IASA

Course & Certifications Curriculum

for IT Architects

2017-2018

Contents

Iasa Foundation Course: Architect Core

Certificate:	CITA-Foundation
Delivery:	Instructor led – onsite and online
Language:	English | Spanish
Cost:	$1,725 Online | $2,525 Onsite (pp)*

Iasa's Architect Core training provides an introduction to the tools, information, skills and terminology required to succeed as a professional architect.

This course is designed to give you and your team all of the tools you need to lift architecture from a 'documentation' process to a true business capability.

All IT architects will benefit from the concepts presented in this course.

Participants will have the knowledge and ability to:

- Automate key business processes
- Align communication across primary business units
- Identify internal and external business drivers
- Analyze business structures and segments
- Prepare for investment prioritization
- Map frameworks to an organization's maturity level
- Manage an engagement model
- Create a stakeholder communication strategy
- Value and architecture

Participants will receive an electronic copy of the classroom presentation material and a student workbook.

CITA-F Examination (included):

- The CITA-F credential is achieved by achieving a 70% or higher on the CITA-F examination.
- The CITA-F exam is an online proctored exam consisting of 75 multiple-choice/true/false questions.

* Pricing reflected is for non-members and includes full membership ($125 value)

Module 1 – Pre-Work Review
Lesson – Foundation Pillars Review
Case Study Review

Module 2: Engagement Model & Architecture Practice
Lesson - Architecture Process & the Architect's Engagement Model
Lesson & Workshop – Architecture Process
Lesson & Workshop – Case Study Review

Module 3: Project Selection
Lesson & Workshop – Reviewing the Business Case (Business Model Canvas)
Lesson & Workshop – Validate the Numbers
Lesson & Workshop – Create the Business Case
Lesson & Workshop – Calculate Value
Lesson & Workshop – Prioritize/Select Projects

Module 4: Create Architecture
Lesson & Workshop – Analyze Architecture Requirements
Lesson & Workshop – General Architecture
Lesson & Workshop – Product Specific Architecture
Lesson & Workshop – Views, Viewpoints & Perspectives

Module 5: Deliver Architecture
Lesson & Workshop – Stakeholder Communication
Lesson & Workshop – Modify & Update Artifacts
Lesson & Workshop – Manage Delivery

Module 6: Manage Architecture
Lesson & Workshop – Reviewing and Analyzing Value Across Projects
Lesson & Workshop – Setting Goals for the Team
Lesson & Workshop – Updating Architect's Engagement Model
Lesson & Workshop – Collecting and Communicating Architectural Value

Iasa Associate Course: Business Technology Strategy

Certificate:	Part of CITA-Associate
Delivery:	Instructor led – onsite and online
Language:	English
Cost:	Included in all Associate level courses - $500 sold separately

Business technology strategy is a foundation course for all architecture disciplines, providing instruction, examples, and case studies around the IT processes and systems in the lines-of-business of a corporation.

BTS will give the learner a broad perspective on how to assess the maturity of IT support for business processes and propose concrete changes to improve alignment.

By the end of this module, participants will have the knowledge and ability to:

- Manage architecture service teams assignments and responsibilities with future project and programs
- Measure the value of a technology investment decision using multiple tools and techniques
- Research, select and apply an architecture framework to their organization
- Be able to model, analyze, and reason about structural and financial aspects of a business
- Understand basic financial operation, including accounting for business events
- Be able to trace business in terms of information, funds, and work flows

Related Training:

The Iasa Associate Certified Architect exam is based on the curriculum from this course and **one** of the five associate focus courses:

- Iasa Associate Business Architecture
- Iasa Associate Information Architecture
- Iasa Associate Infrastructure Architecture
- Iasa Associate Software Architecture
- Iasa Associate Solution Architecture

Participants will receive an electronic copy of the classroom presentation material and a student handbook.

CITA-A Examination (included):

- The CITA-A credential is achieved by achieving a 70% or higher on the CITA-A examination. The exam includes questions from the BTS pre-work course and 1 specialization course.
- The CITA-A exams are delivered online consisting of 100 multiple-choice/true/false questions.

Module 1 - MBA concepts and intro to BA
Lesson 1 - How Business Entities are organized
Lesson 2 - Industry Analysis -
Lesson 3 - Internal Value Engines
Lesson 4 - Business Impact of Change
Lesson 5 - Business Capability Models
Lesson 6 - Technology Strategy
Lesson 7 - Role of Finance in Strategy
Lesson 8 - Developing a Quantitative Value Case
Lesson 9 - How to "Sell" the Business Case

Module 2 – Innovate
Lesson 1 - Innovation and Strategy
Lesson 2 - Process to Help Manage Change -.
Lesson 3 - Value of Innovation
Lesson 4 - Innovation in the Organization -
Lesson 5 - Risk -
Lesson 6 - Defining the Business Architect

Module 3 – IT Processes for Business
Lesson 1 - Process Model -
Lesson 2 - Architecture Models & Frameworks
Lesson 3 - Impact of Technology Change
Lesson 4 - Working with the PMO
Lesson 5 - "War on Cost
Lesson 6 - Value & Adoption
Lesson 7 - Team Dynamics

Iasa Associate Course: Business Architecture

Certificate:	CITA-Associate
Delivery:	Instructor led – onsite and online
Language:	English
Cost:	$2,125 Online | $2,925 Onsite (pp)*

Iasa Business Architect Training provides a platform from which professional business architects develop advanced skills in business valuation of technology.

The purpose of this course is to prepare architects to function effectively as business technology strategists using common techniques and procedures.

By the end of this module, participants will have the knowledge and ability to:

- Identify business drivers and risk
- Anticipate future requirements and constraints
- Conduct basic financial statement analysis
- Create project funding models
- Clarify goals, strategies, measures and timelines
- Develop modeling tool set and procedures
- Maintain and support meta models

Related Training:

The Iasa Associate Certified Business Architect exam is supported by the following **two** Iasa courses:

- **Iasa Associate Business Architecture**
- **Iasa Associate Business Technology Strategy**

Participants will receive an electronic copy of the classroom presentation material and a student handbook.

CITA-A Examination (included):

- The CITA-A credential is achieved by achieving a 70% or higher on the CITA-A examination. The exam includes questions from the BTS pre- course and 1 specialization course.
- The CITA-A exams are delivered online consisting of 100 multiple-choice/true/false questions.

* Pricing reflected is for non-members and includes full membership ($125 value)

Module 1 - What is Business Architecture?
Lesson 1: A Day in the Life of a Business Architect
Lesson 2: Definition of a Business
Lesson 3: Definition of Business Architecture

Module 2 - Views, Designs and Models
Lesson 1: Charters, contracts and their role in business architecture
Lesson 2: Views of business architecture
Lesson 3: Models for Strategy
Lesson 4: Models for Value
Lesson 5: Models for Services
Lesson 6: Models for Capabilities
Lesson 7: Models for Processes
Lesson 8: Tying the models together
Lesson 9: Models versus Deliverables

Module 3: Performance Measurement
Lesson 1: Financial measures
Lesson 2: Activity based costing
Lesson 3: Structural performance measures
Lesson 4: Measuring services, processes, and capabilities
Lesson 5: Measuring when measuring is hard

Module 4: Strategy & Goal Development
Lesson 1: Competitive Environments
Lesson 2: Operating Models
Lesson 3: Translate Strategy into Action
Lesson 4: Align the Organization to the Strategy
Lesson 5: Plan Operations

Module 5: Managing Business Capabilities
Lesson 1: Capabilities as model components
Lesson 2: Identifying capabilities
Lesson 3: Organizing capabilities

Module 6: Managing Business Processes
Lesson 1: Building the process model
Lesson 2: Managing processes
Lesson 3: Improving processes

Iasa Associate Course: Infrastructure Architecture

Certificate:	CITA-Associate Infrastructure
Delivery:	Instructor led – onsite and online
Language:	English
Cost:	$2,125 Online	$2,925 Onsite (pp)*

Iasa Infrastructure Architect Training provides a platform from which professional infrastructure architects develop a mastery of network, computing platform and operations.

The purpose of this course is to prepare architects to function effectively as infrastructure architects using common techniques and procedures.

By the end of this module, participants will have the knowledge and ability to:

- Lead application design and development
- Address infrastructure reusability and services
- Ensure information quality attribute levels are achieved
- Support development team
- Communicate concepts to all levels of management
- Utilize infrastructure management trends
- Participate in governance mechanisms
- Ensure deliverables exceed governance standards

Related Training:

The Iasa Associate Certified Infrastructure Architect exam is supported by the following **two** Iasa courses:

- **Iasa Associate Infrastructure Architecture**
- **Iasa Associate Business Technology Strategy**

Participants will receive an electronic copy of the classroom presentation material and a student handbook.

CITA-A Examination (included):

- The CITA-A credential is achieved by achieving a 70% or higher on the CITA-A examination. The exam includes questions from the BTS pre- course and 1 specialization course.
- The CITA-A exams are delivered online consisting of 100 multiple-choice/true/false questions.

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Module 1: Dynamic Datacenter
Lesson 1: Datacenter and Operations Platform
Lesson 2: Network Platform
Lesson 3: Telephony and Communications Platform
Lesson 4: Compute Platform (Server and Devices)
Lesson 5: Data Management Platform

Module 2: Dynamic Systems
Lesson 1: Computing Platform
Lesson 2: Identity Management Platform
Lesson 3: Application Platform
Lesson 4: Collaboration Platform
Lesson 5: Productivity Platform
Lesson 6: Management Platform

Module 3: Design, Patterns and Models
Lesson 1: Designing for Infrastructure
Lesson 2: Tiers, Zones and Containers
Lesson 3: Network and Addressing
Lesson 4: Devices and Configuration
Lesson 5: Platforms and Services

Module 4: Frameworks, Methodologies and Tools
Lesson 1: Infrastructure Frameworks
Lesson 2: Methodologies
Lesson 3: Industry Standards (ITIL, MOF, COBIT)
Lesson 4: Tools

Module 5: Dynamic IT
Lesson 1: Business of Infrastructure
Lesson 2: Center of Excellence
Lesson 3: Support Platform
Lesson 4: Compliance and Security Platform

Module 6: Architecture Lifecycle
Lesson 1: The language of Infrastructure Architects
Lesson 2: Working with Other Architects
Lesson 3: Your Role Before, During and After Delivery
Lesson 4: Day in the Life of an Infrastructure Architect
Lesson 5: Professional Growth: Mentoring, Contribution and Continued Learning

Iasa Associate Course: Information Architecture

Certificate:	CITA-Associate Infrastructure
Delivery:	Instructor led – onsite and online
Language:	English
Cost:	$2,125 Online	$2,925 Onsite (pp)*

Iasa Information Architect Training provides a platform from which professional information architects develop advanced skills in information management.

The purpose of this course is to prepare architects to function effectively as information technology strategists using common techniques and procedures.

By the end of this module, participants will have the knowledge and ability to:

- Lead information design, usage, storage and retrieval
- Address information reusability and services
- Ensure information quality attribute levels are achieved
- Support development team
- Communicate concepts to all levels of management
- Utilize information management trends
- Participate in governance mechanisms
- Ensure deliverables exceed governance standards

Related Training:

The Iasa Associate Certified Information Architect exam is supported by the following **two** Iasa courses:

- **Iasa Associate Information Architecture**
- **Iasa Associate Business Technology Strategy**

Participants will receive an electronic copy of the classroom presentation material and a student handbook.

CITA-A Examination (included):

- The CITA-A credential is achieved by achieving a 70% or higher on the CITA-A examination. The exam includes questions from the BTS pre- course and 1 specialization course.
- The CITA-A exams are delivered online consisting of 100 multiple-choice/true/false questions.

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Module 1 - Information for Business
Lesson 1: Information as Strategy
Lesson 2: Relating Information to Value
Lesson 3: Information Scope and Governance

Module 2 - Information Usage
Lesson 1: Who Uses Your Information?
Lesson 2: How, When, Where and Why is Information Used
Lesson 3: Form Factors
Lesson 4: Usage Design 1
Lesson 5: Quality Attributes for Information Architecture
Lesson 6: Data Tools and Frameworks

Module 3 - Data Integration
Lesson 1: Integrating at the Company Level
Lesson 2: Data Characteristics
Lesson 3: Data Integration at the System level

Module 4 - Data Quality and Governance
Lesson 1: Data and Information Quality
Lesson 2: Data Compliance
Lesson 3: Data and Information Governance

Module 5 - Advanced Information Management
Lesson 1: Data Warehousing
Lesson 2: Business Intelligence
Lesson 3: Data Security and Privacy
Lesson 4: Metadata and Taxonomy Management
Lesson 5: Knowledge Management

Iasa Associate Course: Software Architecture

Certificate:	CITA-Associate Software
Delivery:	Instructor led – onsite and online
Language:	English
Cost:	$2,125 Online | $2,925 Onsite (pp)*

Iasa Software Architect Training provides a platform from which professional software architects develop a mastery of technical design documentation and optimization based on an understanding of costs and returns.

The purpose of this course is to prepare architects to function effectively as software technology strategists using common techniques and procedures.

By the end of this module, participants will have the knowledge and ability to:

- Lead application design and development
- Address software reusability and services
- Ensure information quality attribute levels are achieved
- Support development team
- Communicate concepts to all levels of management
- Utilize software management trends
- Participate in governance mechanisms
- Ensure deliverables exceed governance standards

Related Training:

The Iasa Associate Certified Software Architect exam is supported by the following **two** Iasa courses:

- **Iasa Associate Software Architecture**
- **Iasa Associate Business Technology Strategy**

Participants will receive an electronic copy of the classroom presentation material and a student handbook.

CITA-A Examination (included):

- The CITA-A credential is achieved by achieving a 70% or higher on the CITA-A examination. The exam includes questions from the BTS pre- course and 1 specialization course.
- The CITA-A exams are delivered online consisting of 100 multiple-choice/true/false questions.

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Module 1 - Advanced Software Engineering
- Application Development – IT Environment Review
- Object Oriented Programming
- Code Patterns
- Media Programming
- Writing Secure Code
- Concurrent and Parallel Programming

Module 2 - Components, Frameworks, Tools 1
- Technology Components and Frameworks
- Clients, Servers and Storage
- .NET, Java and Other Platforms
- Common Components and Frameworks
- Application and Component Portfolio

Module 3 - Components, Frameworks and Tools 2
- Transactions
- Database Programming
- Workflow
- Client Programming and User Experience

Module 4 - Service Network
- Asynchronous and Synchronous Distributed Computing
- SOA
- Messaging, XML and B2B
- Application and Service Management

Module 5 - Software Processes and Methods
- Development Methodologies
- Agile Development
- Code Quality Analysis
- Software Engineering Methods

Module 6 - Architecture Lifecycle
- Working with Other Architects
- Your Role Before, During and After the SDLC
- Day in the Life of a Software Architect

Iasa Associate Course: Solution Architecture

Certificate:	CITA-Associate Solution
Delivery:	Instructor led – onsite and online
Language:	English
Cost:	$2,125 Online | $2,925 Onsite (pp)*

The Iasa Solutions Architect training develops an architect's skills to effectively function as a project delivery architect for midsize to large projects using common techniques and procedures.

By the end of this module, participants will have the knowledge and ability to:

- Develop solution architecture for midsize to large projects
- Understand the 4 primary aspects of solution architecture and work with critical stakeholders to deliver them
- Function within the team throughout project life cycles to ensure appropriate technology strategy delivery
- Deliver solutions regularly based on sound value management techniques
- Manage stakeholders and key team member's expectations and communications strategy

Related Training:

The Iasa Associate Certified Solution Architect exam is supported by the following **two** Iasa courses:

- **Iasa Associate Solution Architecture**
- **Iasa Associate Business Technology Strategy**

Participants will receive an electronic copy of the classroom presentation material and a student handbook.

CITA-A Examination (included):

- The CITA-A credential is achieved by achieving a 70% or higher on the CITA-A examination. The exam includes questions from the BTS pre- course and 1 specialization course.
- The CITA-A exams are delivered online consisting of 100 multiple-choice/true/false questions.

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Module 1 – Characteristics of a Solution Architect
IASA view of the Solution Architect
Solution Architect in the Organization

Module 2 - Being the Solution Architect
Inception - Business Modeling, Business Strategy, project scorecard for the business
Elaboration – Creating the outline for architecture
Execution of the Project – Business objectives and alignment
Transition – Selling the solution, providing metrics

Module 3 - Defining Critical Success Factors
Walking through the standard metrics
Walk through of the Quality Attributes
Measuring and Managing metrics and constraints

Module 4 - Working with Stakeholders
Understanding the context of the project
Understand your role

Module 5 - Solution Architecture
Creating the Generic Architecture
Creating the Product Specific Architecture
Architectural Viewpoints

Module 6 - Software Architecture
Technology Platforms
Modeling
Quality Analysis
Design Patterns Selection and Application
SDLC - What it means to the Software Architect

Module 7 – Information Architecture
Data, Information and Knowledge
Valuing Information
Buying & Selling Information
Governance Model
Working with an Information Architect

Module 8 - Infrastructure Architecture
Network, Hardware and Datacenter
Managing the Cloud
Operations Architectures
Getting Infrastructure Right – working with an Infrastructure Architect