transformation and provides detailed coverage of associated practices, models and technologies, along with coverage of Digital Transformation benefits, challenges and business and technology drivers. Also explained are common Digital Transformation domains, digital capabilities and adoption considerations.

02 — **Module 02 | Digital Transformation in Practice**

Delves into the application of Digital Transformation by exploring a series of contemporary technologies associated with carrying out Digital Transformation projects and further demonstrating how the adoption of Digital Transformation practices and technologies can lead to business process improvements and optimization.

09 — **Module 09 | Fundamental Big Data Analysis & Analytics**

Provides an overview of essential Big Data science topics and explores a range of the most relevant contemporary analysis practices, technologies and tools for Big Data environments. Topics include common analysis functions and features offered by Big Data solutions, as well as an exploration of the Big Data analysis lifecycle.

10.A — **Module 10.A | Fundamental Machine Learning**

Provides an easy-to-understand overview of Machine Learning that explains how it works, what it can and cannot do and how it is commonly utilized in support of business goals. The module covers common algorithm types and further explains how Machine Learning systems work behind the scenes.

— or —

10.B — **Module 10.B | Fundamental Predictive AI**

Illustrates how predictive AI can be used and applied in a range of business applications, as well as essential coverage of predictive AI practices and systems. The module explores the most common learning approaches and functional areas that AI systems are used for. All of the content is authored in easy-to-understand, plain English.

11 — **Module 11 | Fundamental Generative AI**

Explores the application of generative AI within a range of business scenarios and provides fundamental coverage of generative AI concepts, models, best practices and neural networks, including Generative Adversarial Networks (GANs), Variational Encoders (VAEs) and Transformer models. All of the content is authored in easy-to-understand, plain English.

Digital Transformation:
Advanced Data Science Course

Digital Transformation
Data Scientist Certification

The Digital Transformation: Advanced Data Science course delves into the practical application of contemporary data science techniques and algorithms. This course can be used to prepare for the Digital Transformation Data Scientist Certification exam.

Request this Guide

Module 01 | Fundamental Digital Transformation

01

Introduces Digital Transformation and provides detailed coverage of associated practices, models and technologies, along with coverage of Digital Transformation benefits, challenges and business and technology drivers. Also explained are common Digital Transformation domains, digital capabilities and adoption considerations.

Module 02 | Digital Transformation in Practice

02

Delves into the application of Digital Transformation by exploring a series of contemporary technologies associated with carrying out Digital Transformation projects and further demonstrating how the adoption of Digital Transformation practices and technologies can lead to business process improvements and optimization.

Module 09 | Fundamental Big Data Analysis & Analytics

09

Provides an overview of essential Big Data science topics and explores a range of the most relevant contemporary analysis practices, technologies and tools for Big Data environments. Topics include common analysis functions and features offered by Big Data solutions, as well as an exploration of the Big Data analysis lifecycle.

Module 10.A | Fundamental Machine Learning

10.A

Provides an easy-to-understand overview of Machine Learning that explains how it works, what it can and cannot do and how it is commonly utilized in support of business goals. The module covers common algorithm types and further explains how Machine Learning systems work behind the scenes.

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Module 10.B | Fundamental Predictive AI

10.B

Illustrates how predictive AI can be used and applied in a range of business applications, as well as essential coverage of predictive AI practices and systems. The module explores the most common learning approaches and functional areas that AI systems are used for. All of the content is authored in easy-to-understand, plain English.

Module 11 | Fundamental Generative AI

11

Explores the application of generative AI within a range of business scenarios and provides fundamental coverage of generative AI concepts, models, best practices and neural networks, including Generative Adversarial Networks (GANs), Variational Encoders (VAEs) and Transformer models. All of the content is authored in easy-to-understand, plain English.

Module 12 | Advanced Big Data Analysis & Analytics

12

Provides an in-depth overview of essential and advanced topic areas pertaining to data science and analysis techniques relevant and unique to Big Data with an emphasis on how analysis and analytics need to be carried out individually and collectively in support of the distinct characteristics, requirements and challenges associated with Big Data datasets.

Module 13.A | Advanced Machine Learning

13.A

Delves into the many algorithms, methods and models of contemporary Machine Learning practices to explore how a range of different business problems can be solved by utilizing and combining proven Machine Learning techniques.

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Module 13.B | Advanced Predictive AI

13.B

Provides insight into how predictive AI systems work by exploring common techniques for learning, data processing and manipulation, and AI system performance management. The course module does not cover any mathematical formulas or programming and is intended for general IT professionals.

Module 14 | Advanced Generative AI

14

Covers a range of common generative AI networks, models and techniques, including specialized neural networks and practices for managing and optimizing generative AI systems and model training processes. The course module does not cover any mathematical formulas or programming and is intended for general IT professionals.

Arcitura
TRAINING
Digital Transformation Advanced Data Science

Arcitura
CERTIFIED
Digital Transformation Data Scientist

Digital Transformation courses are available via online study, as well as in-person or virtual instructor-led training and coaching.

Digital Transformation: Fundamental Security Course

Digital Transformation Security Professional Certification

The Digital Transformation: Fundamental Security course provides in-depth coverage of security concepts, technologies and practices essential to Digital Transformation. This course can be used to prepare for the Digital Transformation Security Professional Certification exam.

Request this Guide

01 — Module 01 | Fundamental Digital Transformation

Introduces Digital Transformation and provides detailed coverage of associated practices, models and technologies, along with coverage of Digital Transformation benefits, challenges and business and technology drivers. Also explained are common Digital Transformation domains, digital capabilities and adoption considerations.

02 — Module 02 | Digital Transformation in Practice

Delves into the application of Digital Transformation by exploring a series of contemporary technologies associated with carrying out Digital Transformation projects and further demonstrating how the adoption of Digital Transformation practices and technologies can lead to business process improvements and optimization.

04 — Module 04 | Fundamental Blockchain

Provides a clear, end-to-end understanding of how Blockchain works. It breaks down Blockchain technology and architecture in easy-to-understand concepts, terms and building blocks. Industry drivers and impacts of Blockchain are explained, followed by plain English descriptions of each primary part of a Blockchain system and step-by-step descriptions of how these parts work together.

15 — Module 15 | Fundamental Cybersecurity

Covers essential topics for understanding and applying cybersecurity solutions and practices. The course begins by covering basic aspects of cybersecurity and then explains foundational parts of cybersecurity environments, such as frameworks, metrics and the relationship between cybersecurity and data science technology.

Digital Transformation: Advanced Security Course

Digital Transformation Security Specialist Certification

The Digital Transformation: Advanced Security course covers advanced Cybersecurity and Blockchain topics essential to building contemporary Digital Transformation solutions. This course can be used to prepare for the Digital Transformation Security Specialist Certification exam.

Request this Guide

01 — Module 01 | Fundamental Digital Transformation

Introduces Digital Transformation and provides detailed coverage of associated practices, models and technologies, along with coverage of Digital Transformation benefits, challenges and business and technology drivers. Also explained are common Digital Transformation domains, digital capabilities and adoption considerations.

02 — Module 02 | Digital Transformation in Practice

Delves into the application of Digital Transformation by exploring a series of contemporary technologies associated with carrying out Digital Transformation projects and further demonstrating how the adoption of Digital Transformation practices and technologies can lead to business process improvements and optimization.

04 — Module 04 | Fundamental Blockchain

Provides a clear, end-to-end understanding of how Blockchain works. It breaks down Blockchain technology and architecture in easy-to-understand concepts, terms and building blocks. Industry drivers and impacts of Blockchain are explained, followed by plain English descriptions of each primary part of a Blockchain system and step-by-step descriptions of how these parts work together.

07 — Module 07 | Blockchain Architecture

Delves into Blockchain Security architecture and the inner workings of blockchains by exploring a series of key design patterns, techniques and related architectural models, along with common Security mechanisms used to customize and optimize Blockchain application designs in support of fulfilling business requirements.

15 — Module 15 | Fundamental Cybersecurity

Covers essential topics for understanding and applying cybersecurity solutions and practices. The course begins by covering basic aspects of cybersecurity and then explains foundational parts of cybersecurity environments, such as frameworks, metrics and the relationship between cybersecurity and data science technology.

16 — Module 16 | Advanced Cybersecurity

Delves into the building blocks of cybersecurity solution environments and further explores the range of cyber threats that cybersecurity solutions can be designed to protect organizations from. The module establishes a set of cybersecurity technology mechanisms that represent the common components that comprise cybersecurity solutions and further explores formal processes and procedures used to establish sound practices that utilize the mechanisms.

Digital Transformation:
Fundamental Intelligent Automation Course

Digital Transformation
IA Professional Certification

The Digital Transformation: Fundamental Intelligent Automation course provides fundamental coverage of artificial intelligent (AI) and robotic process automation (RPA) concepts, technologies and practices associated with intelligent automation (IA). This course can be used to prepare for the Digital Transformation IA Professional Certification exam.

Request this Guide

Module 01 | Fundamental Digital Transformation
Introduces Digital Transformation and provides detailed coverage of associated practices, models and technologies, along with coverage of Digital Transformation benefits, challenges and business and technology drivers. Also explained are common Digital Transformation domains, digital capabilities and adoption considerations.

Module 02 | Digital Transformation in Practice
Delves into the application of Digital Transformation by exploring a series of contemporary technologies associated with carrying out Digital Transformation projects and further demonstrating how the adoption of Digital Transformation practices and technologies can lead to business process improvements and optimization.

Module 10.B | Fundamental Predictive AI
Illustrates how predictive AI can be used and applied in a range of business applications, as well as essential coverage of predictive AI practices and systems. The module explores the most common learning approaches and functional areas that AI systems are used for. All of the content is authored in easy-to-understand, plain English.

Module 18 | Fundamental RPA
Establishes the components and models that comprise contemporary robotic process automation (RPA) environments. Different types of RPA bots are explained, along with different RPA architectures and bot utilization models. This course module further provides detailed scenarios that demonstrate different deployments of RPA bots and other components in relation to different business automation requirements.

Digital Transformation:
Advanced Intelligent Automation Course

Digital Transformation
IA Specialist Certification

The Digital Transformation: Advanced Intelligent Automation course covers advanced AI and RPA topics to explore the creation of integrated intelligent automation environments. This course can be used to prepare for the Digital Transformation IA Specialist Certification exam.

Request this Guide

Module 01 | Fundamental Digital Transformation
Introduces Digital Transformation and provides detailed coverage of associated practices, models and technologies, along with coverage of Digital Transformation benefits, challenges and business and technology drivers. Also explained are common Digital Transformation domains, digital capabilities and adoption considerations.

Module 02 | Digital Transformation in Practice
Delves into the application of Digital Transformation by exploring a series of contemporary technologies associated with carrying out Digital Transformation projects and further demonstrating how the adoption of Digital Transformation practices and technologies can lead to business process improvements and optimization.

Module 10.B | Fundamental Predictive AI
Illustrates how predictive AI can be used and applied in a range of business applications, as well as essential coverage of predictive AI practices and systems. The module explores the most common learning approaches and functional areas that AI systems are used for. All of the content is authored in easy-to-understand, plain English.

Module 17 | Fundamental Agentic AI
Establishes the core concepts behind intelligent AI agents that can perceive, reason and act autonomously. Key components of agentic systems are covered, including agentic system components, as well as agent types (such as reactive, deliberative and hybrid). The module also explains essential concepts like environments, sensors, actuators and the agent-environment interaction loop, along with the basics of knowledge representation for agents and how agents plan and make decisions at a high level.

Module 18 | Fundamental RPA
Establishes the components and models that comprise contemporary robotic process automation (RPA) environments. Different types of RPA bots are explained, along with different RPA architectures and bot utilization models. This course module further provides detailed scenarios that demonstrate different deployments of RPA bots and other components in relation to different business automation requirements.

Module 19 | Advanced RPA & Intelligent Automation
Explores the relationship between RPA and AI and describes how these technologies can be combined to establish intelligence automation (IA) environments utilizing RPA bots and autonomous decision-making solutions using AI decisioning technology.

Arcitura ®
C E R T I F I E D

Next-Gen IT certifications are formal accreditations that prove proficiency in contemporary fields of practice and modern IT technologies.

The Next-Gen IT Academy curriculum is comprised of 24 course modules and 8 certification tracks. For each topic area covered within the program, a set of 3 course modules is developed, along with a single exam. Exams are available worldwide via online proctoring and on-site delivery by Certified Trainers. Achieving a passing grade on the required exam(s) achieves a certification for which a digital accreditation certificate is automatically issued by Arcitura and a digital certification badge is issued by Acclaim/Credly.

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QUESTIONS?
Contact us at: info@arcitura.com

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Arcitura CERTIFIED
DevOps Specialist

A Certified DevOps Specialist understands the DevOps process stages, techniques and models to successfully apply DevOps in support of achieving project objectives and realizing business goals.

DevOps COURSE 01 02 03

Arcitura CERTIFIED
Blockchain Architect

A Certified Blockchain Architect understands the concepts, models and technology architecture behind Blockchain solutions for both public and private use, including the utilization of immutable data storage and consensus processing.

Blockchain Architecture COURSE 01 02 03

Arcitura CERTIFIED
IoT Architect

A Certified IoT Architect has knowledge of the devices, technologies, and protocols used to build IoT solutions, and has gained an understanding of different IoT architecture layers and models, as well as associated technology mechanisms.

IoT Architecture COURSE 01 02 03

Arcitura CERTIFIED
Cybersecurity Specialist

A Certified Cybersecurity Specialist has an understanding of common cybersecurity threats, as well as the technologies and practices used to counter and prevent cyber-attacks, including the investigation of suspicious online activity and the hardening and protection of digital assets.

Cybersecurity COURSE 01 02 03

Arcitura CERTIFIED
RPA Specialist

A Certified RPA Specialist has an understanding of RPA bots, design practices and business automation models and further has knowledge of how RPA solutions can incorporate artificial intelligence systems to establish intelligent automation environments.

Robotic Process Automation COURSE 01 02 03

Arcitura CERTIFIED
Digital Business Technology Professional

A Certified Digital Business Technology Professional has an understanding of the purpose, benefits and challenges of contemporary digital business automation and data science technologies as they may relate to businesses pursuing their adoption.

Digital Business Technology COURSE 01 02 03

Arcitura CERTIFIED
Containerization Architect

A Certified Containerization Architect has an understanding of containerization technology architecture, as well as the inner workings of containers, including the utilization of container engines, templates and management solutions.

Containerization Architecture COURSE 01 02 03

Arcitura CERTIFIED
Quantum Computing Specialist

A Certified Quantum Computing Specialist has knowledge of concepts, architectural models and infrastructure components of quantum computing technology environments, as well as how they can be utilized to support business automation.

Quantum Computing COURSE 01 02 03

Next-Gen IT courses are available via online study, as well as in-person or virtual instructor-led training and coaching.

DevOps Course
DevOps Specialist Certification

The DevOps course develops skills in DevOps practices, processes, metrics and models. This course can be used to prepare for the DevOps Specialist Certification exam.

Request this Guide

Module 01 | Fundamental DevOps

01

A comprehensive overview of DevOps practices, models and techniques, along with coverage of DevOps benefits, challenges and business and technology drivers. Also explained is how DevOps compares to traditional solution development and release approaches and how the application of DevOps can be monitored and measured for concrete business value.

Module 02 | DevOps in Practice

02

A course module that delves into the application of DevOps practices and models by exploring how the DevOps lifecycle and its associated stages can be carried out and further identifying related challenges and considerations. In-depth coverage is provided for the application of Continuous Integration (CI) and Continuous Delivery (CD) approaches, along with an exploration of creating deployment pipelines and managing data flow, solution versions and tracking solution dependencies.

Module 03 | DevOps Lab

03

Provides a series of real-world exercises for applying DevOps practices and carrying out DevOps processes and related techniques to address requirements and solve problems.

Arcitura®
TRAINING
DevOps

Arcitura®
CERTIFIED
DevOps
Specialist

Blockchain Architecture *Course*
Blockchain Architect *Certification*

The Blockchain Architecture course develops skills in Blockchain functions, architectural models, technology and security. This course can be used to prepare for the Blockchain Architect Certification exam.

Request this Guide

Module 01 | Fundamental Blockchain

Provides a clear, end-to-end understanding of how Blockchain works. It breaks down Blockchain technology and architecture in easy-to-understand concepts, terms and building blocks. Industry drivers and impacts of Blockchain are explained, followed by plain English descriptions of each primary part of a Blockchain system and step-by-step descriptions of how these parts work together.

Module 02 | Blockchain Technology & Architecture

Delves into Blockchain technology architecture and the inner workings of blockchains by exploring a series of key design patterns, techniques and related architectural models, along with common technology mechanisms used to customize and optimize Blockchain application designs in support of fulfilling business requirements.

Module 03 | Blockchain Technology & Architecture Lab

Provides a series of exercises for applying and combining Blockchain technologies, mechanisms and security controls to solve real-world problems.

IoT Architecture *Course*
IoT Architect *Certification*

The IoT Architecture course develops skills in Internet of Things (IoT) technology and architecture, along with proficiency in radio protocols, telemetry messaging and IoT architecture layers. This course can be used to prepare for the IoT Architect Certification exam.

Request this Guide

Module 01 | Fundamental IoT

Covers the essentials of the field of Internet of Things (IoT) from both business and technical aspects. Fundamental IoT use cases, concepts, models and technologies are covered in plain English, along with introductory coverage of IoT architecture and IoT messaging with REST, HTTP and CoAp.

Module 02 | IoT Technology & Architecture

Provides a drill-down into key areas of IoT technology architecture and enabling technologies by breaking down IoT environments into individual building blocks via design patterns and associated implementation mechanisms. Layered architectural models are covered, along with design techniques and feature-sets covering the processing of telemetry data, positioning of control logic, performance optimization, as well as addressing scalability and reliability concerns.

Module 03 | IoT Technology & Architecture Lab

Provides a series of exercises for applying and combining IoT concepts, technologies, architecture models and devices to solve real-world problems.

Cybersecurity Course
Cybersecurity Specialist Certification

The Cybersecurity course develops an understanding of common cyber security threats and vulnerabilities and further develop skills in the technologies and practices used to prevent and counter cyber-attacks. This course can be used to prepare for the Cybersecurity Specialist Certification exam.

Request this Guide

01

Module 01 | Fundamental Cybersecurity

Covers essential topics for understanding and applying cybersecurity solutions and practices. The module begins by covering basic aspects of cybersecurity and then explains foundational parts of cybersecurity environments, such as frameworks, metrics and the relationship between cybersecurity and data science technology.

02

Module 02 | Advanced Cybersecurity

Delves into the building blocks of cybersecurity solution environments and further explores the range of cyber threats that cybersecurity solutions can be designed to protect organizations from. The module establishes a set of cybersecurity technology mechanisms that represent the common components that comprise cybersecurity solutions and further explores formal processes and procedures used to establish sound practices that utilize the mechanisms.

03

Module 03 | Cybersecurity Lab

Provides a series of exercises for applying and combining Cybersecurity technologies and practices to solve real-world problems.

Robotic Process Automation (RPA) *Course*
RPA Specialist *Certification*

The Robotic Process Automation (RPA) course develops skills in RPA technologies, practices and business process automation models. This course can be used to prepare for the RPA Specialist Certification exam.

Request this Guide

Module 01 | Fundamental RPA

Establishes the components and models that comprise contemporary robotic process automation (RPA) environments. Different types of RPA bots are explained, along with different RPA architectures and bot utilization models. This course module further provides detailed scenarios that demonstrate different deployments of RPA bots and other components in relation to different business automation requirements.

Module 02 | Advanced RPA & Intelligent Automation

Explores the relationship between RPA and AI and describes how these technologies can be combined to establish intelligence automation (IA) environments utilizing RPA bots and autonomous decision-making solutions using AI decisioning technology.

Module 03 | RPA Lab

Provides a series of real-world exercises for applying and combining RPA models and practices to build RPA solutions for common usage scenarios.

Digital Business Technology *Course*
Digital Business Technology Professional *Certification*

The Digital Business Technology course provides easy-to-understand, fundamental coverage of a broad range of contemporary IT technologies and associated IT practices. Coverage is intentionally non-technical and limited to explaining the strategic purpose and significance of each technology as it may relate to an organization's business operations. Topics include Digital Transformation Solutions, Artificial Intelligence (AI), Robotic Process Automation (RPA), Cloud Computing, Blockchain, Internet of Things (IoT), Machine Learning, Big Data and Cybersecurity. This course can be used to prepare for the Digital Business Technology Professional Certification exam.

Request this Guide

Module 01 | Business Automation Technology Overview

Provides introductory, non-technical coverage of Cloud Computing, Robotic Process Automation (RPA) and the Internet of Things (IoT) with an emphasis on the drivers, benefits, goals, risks and challenges of these technologies.

Module 02 | Data Science Technology Overview

Provides introductory, non-technical coverage of Big Data, Machine Learning and Artificial Intelligence (AI) with an emphasis on the drivers, benefits, goals, risks and challenges of these technologies.

Module 03 | Digital & Security Technology Overview

Provides introductory, non-technical coverage of Digital Transformation, Blockchain and Cybersecurity with an emphasis on the drivers, benefits, goals, risks and challenges of these technologies.
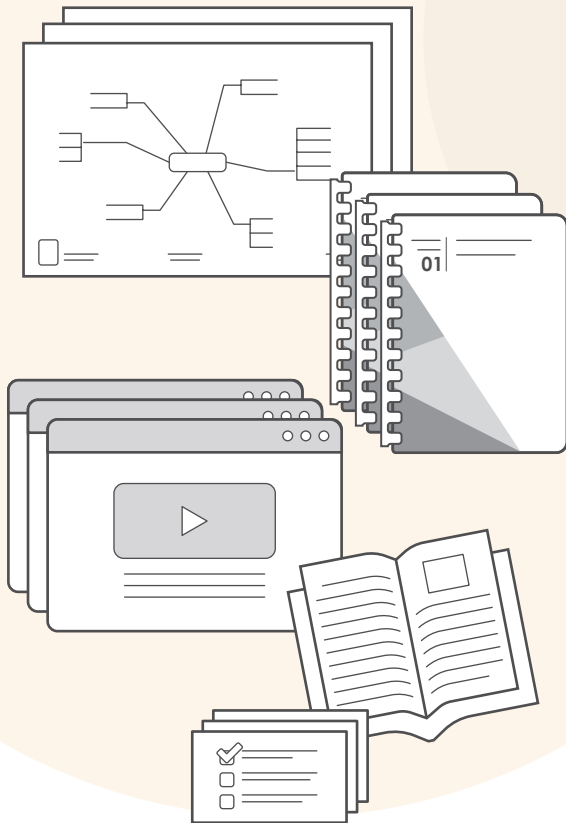
Containerization Architecture *Course*
Containerization Architect *Certification* —

The Containerization Architecture course develops skills in containerization technology and architecture, along with proficiency in assessing, designing and securing highly available container-hosted services and solutions. This course can be used to prepare for the Containerization Architect Certification exam.

Request this Guide

Module 01 | Fundamental Containerization

01

Provides comprehensive coverage of Containerization models, technologies, mechanisms and environments. How the utilization of containers impacts both the technology and business of an organization is covered, along with many technical features, characteristics and deployment environments.

Module 02 | Containerization Technology & Architecture

02

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.

Module 03 | Containerization Technology & Architecture Lab

03

Provides a series of exercises for applying and combining Containerization concepts, technologies, architecture models to solve real-world problems.

Quantum Computing Course

Quantum Computing Specialist Certification

The Quantum Computing course provides comprehensive coverage the concepts, technology models and infrastructure components that comprise contemporary quantum computing solutions, as well as guidance for how to utilize these solutions in IT enterprise environments. This course can be used to prepare for the Quantum Computing Specialist Certification exam.

Request this Guide

01

Module 01 | Fundamental Quantum Computing

Explains quantum computing in plain English, with fundamental coverage of the benefits and challenges of working with quantum computers, as well as simplified coverage of the basic quantum mechanics concepts and principles that quantum computers are based upon. Also provided is an overview of individual quantum computer components and a step-by-step process description of how quantum computers carry out computations.

02

Module 02 | Advanced Quantum Computing

Expands upon some key quantum mechanics concepts and then covers a range of common techniques and quantum computational models to provide insight into the types of processing tasks quantum computers can carry out, as well as the runtime problems and environmental concerns that quantum computers commonly face. The course module does not cover any mathematical formulas or programming and is intended for general IT professionals.

03

Module 03 | Quantum Computing Lab

Provides a series of real-world exercises for applying and combining technologies and models associated with assembling quantum computing solutions for common usage scenarios.

Arcitura®
CERTIFIED

The Next-Gen Data Science Academy from Arcitura provides formal education and accreditation programs dedicated to the fields of Artificial Intelligence, Machine Learning, Big Data, including analytics and analysis, data science, architecture, engineering and governance.

The Next-Gen Data Science Academy curriculum is comprised of 19 course modules and 9 certification tracks. Exams are available worldwide via online proctoring and on-site delivery by Certified Trainers. Achieving a passing grade on the required exam(s) achieves a certification for which a digital accreditation certificate is automatically issued by Arcitura and a digital certification badge is issued by Acclaim/Credly.

www.arcitura.com/ds

Arcitura CERTIFIED
Big Data Professional

Arcitura CERTIFIED Big Data Professional

A Certified Big Data Professional has a proven understanding of Big Data concepts and technologies, and has further demonstrated proficiency in fundamental areas of Big Data, including analysis, analytics, models and practices.

Essential Big Data & Data Science
COURSE 01 02

Arcitura CERTIFIED
Big Data Science Professional

Arcitura CERTIFIED Big Data Science Professional

A Certified Big Data Science Professional has knowledge of fundamental data science and Big Data concepts and models, as well as an understanding of Big Data analysis, analytics and mechanisms.

Big Data Analytics & Fundamental Data Science
COURSE 01 02 03

Arcitura CERTIFIED
Big Data Scientist

Arcitura CERTIFIED Big Data Scientist

A Certified Big Data Scientist has knowledge of a range of analysis and analytics techniques, as well as the processes required for processing large volumes of complex data to drive decision-making.

Big Data Analysis & Advanced Data Science
COURSE 01 02 04 05 06

Arcitura CERTIFIED
Big Data Consultant

Arcitura CERTIFIED Big Data Consultant

A Certified Big Data Consultant has demonstrated proficiency across a range of key Big Data topics, with a particular focus on Big Data analytics and analysis techniques, as well data processing and storage.

Big Data Professional Consulting
COURSE 01 02 03 04 11

Arcitura CERTIFIED
Data Science Consultant

Arcitura CERTIFIED Data Science Consultant

A Certified Data Science Consultant has knowledge of a cross-section of contemporary data science-related fields of practice, including big data analytics, machine learning and artificial intelligence so as to provide guidance and advisory services.

Data Science Professional Consulting
COURSE 01 02 03 07 10

Arcitura CERTIFIED
Machine Learning Specialist

Arcitura CERTIFIED Machine Learning Specialist

A Certified Machine Learning Specialist understands how and where machine learning techniques are best utilized to produce business value, and has knowledge of associated algorithms and system designs, as well as advanced model learning approaches and analysis practices.

Machine Learning
COURSE 07 08 09

Arcitura CERTIFIED
Big Data Engineer

Arcitura CERTIFIED Big Data Engineer

A Certified Big Data Engineer has knowledge of designing and integrating Big Data platforms and solutions, with an emphasis on the mechanisms used to enable data processing, data storage and the utilization of Big Data pipelines.

Big Data Engineering
COURSE 01 02 11 12 13

Arcitura CERTIFIED
Big Data Architect

Arcitura CERTIFIED Big Data Architect

A Certified Big Data Architect has knowledge of Big Data platform technology architecture and Big Data application architecture within IT enterprise and cloud-based environments.

Big Data Architecture
COURSE 01 02 14 15 16

Arcitura CERTIFIED
Data Science Governance Specialist

Arcitura CERTIFIED Data Science Governance Specialist

A Certified Data Science Governance Specialist has an understanding of governance frameworks and controls to standardize and regulate the lifecycles, pipelines and platforms pertaining to data analysis and processing practices used in machine learning, AI and big data.

Data Science Governance
COURSE 01 02 17 18 19

Next-Gen Data Science courses are available via online study, as well as in-person or virtual instructor-led training and coaching.

Essential Big Data & Data Science *Course*

Big Data Professional *Certification*

The Essential Big Data & Data Science course provides comprehensive coverage of data science and big data fundamentals, as well as introductory coverage of big data analytics. This course can be used to prepare for the Big Data Professional Certification exam.

Request this Guide

01

Module 01 | Fundamental Big Data Science & Analytics

This foundational module establishes a basic understanding of fundamental data science, and explains Big Data from business and technology perspectives, including common concepts, models, benefits, challenges and adoption issues.

02

Module 02 | Big Data Analysis & Technology Concepts

Explores contemporary data analysis practices, technologies and tools for Big Data environments at a conceptual level, focusing on common analysis approaches, functions and features of Big Data solutions. Also covered is the Big Data Analysis Lifecycle.

Arcitura TRAINING — Fundamental Big Data

Arcitura TRAINING — Fundamental Data Science

Arcitura CERTIFIED — Big Data Professional

Big Data Analytics & Fundamental Data Science *Course*
Big Data Science Professional Certification

The Big Data Analytics & Fundamental Data Science course develops skills in Big Data analytics and analysis, as well as data science fundamentals. This course can be used to prepare for the Big Data Science Professional Certification exam.

Request this Guide

01 Module 01 | Fundamental Big Data Science & Analytics

This foundational module establishes a basic understanding of fundamental data science, and explains Big Data from business and technology perspectives, including common concepts, models, benefits, challenges and adoption issues.

02 Module 02 | Big Data Analysis & Technology Concepts

Explores contemporary data analysis practices, technologies and tools for Big Data environments at a conceptual level, focusing on common analysis approaches, functions and features of Big Data solutions. Also covered is the Big Data Analysis Lifecycle.

03 Module 03 | Big Data Analysis & Technology Lab

Provides a series of real-world exercises for assessing and establishing Big Data environments, and for solving problems using common Big Data analysis techniques.

Big Data Analysis & Advanced Data Science *Course*
Big Data Scientist Certification

The Big Data Analysis & Advanced Data Science course provides comprehensive coverage of contemporary Big Data analysis and analytics practices and advanced data science techniques and processes. This course can be used to prepare for the Big Data Scientist Certification exam.

Request this Guide

01 Module 01 | Fundamental Big Data Science & Analytics

This foundational module establishes a basic understanding of fundamental data science, and explains Big Data from business and technology perspectives, including common concepts, models, benefits, challenges and adoption issues.

02 Module 02 | Big Data Analysis & Technology Concepts

Explores contemporary data analysis practices, technologies and tools for Big Data environments at a conceptual level, focusing on common analysis approaches, functions and features of Big Data solutions. Also covered is the Big Data Analysis Lifecycle.

04 Module 04 | Big Data Analysis & Science

Provides comprehensive coverage of Big Data analysis algorithms, analytics, data mining and statistical techniques, as well as exploratory data analysis, confirmatory data analysis, visualization and predictions.

05 Module 05 | Advanced Big Data Analysis & Science

Covers the application of a range of essential and advanced analysis techniques, including modeling and model evaluation, data reduction, classification, pattern identification, time series analysis, text analytics and outlier detection.

06 Module 06 | Big Data Analysis & Science Lab

Provides a series of real-world exercises for applying Big Data analysis and analytics techniques to fulfill business requirements and solve complex problems.

Big Data Professional Consulting *Course*
Big Data Consultant *Certification*

The Big Data Professional Consulting course provides comprehensive coverage of contemporary Big Data analysis and analytics practices and advanced data science techniques and processes. This course can be used to prepare for the Big Data Consultant Certification exam.

Request this Guide

01 | **Module 01 | Fundamental Big Data Science & Analytics**

This foundational module establishes a basic understanding of fundamental data science, and explains Big Data from business and technology perspectives, including common concepts, models, benefits, challenges and adoption issues.

02 | **Module 02 | Big Data Analysis & Technology Concepts**

Explores contemporary data analysis practices, technologies and tools for Big Data environments at a conceptual level, focusing on common analysis approaches, functions and features of Big Data solutions. Also covered is the Big Data Analysis Lifecycle.

03 | **Module 03 | Big Data Analysis & Technology Lab**

Provides a series of real-world exercises for assessing and establishing Big Data environments, and for solving problems using common Big Data analysis techniques.

04 | **Module 04 | Big Data Analysis & Science**

Provides comprehensive coverage of Big Data analysis algorithms, analytics, data mining and statistical techniques, as well as exploratory data analysis, confirmatory data analysis, visualization and predictions.

11 | **Module 11 | Fundamental Big Data Engineering**

Explores on the usage and application of the Hadoop and MapReduce frameworks, as well as a range of Big Data engineering techniques and technologies. Coverage includes Big Data storage models, NoSQL and NewSQL, as well as Big Data processing engines.

Data Science
Professional Consulting Course
Data Science Consultant Certification

The Data Science Professional Consulting course covers essential data science and Big Data topics, along with introductory coverage of Machine Learning and Artificial Intelligence. This course can be used to prepare for the Data Science Consultant Certification exam.

Request this Guide

01 | Module 01 | Fundamental Big Data Science & Analytics

This foundational module establishes a basic understanding of fundamental data science, and explains Big Data from business and technology perspectives, including common concepts, models, benefits, challenges and adoption issues.

02 | Module 02 | Big Data Analysis & Technology Concepts

Explores contemporary data analysis practices, technologies and tools for Big Data environments at a conceptual level, focusing on common analysis approaches, functions and features of Big Data solutions. Also covered is the Big Data Analysis Lifecycle.

03 | Module 03 | Big Data Analysis & Technology Lab

Provides a series of real-world exercises for assessing and establishing Big Data environments, and for solving problems using common Big Data analysis techniques.

07 | Module 07 | Fundamental Machine Learning

Provides an easy-to-understand overview of Machine Learning that explains how it works, what it can and cannot do and how it is commonly utilized in support of business goals. The module covers common algorithm types and further explains how Machine Learning systems work behind the scenes.

10 | Module 10 | Fundamental Predictive & Generative AI

Covers the fundamentals of predictive AI and generative AI, by providing essential coverage of benefits, challenges, concepts and common practices. All of the content is authored in easy-to-understand, plain English.

Machine Learning Course
Machine Learning Specialist Certification

The Machine Learning course develops skills in Machine Learning practices, models and algorithms, as well as Machine Learning systems that can perform a range of data analysis processing tasks. This course can be used to prepare for the Machine Learning Specialist Certification exam.

Request this Guide

07 | Module 07 | Fundamental Machine Learning

Provides an easy-to-understand overview of Machine Learning that explains how it works, what it can and cannot do and how it is commonly utilized in support of business goals. The module covers common algorithm types and further explains how Machine Learning systems work behind the scenes.

08 | Module 08 | Advanced Machine Learning

Delves into the many algorithms, methods and models of contemporary Machine Learning practices to explore how a range of different business problems can be solved by utilizing and combining proven Machine Learning techniques.

09 | Module 09 | Machine Learning Lab

Provides a series of exercises for applying Machine Learning systems and techniques, as they are applied and combined to solve real-world problems.

CONTINUED »

Arcitura® CERTIFIED

Next-Gen Data Science courses are available via online study, as well as in-person or virtual instructor-led training and coaching.

Big Data Engineering *Course*
Big Data Engineer *Certification*

The Big Data Engineering course covers essential practices for designing, configuring and utilizing Big Data solutions, including Big Data storage environments, pipelines and data processing. This course can be used to prepare for the Big Data Engineer Certification exam.

Request this Guide

01 | Module 01 | Fundamental Big Data Science & Analytics
This foundational module establishes a basic understanding of fundamental data science, and explains Big Data from business and technology perspectives, including common concepts, models, benefits, challenges and adoption issues.

02 | Module 02 | Big Data Analysis & Technology Concepts
Explores contemporary data analysis practices, technologies and tools for Big Data environments at a conceptual level, focusing on common analysis approaches, functions and features of Big Data solutions. Also covered is the Big Data Analysis Lifecycle.

11 | Module 11 | Fundamental Big Data Engineering
Explores on the usage and application of the Hadoop and MapReduce frameworks, as well as a range of Big Data engineering techniques and technologies. Coverage includes Big Data storage models, NoSQL and NewSQL, as well as Big Data processing engines.

12 | Module 12 | Advanced Big Data Engineering
Delves into advanced engineering topics pertaining primarily to the storage and processing of Big Data datasets. The module covers advanced Big Data engineering mechanisms, in-memory data storage and realtime data processing, as well as MapReduce algorithms, bulk synchronous parallel processing and graph data processing.

13 | Module 13 | Big Data Engineering Lab
Provides a series of real-world exercises for designing Big Data algorithms, Big Data processing and Big Data storage environments.

Arcitura TRAINING Big Data Engineering   *Arcitura CERTIFIED Big Data Engineer*

Big Data Architecture *Course*
Big Data Architect *Certification*

The Big Data Architecture course provides comprehensive coverage of design techniques, technology architecture models and patterns associated with building and integrating Big Data solutions within enterprise environments. This course can be used to prepare for the Big Data Architect Certification exam.

Request this Guide

01 | Module 01 | Fundamental Big Data Science & Analytics
This foundational module establishes a basic understanding of fundamental data science, and explains Big Data from business and technology perspectives, including common concepts, models, benefits, challenges and adoption issues.

02 | Module 02 | Big Data Analysis & Technology Concepts
Explores contemporary data analysis practices, technologies and tools for Big Data environments at a conceptual level, focusing on common analysis approaches, functions and features of Big Data solutions. Also covered is the Big Data Analysis Lifecycle.

14 | Module 14 | Fundamental Big Data Architecture
Provides coverage of the Hadoop stack, data pipelines and Big Data technology architecture layers, mechanisms and components, as well as associated design patterns for building and integrating Big Data solutions.

15 | Module 15 | Advanced Big Data Architecture
Provides a drill-down of Big Data solution environments, architectural models and layers, and additional advanced design patterns. Also covered are cloud-based implementations and enterprise integration considerations, as well as topics pertaining to storage, processing and security.

16 | Module 16 | Big Data Architecture Lab
Provides a series of real-world exercises for building and integrating Big Data solutions within IT enterprises and cloud-based environments.

Arcitura TRAINING Big Data Architecture   *Arcitura CERTIFIED Big Data Architect*

Data Science Governance Course

Data Science
Governance Specialist Certification

The Data Science Governance course develops knowledge and skills of Data Science Governance precepts, processes and roles that pertain to machine learning, artificial intelligence (AI) and big data solutions and processing environments. This course can be used to prepare for the Data Science Governance Specialist Certification exam.
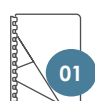
Request this Guide

Module 01 | Fundamental Big Data Science & Analytics

01

This foundational module establishes a basic understanding of fundamental data science, and explains Big Data from business and technology perspectives, including common concepts, models, benefits, challenges and adoption issues.

Module 02 | Big Data Analysis & Technology Concepts

02

Explores contemporary data analysis practices, technologies and tools for Big Data environments at a conceptual level, focusing on common analysis approaches, functions and features of Big Data solutions. Also covered is the Big Data Analysis Lifecycle.

Module 17 | Fundamental Data Science Governance

17

Describes data science governance concepts and basics and identifies common risks and challenges, as well as key roles for those involved in governance projects. The course module further explores the analytics pipeline governance lifecycle and establishes over 70 data science governance precepts and processes. The module maps how precepts and processes relate to each other and how they relate to governance stages.

Module 18 | Advanced Data Science Governance

18

In this course module, over 80 additional data science governance precepts and processes are described in relation to analytics platform governance and machine learning and AI pipeline governance stages. Relevant roles are also mapped to individual governance stages.

Module 19 | Data Science Governance Lab

19

Provides a series of real-world exercises for fostering a comprehensive understanding of how different data science governance precepts and processes can be applied to address common governance concerns.

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

The Cloud Computing School curriculum is comprised of 18 course modules and 8 certification tracks. Exams are available worldwide via online proctoring and on-site delivery by Certified Trainers. Achieving a passing grade on the required exam(s) achieves a certification for which a digital accreditation certificate is automatically issued by Arcitura and a digital certification badge is issued by Acclaim/Credly.

www.arcitura.com/cc

Arcitura® CERTIFIED Cloud Professional

A Certified Cloud Professional has a proven understanding of cloud computing concepts, models and business considerations, and has further demonstrated proficiency in fundamental technology and security- related areas of cloud computing.

Essential Cloud Computing COURSE 01 02

Arcitura® CERTIFIED Cloud Technology Professional

A Certified Cloud Technology Professional has an understanding of cloud computing concepts, mechanisms and security considerations, and has knowledge of the technologies and building blocks used to assemble and evolve cloud platforms and solutions.

Cloud Computing Concepts & Technology COURSE 01 02 03

Arcitura® CERTIFIED Cloud Computing Consultant

A Certified Cloud Computing Consultant has knowledge of essential cloud delivery models, platforms and technologies, as well as an understanding of fundamental cloud technology architecture models and cloud security threats and practices, so as to provide guidance and advisory services.

Cloud Computing Professional Consulting COURSE 01 02 03 04 07

Arcitura® CERTIFIED Cloud Architect

A Certified Cloud Architect has an understanding of cloud computing technology and application architecture, and has knowledge of engineering practices used to build and evolve cloud environments.

Cloud Architecture COURSE 01 02 04 05 06

Arcitura® CERTIFIED Cloud Security Specialist

A Certified Cloud Security Specialist has detailed knowledge of common security threats, security controls and associated technologies, and has knowledge of practices related to securing cloud platforms, cloud services and cloud-based infrastructure.

Cloud Security COURSE 01 02 07 08 09

Arcitura® CERTIFIED Cloud Governance Specialist

A Certified Cloud Governance Specialist understands how to define, establish and evolve governance controls and frameworks specifically for cloud computing environments and solutions.

Cloud Governance COURSE 01 02 10 11 12

Arcitura® CERTIFIED Cloud Storage Specialist

A Certified Cloud Storage Specialist has a detailed understanding of cloud storage mechanisms, devices and technologies, and has knowledge of the practices pertaining to the design and integration of cloud storage components and services.

Cloud Storage COURSE 01 02 13 14 15

Arcitura® CERTIFIED Cloud Virtualization Specialist

A Certified Cloud Virtualization Specialist has a detailed understanding of cloud virtualization technologies and mechanisms, as well as knowledge of the cloud virtualization technology architecture.

Cloud Virtualization COURSE 01 02 16 17 18

Arcitura® CERTIFIED Cloud AI Professional

A Certified Cloud AI Professional has a proven understanding of cloud-based AI technology, infrastructure, automation and services, in support of model training, as well as AI system and data management.

Cloud AI Technology & Automation COURSE* 01 02 01 04 22

Arcitura® CERTIFIED Cloud AI Architect

A Certified Cloud AI Architect has in-depth, proven knowledge of AI-specific cloud architectural models, design patterns and infrastructure to help realize the design, implementation and integration of enterprise- grade, cloud-based AI solutions.

Cloud AI Architecture & Design COURSE* 01 02 01 04 22 23 24

* This course is part of the AI & Cloud AI Professional Academy curriculum and encompasses Modules 1 and 2 from the Cloud Computing School curriculum.

Arcitura ®
CERTIFIED

Cloud Computing courses are available via online study, as well as in-person or virtual instructor-led training and coaching.

Essential Cloud Computing *Course*

Cloud Professional *Certification*

The Essential Cloud Computing course provides introductory coverage of Cloud Computing concepts, models and common cloud environments, from business and technology perspectives. This course can be used to prepare for the Cloud Professional Certification exam.

Request this Guide

01 | Module 01 | Fundamental Cloud Computing

Introduces concepts, terminology, technologies, benefits and challenges associated with Cloud Computing, as well as SLAs and business cost metrics for cloud-based environments. SaaS, PaaS and IaaS delivery models are explained, along with common cloud deployment models and cloud characteristics.

02 | Module 02 | Cloud Technology Concepts

Covers a range of topics related to Cloud Computing mechanisms, containerization, cloud security threats and controls and essential cloud technologies. Also addressed are testing, cloud storage, industry standards and emerging cloud technologies and trends.

Arcitura TRAINING
Fundamental Cloud Computing

Arcitura TRAINING
Fundamental Cloud Technology

Arcitura CERTIFIED
Cloud Professional

Cloud Computing Concepts & Technology *Course*

Cloud Technology Professional *Certification*

The Cloud Computing course develops knowledge and skills in Cloud Computing concepts, industry technologies, mechanisms and cloud delivery and deployment models. Also covered are business metrics, SLAs and topics pertaining to cloud security. This course can be used to prepare for the Cloud Technology Professional Certification exam.

Request this Guide

Module 01 | Fundamental Cloud Computing

Introduces concepts, terminology, technologies, benefits and challenges associated with Cloud Computing, as well as SLAs and business cost metrics for cloud-based environments. SaaS, PaaS and IaaS delivery models are explained, along with common cloud deployment models and cloud characteristics.

Module 02 | Cloud Technology Concepts

Covers a range of topics related to Cloud Computing mechanisms, containerization, cloud security threats and controls and essential cloud technologies. Also addressed are testing, cloud storage, industry standards and emerging cloud technologies and trends.
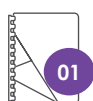
Module 03 | Cloud Technology Lab

Provides a series of real-world exercises for utilizing cloud mechanisms and technologies to assemble cloud-based solutions in order to fulfill business automation requirements.

Cloud Computing Professional Consulting *Course*

Cloud Computing Consultant *Certification*

The Cloud Computing Professional Consulting course covers fundamental cloud technology architecture models and design practices, as well as essential cloud security threats, controls and counter-measures. This course can be used to prepare for the Cloud Computing Consultant Certification exam.

Request this Guide

Module 01 | Fundamental Cloud Computing

Introduces concepts, terminology, technologies, benefits and challenges associated with Cloud Computing, as well as SLAs and business cost metrics for cloud-based environments. SaaS, PaaS and IaaS delivery models are explained, along with common cloud deployment models and cloud characteristics.

Module 02 | Cloud Technology Concepts

Covers a range of topics related to Cloud Computing mechanisms, containerization, cloud security threats and controls and essential cloud technologies. Also addressed are testing, cloud storage, industry standards and emerging cloud technologies and trends.

Module 03 | Cloud Technology Lab

Provides a series of real-world exercises for utilizing cloud mechanisms and technologies to assemble cloud-based solutions in order to fulfill business automation requirements.

Module 04 | Fundamental Cloud Architecture

Delves into the technology architecture of cloud platforms and cloud-based solutions and services by exploring a series of new cloud computing mechanisms and their utilization via cloud computing design patterns that encompass architectural models, design techniques and the incorporation of containerization.

Module 07 | Fundamental Cloud Security

Dives into the implementation technologies behind the cloud security mechanisms and further explores how cloud-based security technologies can be configured and combined to establish a cloud security architecture.

Cloud Computing courses are available via online study, as well as in-person or virtual instructor-led training and coaching.

Cloud Architecture Course
Cloud Architect Certification

The Cloud Architecture course provides comprehensive coverage of design techniques, technology architecture models, design patterns and mechanisms associated with building cloud-based environments and solutions. This course can be used to prepare for the Cloud Architect Certification exam.

Request this Guide

01 Module 01 | Fundamental Cloud Computing

Introduces concepts, terminology, technologies, benefits and challenges associated with Cloud Computing, as well as SLAs and business cost metrics for cloud-based environments. SaaS, PaaS and IaaS delivery models are explained, along with common cloud deployment models and cloud characteristics.

02 Module 02 | Cloud Technology Concepts

Covers a range of topics related to Cloud Computing mechanisms, containerization, cloud security threats and controls and essential cloud technologies. Also addressed are testing, cloud storage, industry standards and emerging cloud technologies and trends.

04 Module 04 | Fundamental Cloud Architecture

Delves into the technology architecture of cloud platforms and cloud-based solutions and services by exploring a series of new cloud computing mechanisms and their utilization via cloud computing design patterns that encompass architectural models, design techniques and the incorporation of containerization.

05 Module 05 | Advanced Cloud Architecture

Advanced technology architecture topics are addressed, with a focus on complex cloud-based solution design, including the incorporation of hybrid cloud deployment models, compound design patterns, containerization and solution architectures that span cloud and on-premise environments.

06 Module 06 | Cloud Architecture Lab

Provides a series of real-world exercises for applying technology architecture models and design techniques for a range of cloud usage scenarios.

Arcitura **TRAINING** Cloud Architecture

Arcitura **CERTIFIED** Cloud Architect

Cloud Security *Course*
Cloud Security Specialist *Certification*

The Cloud Security course provides comprehensive coverage of security controls, mechanisms and architecture models, as well as techniques and practices for responding to security threats. This course can be used to prepare for the Cloud Security Specialist Certification exam.

Request this Guide

Module 01 | Fundamental Cloud Computing
Introduces concepts, terminology, technologies, benefits and challenges associated with Cloud Computing, as well as SLAs and business cost metrics for cloud-based environments. SaaS, PaaS and IaaS delivery models are explained, along with common cloud deployment models and cloud characteristics.

Module 02 | Cloud Technology Concepts
Covers a range of topics related to Cloud Computing mechanisms, containerization, cloud security threats and controls and essential cloud technologies. Also addressed are testing, cloud storage, industry standards and emerging cloud technologies and trends.

Module 07 | Fundamental Cloud Security
Dives into the implementation technologies behind the cloud security mechanisms and further explores how cloud-based security technologies can be configured and combined to establish a cloud security architecture.

Module 08 | Advanced Cloud Security
Complex security topics are covered with an emphasis on the application of cloud security mechanisms, models and technologies in order to establish sophisticated, custom security controls for preventative and reactionary responses to common threats and attacks.

Module 09 | Cloud Security Lab
Provides a series of exercises for applying security techniques and mechanisms to complete a series of exercises that present real-world security problems.

Cloud Governance *Course*
Cloud Governance Specialist *Certification*

The Cloud Governance course provides comprehensive coverage of precepts, processes and roles that pertain to the governance of cloud-based environments, resources and solutions and that further develop skills in establishing a custom cloud governance framework. This course can be used to prepare for the Cloud Governance Specialist Certification exam.

Request this Guide

Module 01 | Fundamental Cloud Computing
Introduces concepts, terminology, technologies, benefits and challenges associated with Cloud Computing, as well as SLAs and business cost metrics for cloud-based environments. SaaS, PaaS and IaaS delivery models are explained, along with common cloud deployment models and cloud characteristics.

Module 02 | Cloud Technology Concepts
Covers a range of topics related to Cloud Computing mechanisms, containerization, cloud security threats and controls and essential cloud technologies. Also addressed are testing, cloud storage, industry standards and emerging cloud technologies and trends.

Module 10 | Fundamental Cloud Governance
Covers the essential building blocks required to establish a governance system for cloud environments. Topics include the definition of cloud governance precepts, roles, practices and processes, along with coverage of common governance challenges and pitfalls specific to cloud computing.

Module 11 | Advanced Cloud Governance
Advanced cloud governance topics are covered to focus on establishing regulatory controls and precepts for a range of cloud-based IT resources and solutions in relation to different cloud project delivery stages.

Module 12 | Cloud Governance Lab
Provides a series of exercises for applying cloud governance framework components, models, precepts and processes to complete a series of real-world exercises.

Cloud Storage *Course*

Cloud Storage Specialist Certification

The Cloud Storage course covers cloud storage devices and mechanisms, as well as cloud storage architectures and solutions. This course can be used to prepare for the Cloud Storage Specialist Certification exam.

Request this Guide

01 | Module 01 | Fundamental Cloud Computing
Introduces concepts, terminology, technologies, benefits and challenges associated with Cloud Computing, as well as SLAs and business cost metrics for cloud-based environments. SaaS, PaaS and IaaS delivery models are explained, along with common cloud deployment models and cloud characteristics.

02 | Module 02 | Cloud Technology Concepts
Covers a range of topics related to Cloud Computing mechanisms, containerization, cloud security threats and controls and essential cloud technologies. Also addressed are testing, cloud storage, industry standards and emerging cloud technologies and trends.

13 | Module 13 | Fundamental Cloud Storage
Explores cloud storage devices, structures and technologies from an implementation-specific perspective, including cloud storage mechanisms and devices, along with in-depth coverage of NoSQL and cloud storage services.

14 | Module 14 | Advanced Cloud Storage
A number of advanced topics are covered, including persistent, redundant, cloud-attached and cloud-remote storage, as well as cloud storage gateways, cloud storage brokers, DAS, NAS, SAN, various cloud storage-related design patterns and information lifecycle management as it applies to cloud-hosted data.

15 | Module 15 | Cloud Storage Lab
Provides a series of real-world exercises for applying design practices and utilizing cloud storage devices and mechanisms to complete a series of exercises that pertain to solving cloud storage problems and creating cloud storage architectures.

Cloud Virtualization *Course*

Cloud Virtualization Specialist Certification

The Cloud Virtualization course covers industry virtualization technology models and mechanisms for building cloud-based virtualization environments and solutions. This course can be used to prepare for the Cloud Virtualization Specialist Certification exam.

Request this Guide

01 | Module 01 | Fundamental Cloud Computing
Introduces concepts, terminology, technologies, benefits and challenges associated with Cloud Computing, as well as SLAs and business cost metrics for cloud-based environments. SaaS, PaaS and IaaS delivery models are explained, along with common cloud deployment models and cloud characteristics.

02 | Module 02 | Cloud Technology Concepts
Covers a range of topics related to Cloud Computing mechanisms, containerization, cloud security threats and controls and essential cloud technologies. Also addressed are testing, cloud storage, industry standards and emerging cloud technologies and trends.

16 | Module 16 | Fundamental Cloud Virtualization
Core topic areas pertaining to fundamental virtualization mechanisms and types used within contemporary cloud computing platforms are explored, along with various key performance indicators and related metrics.

17 | Module 17 | Advanced Cloud Virtualization
A range of specialized and advanced design practices and architecture models are provided to explore virtualization-related reliability, performance and integration. Combinations of virtualization mechanisms are covered in different application scenarios.

18 | Module 18 | Cloud Virtualization Lab
Provides a series of exercises for applying cloud virtualization technology architectures and mechanisms to complete a series of real-world exercises.
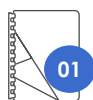
Cloud AI Technology & Automation *Course*
Cloud AI Professional *Certification*

The Cloud AI Technology & Automation course provides essential coverage of concepts and technologies for cloud-based AI systems, including infrastructure resources for reliability and scaling, AI data management, AI system deployment models, using containerization with AI systems, cloud AI serverless architecture, as well as integration of AI services with cloud-native applications. This course can be used to prepare for the Cloud AI Professional Certification exam.

Request this Guide

01 | **Module 01 | Fundamental Predictive AI**

Illustrates how predictive AI can be used and applied in a range of business applications, as well as essential coverage of predictive AI practices and systems. The module explores the most common learning approaches and functional areas that AI systems are used for. All of the content is authored in easy-to-understand, plain English.

04 | **Module 04 | Fundamental Generative AI**

Explores the application of generative AI within a range of business scenarios and provides fundamental coverage of generative AI concepts, models, best practices and neural networks, including Generative Adversarial Networks (GANs), Variational Encoders (VAEs) and Transformer models. All of the content is authored in easy-to-understand, plain English.

22 | **Module 22 | Cloud AI Technology & Automation**

Focuses on cloud computing technology, infrastructure and practices specific to establishing and running cloudbased predictive AI and generative AI solutions. Topics include GPU and TPU for AI learning workloads, cloud-based AI services such as AWS SageMaker, Azure Machine Learning and Google AI Platform for model development, training and deployment, as well as mechanisms for scaling AI applications in the cloud, data storage and pipeline options.

Cloud AI Course & Certification Prerequisite

The Cloud AI courses and certifications are part of the AI & Cloud AI Professional Academy program. It is recommended that you complete the Essential Cloud Computing course from the Cloud Computing School program prior to starting a Cloud AI course. The attainment of the corresponding Cloud Professional certification is a prerequisite for taking Cloud AI certification exams.

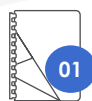Visit arcitura.com/ai for further details.

Cloud AI Architecture & Design *Course*
Cloud AI Architect *Certification*

The Cloud AI Architecture & Design course covers the technology architecture of cloud-based AI systems, including cloud automation and infrastructure relevant to AI processing, serverless architectural models for AI, AI system monitoring, logging and auditing, AI in multi-cloud and hybrid architectures, as well as AI-related cloud services and infrastructure models. This course can be used to prepare for the Cloud AI Architect Certification exam.
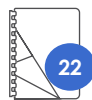
Request this Guide

01 | **Module 01 | Fundamental Predictive AI**

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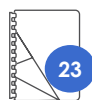
04 | **Module 04 | Fundamental Generative AI**

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22 | **Module 22 | Cloud AI Technology & Automation**

Focuses on cloud computing technology, infrastructure and practices specific to establishing and running cloudbased predictive AI and generative AI solutions. Topics include GPU and TPU for AI learning workloads, cloud-based AI services such as AWS SageMaker, Azure Machine Learning and Google AI Platform for model development, training and deployment, as well as mechanisms for scaling AI applications in the cloud, data storage and pipeline options.

23 | **Module 23 | Cloud AI Architecture & Design**

Explores cloud-based architectural models and design patterns specific to predictive AI and generative AI applications, including the selection and configuration of specialized cloud AI infrastructure, AI-optimized compute instances and network topologies for data-intensive workloads, as well as strategies for integrating AI services within existing cloud environments. Topics also include the utilization of containerization and multi-clouds, as well as scalability, failover and security considerations.

24 | **Module 24 | Cloud AI Architecture & Design Lab**

Provides a series of case-study driven, lab-style exercises and problems that are designed to test your ability to apply your knowledge of topics covered in previous modules. Completing this lab helps reinforce understanding of preceding topics and further demonstrates how different practices and technologies can be applied together as part of greater solutions.

Arcitura ®
CERTIFIED

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

The Service Technology School curriculum is comprised of 20 course modules and 9 certification tracks. Exams are available worldwide via online proctoring and on-site delivery by Certified Trainers. Achieving a passing grade on the required exam(s) achieves a certification for which a digital accreditation certificate is automatically issued by Arcitura and a digital certification badge is issued by Acclaim/Credly.

www.arcitura.com/st

Arcitura CERTIFIED
Microservice Professional

A Certified Microservice Professional has an understanding of technologies, models, messaging patterns and implementation mediums commonly utilized for the creation of microservices and other types of services.

Fundamental Microservices & Service Technology
COURSE **01 02**

Arcitura CERTIFIED
SOA Professional

A Certified SOA Professional has an understanding of service technology, microservices, APIs and service-oriented architecture (SOA), as well as knowledge of design principles for building services and assembling service-oriented solutions.

Fundamental SOA Design with Services & Microservices
COURSE **01 03**

Arcitura CERTIFIED
SOA Analyst

A Certified SOA Analyst has an in-depth understanding of analysis techniques and processes for modeling service APIs, microservice APIs and service compositions for service portfolio and service-oriented solution blueprints.

SOA Analysis & Modeling with Services & Microservices
COURSE **01 03 04 05 06**

Arcitura CERTIFIED
SOA Architect

A Certified SOA Architect has an in-depth understanding of the technology and application architecture models and mechanics of service, microservice and service composition implementations, and knowledge of how to engineer modern-day services-oriented solutions.

SOA Design & Architecture with Services & Microservices
COURSE **01 02 03 07 08**

Arcitura CERTIFIED
Microservice Architect

A Certified Microservice Architect has knowledge of the technology architecture models and mechanics of microservice implementations and containerization environments, as well as an understanding of associated design techniques for engineering microservices.

Microservice Design & Architecture
COURSE **01 02 09 10 11**

Arcitura CERTIFIED
Microservice Consultant

A Certified Microservice Consultant has knowledge of a cross-section of service technologies, solution design practices, API design techniques and security considerations relevant to microservices and other types of services.

Microservice Professional Consulting
COURSE **01 02 09 12 18**

Arcitura CERTIFIED
Service API Specialist

A Certified Service API Specialist has in-depth knowledge of service API design and coupling techniques, and REST and web-capable RPC protocols, as well as associated management practices, including monetization and versioning.

Service API Design & Management
COURSE **01 02 12 13 14**

Arcitura CERTIFIED
Service Governance Specialist

A Certified Service Governance Specialist has an in-depth understanding of project delivery methodology, as well as the definition and evolution of a service governance framework comprised of formal precepts, roles and processes.

Service Governance & Project Delivery
COURSE **01 03 15 16 17**

Arcitura CERTIFIED
Service Security Specialist

A Certified Service Security Specialist has comprehensive knowledge of common threats and vulnerabilities associated with solutions based on the use of services and microservices, and has an understanding of how to equip solution architectures with security controls.

Security for Microservices & SOA
COURSE **01 02 18 19 20**

Microservice and SOA courses are available via online study, as well as in-person or virtual instructor-led training and coaching.
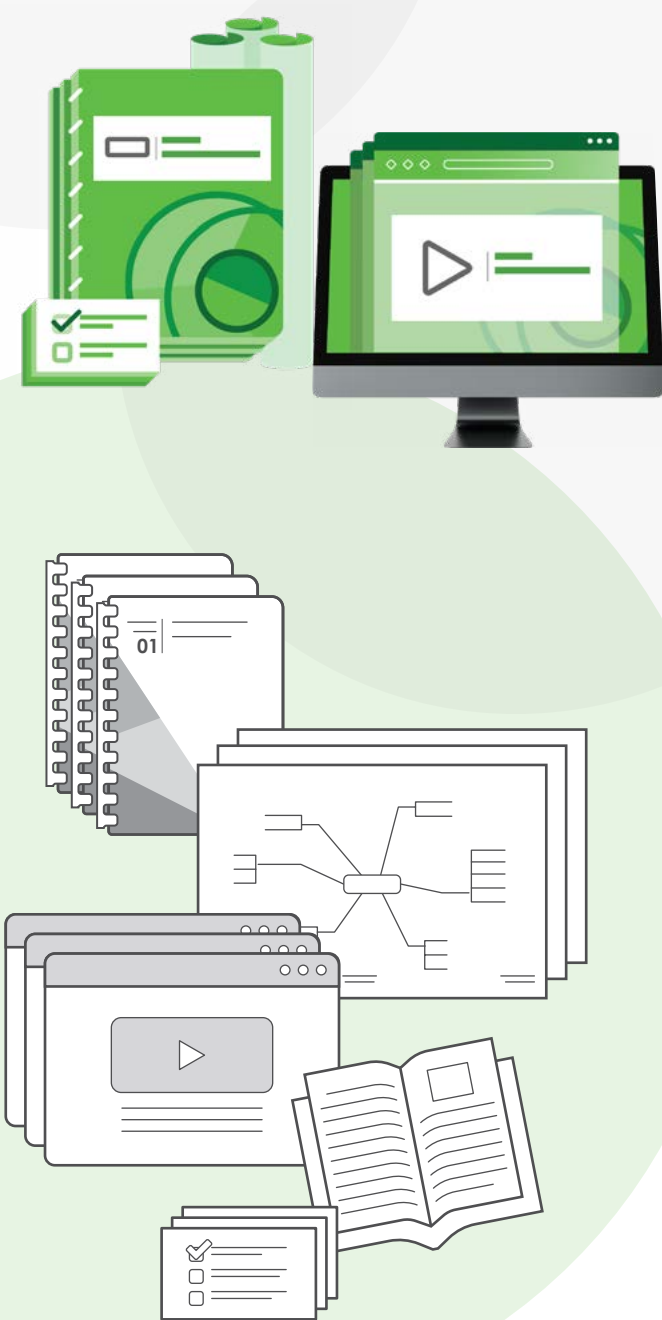
Fundamental Microservices & Service Technology *Course*
Microservice Professional Certification

The Fundamental Microservices & Service Technology course provides an understanding of the concepts, models and industry technologies relevant to contemporary microservices and other API-driven service technology implementations. This course can be used to prepare for the Microservice Professional Certification exam.

Request this Guide

Module 01 | Fundamental SOA, Services & Microservices

Provides comprehensive coverage of contemporary concepts, models and technologies pertaining to modern-day microservices and other forms of API-driven services, including coverage of service-oriented computing and service-oriented architecture (SOA).

Module 02 | Microservice Technology Concepts

Covers industry technologies, implementation mediums and messaging protocols relevant to microservices and other forms of API-driven services, as well as basic coverage of relevant cloud computing topics.

Fundamental SOA Design with Services & Microservices *Course*
SOA Professional *Certification*

The Fundamental SOA Design with Services & Microservices course establishes an essential understanding of the technologies and concepts associated with designing and composing API-driven services and microservices, as well as models and characteristics of service-oriented architecture. This course can be used to prepare for the SOA Professional Certification exam.

Request this Guide

Module 01 | Fundamental SOA, Services & Microservices

Provides comprehensive coverage of contemporary concepts, models and technologies pertaining to modern-day microservices and other forms of API-driven services, including coverage of service-oriented computing and service-oriented architecture (SOA).

Module 03 | Design & Architecture with SOA, Services & Microservices

Essential topics pertaining to service architectural models and practices and service-orientation principles relevant to service and microservice design, along with a range of distinct considerations for designing service-oriented solutions with REST services and Web services.

SOA Analysis & Modeling with Services & Microservices *Course*
SOA Analyst *Certification*

The SOA Analysis & Modeling with Services & Microservices course provides in-depth coverage of service and API modeling for microservices and other types of services, include the modeling of complex service compositions and service inventory blueprints. This course can be used to prepare for the SOA Analyst Certification exam.

Request this Guide

Module 01 | Fundamental SOA, Services & Microservices

Provides comprehensive coverage of contemporary concepts, models and technologies pertaining to modern-day microservices and other forms of API-driven services, including coverage of service-oriented computing and service-oriented architecture (SOA).
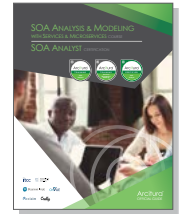
Module 03 | Design & Architecture with SOA, Services & Microservices

Essential topics pertaining to service architectural models and practices and service-orientation principles relevant to service and microservice design, along with a range of distinct considerations for designing service-oriented solutions with REST services and Web services.

Module 04 | Fundamental SOA Analysis & Modeling with Services & Microservices

Provides comprehensive coverage of SOA analysis techniques, models and approaches, including strategies and concepts for service modeling, service composition modeling and microservice modeling.

Module 05 | Advanced SOA Analysis & Modeling with Services & Microservices

Delves into the step-by-step processes for the analysis and modeling of services and microservices for REST service and Web service mediums, with an emphasis on establishing effective service layers as part of an overall conceptual blueprint.

Module 06 | SOA Analysis & Modeling Lab with Services & Microservices

Provides a series of real-world exercises for applying service modeling and SOA analysis techniques for a range of different services-based solutions.

Microservice and SOA courses are available via online study, as well as in-person or virtual instructor-led training and coaching.

SOA Design & Architecture with Services & Microservices Course
SOA Architect Certification

The SOA Design & Architecture with Services & Microservices course provides in-depth coverage of service-oriented technology and application architecture models, design patterns and integration techniques. This course can be used to prepare for the SOA Architect Certification exam.

Request this Guide

01

Module 01 | Fundamental SOA, Services & Microservices

Provides comprehensive coverage of contemporary concepts, models and technologies pertaining to modern-day microservices and other forms of API-driven services, including coverage of service-oriented computing and service-oriented architecture (SOA).

02

Module 02 | Microservice Technology Concepts

Covers industry technologies, implementation mediums and messaging protocols relevant to microservices and other forms of API-driven services, as well as basic coverage of relevant cloud computing topics.

03

Module 03 | Design & Architecture with SOA, Services & Microservices

Essential topics pertaining to service architectural models and practices and service-orientation principles relevant to service and microservice design, along with a range of distinct considerations for designing service-oriented solutions with REST services and Web services.

07

Module 07 | Advanced SOA Design & Architecture with Services & Microservices

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 others.

08

Module 08 | SOA Design & Architecture Lab with Services & Microservices

Provides a series of real-world exercises for applying service-oriented technology architecture models and techniques to design a variety of service-oriented solution architectures.

Microservice Design & Architecture *Course*
Microservice Architect Certification

The Microservice Design & Architecture course provides comprehensive coverage of microservice technology architecture models and design practices, as well as associated containerization technology components and design approaches. This course can be used to prepare for the Microservice Architect Certification exam.

Request this Guide

01 — Module 01 | Fundamental SOA, Services & Microservices

Provides comprehensive coverage of contemporary concepts, models and technologies pertaining to modern-day microservices and other forms of API-driven services, including coverage of service-oriented computing and service-oriented architecture (SOA).

02 — Module 02 | Microservice Technology Concepts

Covers industry technologies, implementation mediums and messaging protocols relevant to microservices and other forms of API-driven services, as well as basic coverage of relevant cloud computing topics.

09 — Module 09 | Fundamental Microservice Architecture & Containerization

Establishes foundational microservice technology architecture and design models and further introduces containerization concepts and container characteristics. Topics covered include microservice deployment, provisioning, registration and isolation levels, as well as logical containers, PODs and composition architecture.

10 — Module 10 | Advanced Microservice Architecture & Containerization

Provides an in-depth exploration of the practices, models and technology architectures behind microservices and containerization. Topics include microservice scaling, data management and autonomous ownership and versioning, as well as event sourcing, CQRS, composite isolated containers and container hosting models.

11 — Module 11 | Microservice Architecture & Containerization Lab

Provides a series of real-world exercises for applying architectural and design exercises pertaining to microservices and the use of containerization.

Microservice Professional Consulting *Course*
Microservice Consultant Certification

The Microservice Professional Consulting course provides a cross-section of topic coverage that includes microservice application architecture, containerization, service API design and management, and security technology and practices relevant to microservices. This course can be used to prepare for the Microservice Consultant Certification exam.

Request this Guide

01 — Module 01 | Fundamental SOA, Services & Microservices

Provides comprehensive coverage of contemporary concepts, models and technologies pertaining to modern-day microservices and other forms of API-driven services, including coverage of service-oriented computing and service-oriented architecture (SOA).

02 — Module 02 | Microservice Technology Concepts

Covers industry technologies, implementation mediums and messaging protocols relevant to microservices and other forms of API-driven services, as well as basic coverage of relevant cloud computing topics.

09 — Module 09 | Fundamental Microservice Architecture & Containerization

Establishes foundational microservice technology architecture and design models and further introduces containerization concepts and container characteristics. Topics covered include microservice deployment, provisioning, registration and isolation levels, as well as logical containers, PODs and composition architecture.

12 — Module 12 | Fundamental Service API Design & Management

Essential topics are covered pertaining to modern-day service API design and management practices and models. Coverage includes positive and negative API coupling types, API granularity levels, the use of API proxies and API gateways, as well as service API versioning.

18 — Module 18 | Fundamental Security for Services, Microservices & SOA

Provides coverage of essential security concepts and controls, as well as techniques and industry technologies that pertain to establishing security measures and security architectures for microservices and other types of services.
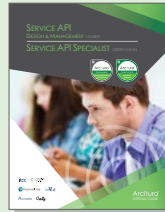
CONTINUED »

Microservice and SOA courses are available via online study, as well as in-person or virtual instructor-led training and coaching.

Service API Design & Management Course
Service API Specialist Certification

The Service API Design & Management course provides comprehensive coverage of API design techniques, coupling and granularity considerations, and API management practices including API versioning. Also covered are serialization protocols, as well as topics pertaining to REST and RPC protocols. This course can be used to prepare for the Service API Specialist Certification exam.

Request this Guide

01 | Module 01 | Fundamental SOA, Services & Microservices
Provides comprehensive coverage of contemporary concepts, models and technologies pertaining to modern-day microservices and other forms of API-driven services, including coverage of service-oriented computing and service-oriented architecture (SOA).

02 | Module 02 | Microservice Technology Concepts
Covers industry technologies, implementation mediums and messaging protocols relevant to microservices and other forms of API-driven services, as well as basic coverage of relevant cloud computing topics.

12 | Module 12 | Fundamental Service API Design & Management
Essential topics are covered pertaining to modern-day service API design and management practices and models. Coverage includes positive and negative API coupling types, API granularity levels, the use of API proxies and API gateways, as well as service API versioning.

13 | Module 13 | Advanced Service API Design & Management
Advanced coverage of service API design and management techniques and practices, binary and non-binary data serialization protocols (such as Protocol Buffers and Apache Avro), as well as RPC-based service API protocols (such as gRPC, GraphQL and Falcor).

14 | Module 14 | Service API Design & Management Lab
Provides a series of real-world exercises for applying service API design techniques and management practices for a range of different solution scenarios.

Service Governance & Project Delivery Course
Service Governance Specialist Certification

The Service Governance & Project Delivery course provides end-to-end coverage of service technology project delivery stages and SOA governance phases, along with numerous associated precepts, processes and roles. This course can be used to prepare for the Service Governance Specialist Certification exam.

Request this Guide

01 | Module 01 | Fundamental SOA, Services & Microservices
Provides comprehensive coverage of contemporary concepts, models and technologies pertaining to modern-day microservices and other forms of API-driven services, including coverage of service-oriented computing and service-oriented architecture (SOA).

03 | Module 03 | Design & Architecture with SOA, Services & Microservices
Essential topics pertaining to service architectural models and practices and service-orientation principles relevant to service and microservice design, along with a range of distinct considerations for designing service-oriented solutions with REST services and Web services.

15 | Module 15 | Fundamental Service Governance & Project Delivery
Service project delivery methodologies are explained, along with governance technology and task types and service vitality triggers and processes. Coverage includes SOA adoption planning and information and service policy governance precepts, processes and roles.

16 | Module 16 | Advanced Service Governance & Project Delivery
A range of service governance precepts and processes for SOA is covered, including those that address service usage, monitoring, legal data audits, testing practices, as well as service analysis, design and programming.

17 | Module 17 | Service Governance & Project Delivery Lab
Provides a series of real-world exercises for establishing service lifecycle governance programs and measuring and identifying weaknesses in existing governance systems.

Security for
Microservices & SOA *Course*

Service Security
Specialist *Certification*

The Security for Microservices & SOA course provides in-depth coverage of industry technologies, practices and controls used to secure microservice-based applications and other types of service-oriented solutions and counter common security threats. This course can be used to prepare for the Service Security Specialist Certification exam.

Request this Guide

Module 01 | Fundamental SOA, Services & Microservices

Provides comprehensive coverage of contemporary concepts, models and technologies pertaining to modern-day microservices and other forms of API-driven services, including coverage of service-oriented computing and service-oriented architecture (SOA).

Module 02 | Microservice Technology Concepts

Covers industry technologies, implementation mediums and messaging protocols relevant to microservices and other forms of API-driven services, as well as basic coverage of relevant cloud computing topics.

Module 18 | Fundamental Security for Services, Microservices & SOA

Provides coverage of essential security concepts and controls, as well as techniques and industry technologies that pertain to establishing security measures and security architectures for microservices and other types of services.

Module 19 | Advanced Security for Services, Microservices & SOA

Covers a series of technical and complex security topics pertaining to contemporary microservice deployments, service-oriented solution design, infrastructure, API gateways and modern service technologies.

Module 20 | Security Lab for Services, Microservices & SOA

Provides a series of real-world exercises for applying security practices and technologies to counter threats and solve complex service technology security problems.

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.

➤ Both courses and accreditations are vendor-neutral, which means they empower you with skills and credentials that you can take to wherever you need to go.

➤ 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.

What You Learn from Arcitura Courses

Learn from an Extensive Curriculum

Arcitura provides one of the largest and most comprehensive vendor-neutral IT education programs in the world.

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Arcitura courses and certifications cover contemporary topics from an IT industry perspective.

Learn about Real World IT

When you take an Arcitura course you learn about a field of practice as it exists in the real world, not specific to any vendor.

What's in an Arcitura Course
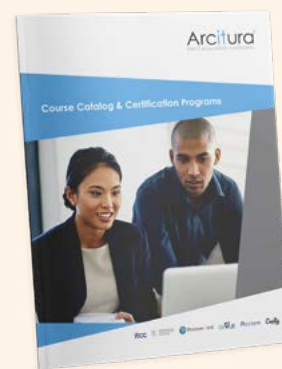
Comprehensive Coverage

Each course provides a comprehensive curriculum with 2-8 modules and 20-80 hours of training.

More Than Just Video Lessons

In addition to standard video lessons, courses include full-color workbooks and reference posters for all lessons.

Interactive & Graded Challenges

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

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▶ 0:00 / 1:00

About Arcitura Courses

▶ 0:00 / 1:19

About Arcitura Certifications

▶ 0:00 / 1:47

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Pearson VUE OnVUE Online Proctoring enables test takers to take proctored exams remotely, in any time zone, and often on short notice. For more information, visit: www.pearsonvue.com/arcitura/op

TAKING EXAMS VIA
DIRECT ONLINE PROCTORING

Arcitura Direct Online Proctoring enables test takers to take proctored exams remotely, in any time zone, and often on short notice. For more information, contact info@arcitura.com and provide your exam scheduling preferences.

TAKING ON-SITE EXAMS DURING AN
INSTRUCTOR-LED WORKSHOP

It is possible for Arcitura exams to be taken during the delivery of onsite workshops. In this case, the Certified Trainer teaching the workshop also acts as the exam proctor. Contact info@arcitura.com for more information regarding this option.

You can take exams from anywhere in the world via Pearson VUE testing centers, Pearson VUE OnVUE online proctoring, direct online proctoring and/or onsite exam proctoring at your location. Visit www.arcitura.com/exams.html for details.

COURSES / CERTIFICATIONS	Essential AI / AI Professional	Predictive AI / Predictive AI Specialist	Generative AI / Generative AI Specialist	Agentic AI / Agentic AI Specialist	Predictive AI Engineering / Predictive AI Engineer	Generative AI Engineering / Generative AI Engineer	AI Architecture & Design / AI Architect	AI Professional Consulting / AI Consultant	AI Governance & Ethics / AI Governance & Ethics Specialist	Cloud AI Technology & Automation / Cloud AI Professional*	Cloud AI Architecture & Design / 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.

DIGITAL TRANSFORMATION PROFESSIONAL ACADEMY

	COURSES → CERTIFICATIONS	Digital Transformation / Digital Transformation Specialist	Digital Transformation: Fundamental Technology / Digital Transformation Technology Professional	Digital Transformation: Advanced Technology & Architecture / Digital Transformation Technology Architect	Digital Transformation: Fundamental Data Science / Digital Transformation Data Science Professional	Digital Transformation: Advanced Data Science / Digital Transformation Data Scientist	Digital Transformation: Fundamental Security / Digital Transformation Security Professional	Digital Transformation: Advanced Security / Digital Transformation Security Specialist	Digital Transformation: Fundamental Intelligent Automation / Digital Transformation Intelligent Automation Professional	Digital Transformation: Advanced Intelligent Automation / 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.

		DevOps	Blockchain Architecture	IoT Architecture	Cybersecurity	Robotic Process Automation	Digital Business Technology	Containerization Architecture	Quantum Computing
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 / CERTIFICATIONS	Essential Big Data & Data Science / Big Data Professional	Big Data Analytics & Fundamental Data Science / Big Data Science Professional	Big Data Analysis & Advanced Data Science / Big Data Scientist	Big Data Professional Consulting / Big Data Consultant	Data Science Professional Consulting / Data Science Consultant	Machine Learning / Machine Learning Specialist	Big Data Engineering / Big Data Engineer	Big Data Architecture / Big Data Architect	Data Science Governance / 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.

CLOUD COMPUTING SCHOOL

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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	●	●	●	●	●	●	●	●	●	●
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 Professional: This track has the following additional modules from the AI & Cloud AI Professional Academy curriculum: 1, 4, 19*

Cloud AI Architect: This track has the following additional modules from the AI & Cloud AI Professional Academy curriculum: 1, 4, 19, 20, 21*

* 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.

SERVICE TECHNOLOGY SCHOOL

COURSES / CERTIFICATIONS	Fundamental Microservices & Service Technology — Microservice Professional	Fundamental SOA Design with Services & Microservices — SOA Professional	SOA Analysis & Modeling with Services & Microservices — SOA Analyst	SOA Design & Architecture with Services & Microservices — SOA Architect	Microservice Design & Architecture — Microservice Architect	Microservice Professional Consulting — Microservice Consultant	Service API Design & Management — Service API Specialist	Service Governance & Project Delivery — Service Governance Specialist	Security for Microservices & SOA — 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.

CURRICULUM MAPPING

Digital Transformation

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.A | Fundamental Machine Learning

MODULE 10.B | Fundamental Predictive AI

MODULE 11 | Fundamental Generative AI

MODULE 12 | Advanced Big Data Analysis & Analytics

MODULE 13.A | Advanced Machine Learning

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

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The following mapping diagram shows which course modules from the Digital Transformation Professional Academy curriculum correspond to course modules in other programs. Use this mapping information for your learning plan, as the completion of a course module in one program will automatically advance you in another course in a different program.

Module	Program
MODULE 01 | Fundamental Cloud Computing	Cloud Computing School
MODULE 02 | Cloud Technology Concepts	Cloud Computing School
MODULE 01 | Fundamental Blockchain	Next-Gen IT Academy
MODULE 01 | Fundamental IoT	Next-Gen IT Academy
MODULE 04 | Fundamental Cloud Architecture	Cloud Computing School
MODULE 02 | Blockchain Technology & Architecture	Next-Gen IT Academy
MODULE 02 | IoT Technology & Architecture	Next-Gen IT Academy
MODULE 01 | Fundamental Big Data Science & Analytics	Next-Gen Data Science Academy
MODULE 07 | Fundamental Machine Learning	Next-Gen Data Science Academy
MODULE 01 | Fundamental Predictive AI	AI & Cloud AI Professional Academy
MODULE 04 | Fundamental Generative AI	AI & Cloud AI Professional Academy
MODULE 02 | Big Data Analysis & Technology Concepts	Next-Gen Data Science Academy
MODULE 08 | Advanced Machine Learning	Next-Gen Data Science Academy
MODULE 02 | Advanced Predictive AI	AI & Cloud AI Professional Academy
MODULE 05 | Advanced Generative AI	AI & Cloud AI Professional Academy
MODULE 01 | Fundamental Cybersecurity	Next-Gen IT Academy
MODULE 02 | Advanced Cybersecurity	Next-Gen IT Academy
MODULE 16 | Fundamental Agentic AI	AI & Cloud AI Professional Academy
MODULE 01 | Fundamental RPA	Next-Gen IT Academy
MODULE 02 | Advanced RPA & Intelligent Automation	Next-Gen IT Academy
MODULE 13 | Fundamental AI Architecture & Design	AI & Cloud AI Professional Academy
MODULE 14 | Advanced AI Architecture & Design	AI & Cloud AI Professional Academy

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Arcitura Education offers a Trainer Development Program that guides individuals through a series of steps to help them work toward the requirements for teaching Arcitura courses. If you are interested in pursuing a Certified Trainer designation, contact info@arcitura.com.

+1·604·904·4100
info@arcitura.com
www.arcitura.com

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Arcitura®

www.arcitura.com • info@arcitura.com
+1-604-904-4100