



SOLUTION ARCHITECTURE

GENERAL INFORMATION

Description

A Solutions Architect is an expert in many categories. They should have hands-on experience in multiple industries and across several disciplines. They can master a variety of hardware platforms including mainframes, distributed platforms, desktops, and mobile devices. Akin to that, they should also possess skill and understanding of a variety of Operating Systems. A broad and deep understanding of Databases is also required.

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.

Target Audience

The CITA-A Solution course is for architects, managers, senior technical and delivery staff who wish to get a full life-cycle view of working and deliverable architectures at the enterprise solution level. They are expected to have completed CITA-Foundation and the IASA Core course. Students of the class have included CTO's, Senior Development teams, architects of all types, and business managers with technical skills.

COURSE MATERIALS

This course is delivered in instructor-led format offered online or onsite. Each day the course instructor will guide students through understanding the deliverables and strategy for Solution architects as well as the recommended best practices for delivering a solution architecture of value. Students will progress through instructor and student led discussions, hands-on workshops, and industry case studies and develop a solution architecture suitable for midsize to large projects.

Students will understand

- the four primary aspects of solution architecture
- how to function within a team throughout project life cycles to ensure appropriate technology strategy delivery
- how to deliver solutions based on sound value management techniques
- manage stakeholders and key team members expectations and communications strategy.

Prerequisites

- **Minimum:** Knowledge of the IT Body of Knowledge (ITABoK) - Downloadable materials included in membership ([separate registration is required](#)). Business Technology Strategy pre-work materials included if registering as an individual online (Corporate plans may differ).
- **Recommended:** [CITA-Foundation Certification](#)

The student should have hands-on experience in multiple industries and across several disciplines. Possess skill and understanding of a variety of Operating Systems. A broad and deep understanding of Databases is also required.

COURSE MODULES

Module 0: Introduction

1. Iasa's 5 Pillars - BTS, IT Environment, Design Skills, Quality Attributes, Human Dynamics
2. Core review
3. The Mini-MBA
4. Innovation Management in Architecture
5. Agility and Traditional Approaches Throughout

Module 1: The Solution Architect

1. Understanding the Role and the Skills
2. Enterprise vs Specialist Solution Architects
3. Components of a Solution Architecture
4. Engagement Models, Principles, and Architect Organization
5. The EA/BA/SA Bridges

Module 2: Demand Shaping and Business Architecture

1. Business Architecture for Solutions
2. Strategy, Business Models and Customers
3. Measures and Value Management
4. Business Case Impact on Solution Success

Module 3: Scoping, Teams, and Stakeholders

1. Solution Architecture Process
2. Early Analysis and Depth Requirement Management
3. Traceability Through the Lifecycle
4. Roadmaps and Early-Stage Team

Module 4: Roadmaps and Design Techniques

1. Services and Blueprints
2. Modeling, Documenting and Communicating for Solutions
3. C4, UML, ArchiMate
4. Patterns, Styles and Whiteboards

Module 5: Solution Delivery Done Right

1. Evolutionary Design
2. Software Engineering and Teams
3. DevOps Pipeline and Delivery

4. Modern Architecture Stack
5. DevOps and Continuous Integration/Delivery/Deployment

Module 6: Digital Transformation and the Cloud

1. Digital Transformation and the Solution Architect
2. Making the Most of the Cloud
3. Complex Cloud Scenarios

Module 7: Information and Integration

1. Modern Solution Information Patterns in Microservices and Cloud
2. Information Architecture Opportunities
3. Integration Architectures with APIs, Serverless, Microservices and Legacy
4. Bringing It Back to the Solution

Module 8: Working with the Enterprise

5. Change Management
6. Governance and Risk
7. Enterprise Frameworks and overlaps
8. Building a Complete Architecture Engagement Model

EXAM INFORMATION

The CITA-A credential is awarded to those who qualify based on a combination of criteria including education, experience and test-based examination of professional knowledge of architectural skills and management.

The CITA-A exam for the solution architect specialization is based on the curriculum from this course and the IASA Associate Business Technology Strategy training pre-work material. The exam consists of 100 multiple-choice and true/false questions deployed in an online environment.

Students will be given 60 days to enter the exam after completing an associate course and 3 hours to complete the exam once entered. A passing grade is 70%.