DIGITAL TRANSFORMATION:
FUNDAMENTAL TECHNOLOGY COURSE

DIGITAL TRANSFORMATION
TECHNOLOGY PROFESSIONAL CERTIFICATION

Arcitura® TRAINING
Digital Transformation Technology

Arcitura® CERTIFIED
Digital Transformation Technology Professional

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PCC PROFESSIONAL CERTIFICATION COALITION

P Pearson | VUE   OnVUE

Acclaim   Credly by Pearson

Arcitura®
OFFICIAL GUIDE

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.

For more information and to download the academy catalog, visit the Digital Transformation Professional Academy home page:

arcitura.com/dt

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SELF-STUDY WITH ELEARNING

eLearning Made Easy

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

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

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

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

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

arcitura.com/elearning

eLearning Formats

For Everyday Learning

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

For Learning On-the-Go

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

For Your Reference

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

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

INSTRUCTOR-LED TRAINING & COACHING

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

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

arcitura.com/training

Instructor-Led Services

Online Training

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

Onsite Training

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

Online Coaching

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

For Groups & Individuals

Workshops for Groups or Individuals

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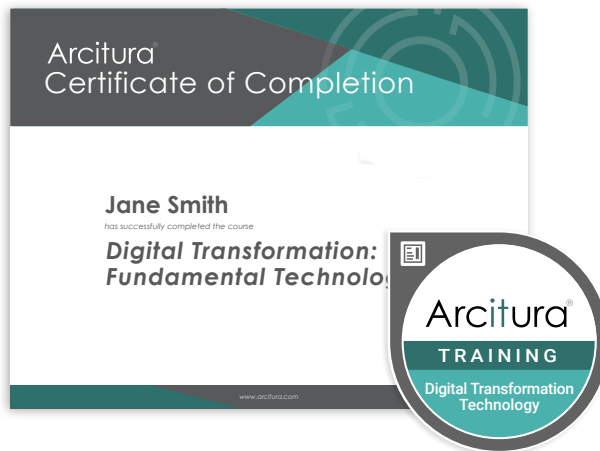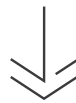
Coaching for Groups or Individuals

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

Training Programs for Multiple Groups

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

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Certificate of Completion

Jane Smith
has successfully completed the course

Digital Transformation: Fundamental Technology
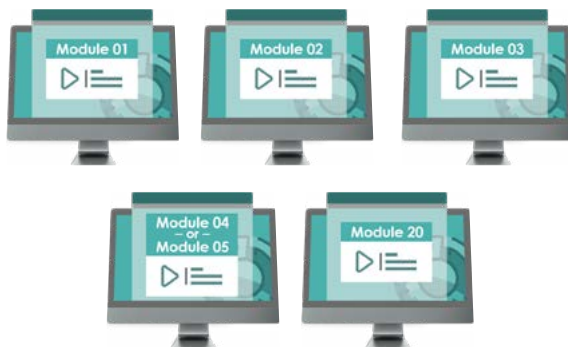
HOW TO GET STARTED

The Digital Transformation: Fundamental Technology course provides essential coverage of digital transformation, as well as primary related digital technologies, including cloud computing, blockchain and IoT. Benefits and challenges of applying these technologies are explained, along with a broad range of fundamental technical details and concepts, as well as explorations of how they can be utilized in business applications.
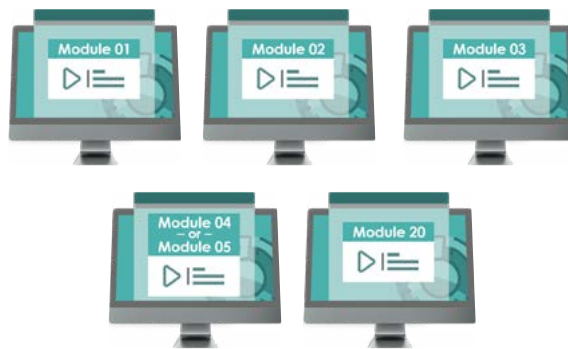
The course is comprised of a set of modules. Each module has a set of lessons and is further supplemented with exercises to help reinforce your understanding of key topics.

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

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

The Digital Transformation: Fundamental Technology course can be used to prepare for the Digital Transformation Technology Professional Certification exam, as explained on the following page.

For more course details, including individual course module topic outlines, visit the Course & Certification webpage via arcitura.com/courses.

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.

HOW TO GET CERTIFIED

The Digital Transformation: Fundamental Technology course prepares you for the official Digital Transformation Technology Professional Certification exam.

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

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

To learn more about the Digital Transformation Technology Professional certification bundle that includes the course, exam and practice questions at a discount, visit the Course & Certification webpage via arcitura.com/store.

DIGITAL TRANSFORMATION: FUNDAMENTAL TECHNOLOGY COURSE

The Digital Transformation: Fundamental Technology course provides essential coverage of digital transformation, as well as primary related digital technologies, including cloud computing, blockchain and IoT. Benefits and challenges of applying these technologies are explained, along with a broad range of fundamental technical details and concepts, as well as explorations of how they can be utilized in business applications.

The Digital Transformation: Fundamental Technology course is comprised of 5 course modules. Each has an estimated completion time of 10 hours. Shown here are the contents of each course module, followed by the individual course module outlines.
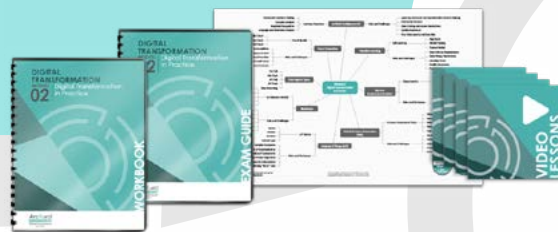
MODULE 01:

Fundamental Digital Transformation

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

MODULE 02:

Digital Transformation in Practice

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

MODULE 03:

Fundamental Cloud Computing

- Workbook Lessons (100+ pages)
- Video Lessons (for all topics)
- Interactive Exercises
- Mind Map Poster
- Symbol Legend Poster
- Practice Exam Questions
- PDFs of Workbook and Posters (printable)
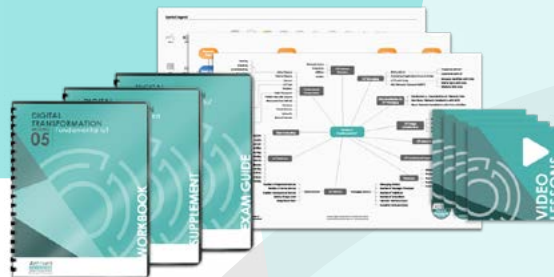
MODULE 04:
Fundamental Blockchain

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

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MODULE 05:
Fundamental IoT

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

MODULE 20:
Fundamental
AI Architecture

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

/ **Partial Course Available**

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

Fundamental Digital Transformation
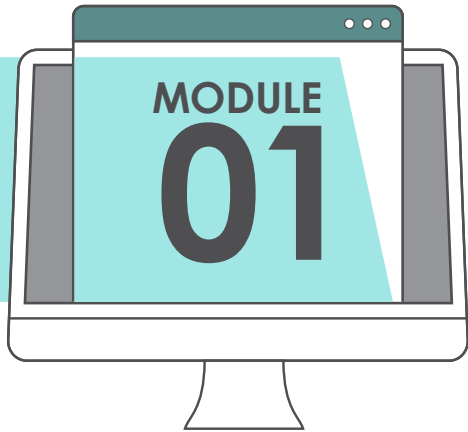
MODULE 01

This course module provides an easy-to-understand introduction to Digital Transformation and how it relates to business, technology, data and people. Coverage includes the benefits, risks and challenges of Digital Transformation, as well as its business and technology drivers.

Also explained are the characteristics of building customer-centric automation solutions, along with an insightful exploration of data intelligence origins, sources, methods and utilization types, as well as manual and automated intelligent decision-making delegated to humans and machines.

The following primary topics are covered:

- Understanding Digital Transformation
- Benefits of Digital Transformation
- Challenges of Digital Transformation
- Digital Transformation Business and Technology Drivers
- Understanding Customer-Centricity
- Product-Centric vs. Customer-Centric Relationships
- Relationship-Value Actions and Warmth
- Omni-Channel Customer Interactions
- Customer Journeys and Customer Data Intelligence
- Data Intelligence Basics
- Data Origins and Data Sources
- Data Collection Methods and Data Utilization Types
- Intelligent Decision-Making
- Computer-Assisted Manual Decision-Making and Conditional Automated Decision-Making
- Intelligent Manual Decision-Making vs. Intelligent Automated Decision-Making
- Direct-Driven Automated Decision-Making and Periodic Automated Decision-Making
- Realtime Automated Decision-Making

Digital Transformation in Practice
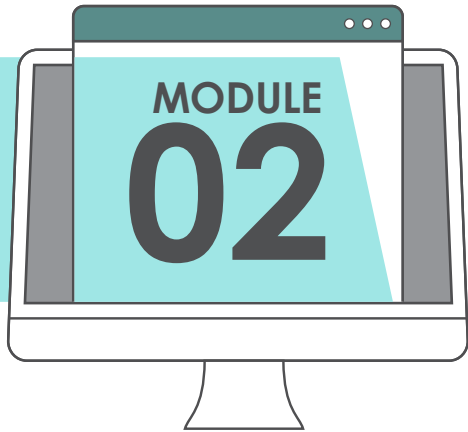
MODULE
02

This course module delves into Digital Transformation automation environments by exploring the key contemporary technologies used to build Digital Transformation automation solutions, including AI, RPA, IoT, machine learning, blockchain, cloud computing and big data.

The module begins by establishing the basic forms of data ingress used to bring data into organizations for use by data science technologies that provide increased data intelligence to both human decision-makers and AI-driven solutions with automated decision-making capabilities.

After covering each of the primary Digital Transformation technologies, the module concludes with a comprehensive, step-by-step description of a business process as carried out by a customer-centric Digital Transformation solution.

The following primary topics are covered:

- Distributed Solution Design Basics
- Data Ingress Basics, including File Pull, File Push, API Pull, API Push and Data Streaming
- An Introduction to Digital Transformation Automation Technologies
- Cloud Computing Basics and Cloud Computing as part of Digital Transformation Solutions
- Common Cloud Computing Risks and Challenges
- Blockchain Basics and Blockchain as part of Digital Transformation Solutions
- Common Blockchain Risks and Challenges
- Internet of Things (IoT) Basics and IoT as part of Digital Transformation Solutions
- Common IoT Risks and Challenges
- Robotic Process Automation (RPA) and RPA as part of Digital Transformation Solutions
- Common RPA Risks and Challenges

- An Introduction to Digital Transformation Data Science Technologies
- Big Data and Data Analytics and Big Data as part of Digital Transformation Solutions
- Common Big Data Risks and Challenges
- Machine Learning Basics and Machine Learning as part of Digital Transformation Solutions
- Common Machine Learning Risks and Challenges
- Artificial Intelligence (AI) Basics and AI as part of Digital Transformation Solutions
- Common AI Risks and Challenges
- Inside a Customer-Centric Digital Transformation Solution (a comprehensive, step-by-step exploration)
- Mapping Individual Digital Transformation Technologies to Solution Processing
- Tracking how Data Intelligence is Collected and Used in a Digital Transformation Solution

Fundamental Cloud Computing
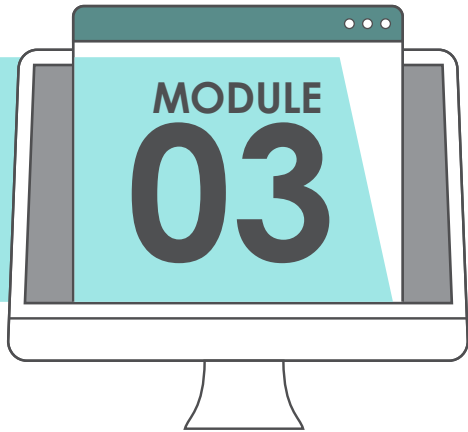
MODULE 03

This course module 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.

The following primary topics are covered:

- Fundamental Cloud Computing Terminology and Concepts
- Basics of Virtualization
- Specific Characteristics that Define a Cloud
- Understanding Elasticity, Resiliency, On-Demand and Measured Usage
- Benefits, Challenges and Risks of Contemporary Cloud Computing Platforms and Cloud Services
- Understanding the Software as a Service (SaaS) Cloud Delivery Model
- Understanding the Platform as a Service (PaaS) Cloud Delivery Model
- Understanding the Infrastructure as a Service (IaaS) Cloud Delivery Model
- Cloud Computing Mechanisms that Establish Architectural Building Blocks
- Virtual Servers, Containers, Ready-Made Environments, Failover Systems & Pay-Per-Use Monitors
- Automated Scaling Listeners, Multi-Device Brokers & Resource Replication
- Understanding How Individual Cloud Computing Mechanisms Support Cloud Characteristics
- An Introduction to Containerization, Container Hosting & Logical Pod Containers
- A Comparison of Containerization and Virtualization
- Cloud Balancing and Cloud Bursting Architectures

Fundamental Blockchain
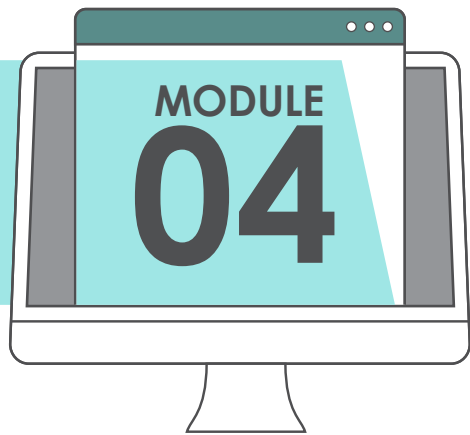
MODULE
04

This course module 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.

The following primary topics are covered:

- Benefits and Challenges of Blockchain
- Blockchain Business Drivers and Technology Drivers
- Understanding Blockchain's Decentralized Model
- Blockchain Value Propositions
- How Blockchain Can be Used for Different Industries
- Blockchain Applications, Networks and the Distributed Ledger
- How the Distributed Ledger Can Relate to Relational Database
- Fundamental Components of a Blockchain Architecture
- Transactions, Records and Pools
- Blocks, Chains and Block Headers
- Blockchain Users, Full Nodes and Partial Nodes
- Step-by-Step Understanding of the Record and Block Lifecycle
- Step-by-Step Understanding How the Merkle Tree Works
- Step-by-Step Understanding of How Consensus Works
- Consensus Algorithms (PoW, PoS, PoA, DPoS, LPoS, PoI, PoET, PoC, PoB, Round Robin)
- Public vs. Private / Permissionless vs. Permissioned Blockchains
- Coins, Tokens, Smart Contracts
- Basics of Crypto Hashing and Cryptography
- On-Chain, Off-Chain and Cross-Chain Activity
- Understanding Soft Forks and Hard Forks
- Common Blockchain Metrics

Fundamental IoT
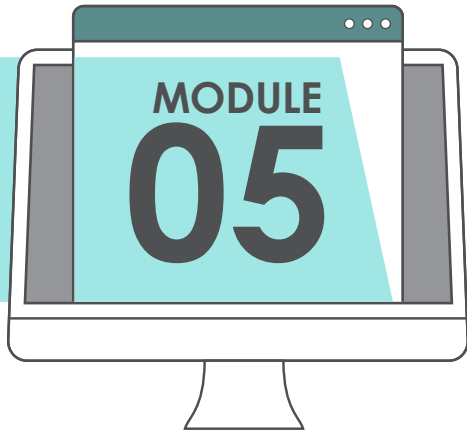
MODULE 05

This course module 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.

The following primary topics are covered:

- Understanding Things, Connectivity, Data, Processing, Commands and Business Analytics
- IoT Business and Technology Drivers, Benefits and Challenges
- Miniaturization and Nanotechnology
- IoT Connectivity and Contextual Realtime Data
- IoT Business Domains (Personal, Home, Enterprise, Utilities, Mobile)
- IoT vs. the Internet
- Resource-Constrained Devices and Low-Power Wide-Area Networks (LPWANs)
- Active and Passive Devices (including RFID)
- Telemetry and Command Data
- Sensors (Mechanical, Resistive, Optical, Ranging, MEMS)
- Microcontrollers, Firmware and Power Sources
- IoT Gateways and Common Gateway Functions
- Introduction to Edge and Fog Computing
- IoT Platforms and Common Platform Functions
- IoT Architecture Layers and Action Modeling
- Key IoT Architecture Design Considerations
- Radio Transports (Leased vs. Unleased, High Band vs. Low Band)
- IoT Messaging with REST, HTTP and the Constrained Application Protocol (CoAp)
- REST Properties and Constrains with IoT and CoAp
- HTTP Resource Identifiers, Media Types and Method with IoT and CoAp
- IoT Publish-and-Subscribe and MQ Telemetry Transport (MQTT)
- Non-Binary Data Serialization for IoT with JSON
- Binary Data Serialization for IoT with Protocol Buffers

Fundamental AI Architecture
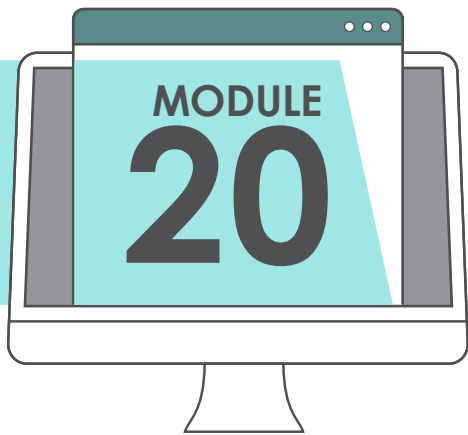
MODULE 20

This course module provides an essential understanding of AI system and solution architecture. It 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).

The following primary topics are covered:

- AI Architecture vs. AI Engineering Comparison
- AI Product Architectures vs. Custom AI Architectures
- AI Architecture Scopes (System and Solution)
- AI Solution Operational Modes (Training and Production)
- AI System Architecture Types (Monolithic, Modular, Hybrid)
- AI Solution Data Storage (Internal, External, Hybrid)
- AI System Core Modules
- Data Ingestion for Common Predictive AI and Generative AI Data Sources
- Data Preprocessing in Predictive AI and Generative AI Systems
- Feature Engineering in Predictive AI and Generative AI Systems
- Inference Engine in Predictive AI and Generative AI Systems
- Model Repository in Predictive AI and Generative AI Systems
- Operations Monitors (Performance, Resource)
- Data Monitors (Input, Output)
- Model Monitors (Weight and Gradient, Activation Distribution, Bias and Fairness)
- Ancillary Monitors (Explainability, Robustness and Adversarial Attack, Data Quality, Data Labeling)

COMPLETE & PARTIAL EXAMS

To attain the Digital Transformation Technology Professional Certification requires a passing grade on the complete Digital Transformation Technology Professional Certification Exam or a passing grade on the partial Digital Transformation Technology Professional Certification Exam and the attainment of the Digital Transformation Specialist Certification, as explained below.

Complete Exam Details

The complete Digital Transformation Technology Professional certification exam covers topics from all 5 modules in the Digital Transformation Technology Professional certification track. Purchase this exam if you've taken the Digital Transformation: Fundamental Technology course and would like to pursue certification as a Digital Transformation Technology Professional, or if you would like to retake this exam to improve your grade.

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

Partial Exam Details

The partial Digital Transformation Technology Professional certification exam covers topics from modules in the Digital Transformation Technology Professional certification track (excluding Modules 1 and 2).

Purchase this exam if:

- you've taken the complete or partial Digital Transformation: Fundamental Technology course and
- you would like to pursue certification as a Digital Transformation Technology Professional and
- you've already achieved the Digital Transformation Specialist certification.

If you are already a certified Digital Transformation Specialist and you pass this exam, you will receive an official digital certificate and a digital certification badge for the Digital Transformation Technology Professional accreditation.

**Digital Transformation
Technology Professional**

CERTIFICATION EXAM
COMPLETE

**Digital Transformation
Technology Professional**

CERTIFICATION EXAM
PARTIAL

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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:
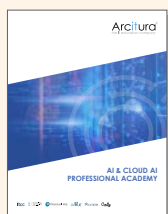
| AI & Cloud AI Professional Academy | Digital Transformation Professional Academy | Next-Gen IT Academy | Next-Gen Data Science Academy | Cloud Computing School | Service Technology School |
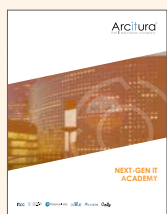
Within each program, modules are organized into tracks. Every course has a track that indicates the order in which course modules should be completed. Each track also corresponds to a professional certification. There are over 50 professional certifications, each of which can be attained by passing a certification exam.
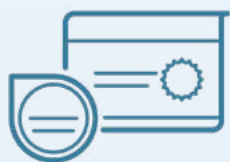
Digital Certificates and Badges

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

AI & Cloud AI Professional Academy

Arcitura®

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

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

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

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

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Digital Transformation Professional Academy

Arcitura®

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		●	●			●	●		
MODULE 05 — Fundamental IoT		● (or)	● (or)						
MODULE 06 — Cloud Architecture			●						
MODULE 07 — Blockchain Architecture			●				●		
MODULE 08 — IoT Architecture			● (or)						
MODULE 09 — Fundamental Big Data Analysis & Analytics				●	●				
MODULE 10.A — Fundamental Machine Learning				●	●				
MODULE 10.B — Fundamental Predictive AI				● (or)	● (or)			●	●
MODULE 11 — Fundamental Generative AI				●	●				
MODULE 12 — Advanced Big Data Analysis & Analytics					●				
MODULE 13.A — Advanced Machine Learning					●				
MODULE 13.B — Advanced Predictive AI					● (or)				
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.

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Next-Gen IT Academy

Arcitura®

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								●

Next-Gen Data Science Academy

Arcitura®

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

Arcitura®

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

Cloud AI Architect column: 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

Arcitura®

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

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

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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.

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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.

Learn about the Latest in IT

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
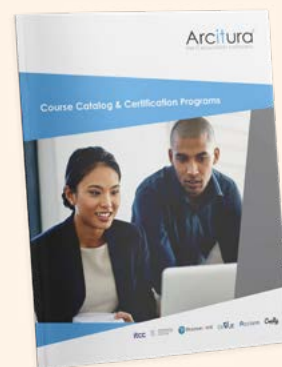
Comprehensive Coverage

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.
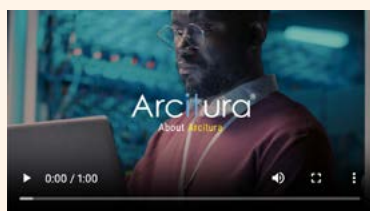
Interactive & Graded Challenges

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

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About Arcitura Certifications