IIASA
An Association for All BT Architects

CORE ARCHITECTURE CLASS

GROWING THE SKILLS YOU NEED FOR CLIENT SUCCESS

BTABOK VERSION 3.0: DIGITAL ADVANTAGE

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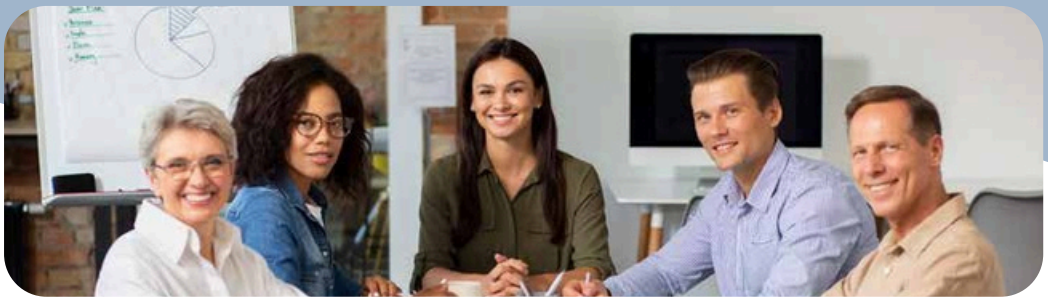
COURSE WELCOME
BY PAUL



WELCOME TO THE CORE CLASS IN ARCHITECTURE!

The IASA Core course welcomes architects worldwide to a collaborative journey of professional growth and understanding. Designed by architects for architects, this curriculum reflects a shared passion for advancing the IT architecture profession. With a focus on bridging business visions with technological solutions, the course delves into fundamental principles, frameworks, and best practices. Beyond technical proficiency, it emphasizes strategic thinking, innovation, and effective communication. Acknowledging the constant evolution of the field, the course encourages lifelong learning and adaptation. Supported by the global IASA community, participants gain access to resources, networking and professional development opportunities. Excited about the potential impact on the technological landscape, the course sets the stage for architects to thrive and shape the future. Let's embark on this transformative journey together.

COURSE OVERVIEW

The IASA Core Course for Business Technology (BT) Architects offers a comprehensive foundation for both aspiring and experienced IT professionals. This intensive program delves into essential principles, frameworks, and best practices necessary for successful architectural design, emphasizing the alignment of technology with business objectives. Participants will gain a deep understanding of analyzing complex business requirements, translating them into technological solutions, and ensuring alignment with overarching business strategy. Industry-standard frameworks such as TOGAF and Zachman are introduced, alongside exploration of architectural patterns and styles. Emphasizing a business-first mindset, the course prioritizes security, scalability, performance, resilience, and adaptability within architectures to directly support business growth and innovation. Furthermore, effective communication and leadership strategies are highlighted, including techniques for visualizing complex systems. Participants have the opportunity to earn the globally recognized CITA-F certification and join IASA's supportive professional community.

IS THIS COURSE RIGHT FOR YOU?

The IASA Core Course is ideal for IT professionals interested in transitioning to BT architecture roles, experienced BT architects seeking formal recognition, technical team leaders wanting to deepen their strategic and business-focused architectural knowledge, and business analysts aiming to bridge the gap between business and technology.

Start Your BT Architecture Journey Today

If you are ready to become a skilled BT architect who designs impactful, business-driven technology solutions, the IASA Core Course provides the essential knowledge and tools to achieve your goals. Visit the IASA website https://iasaglobal.org/ to learn more and embark on your BT architectural journey.

TEACHING MODALITIES
THE CORE SKILLS ARE TAUGHT IN 3 PRIMARY WAYS.

In-Person Instructor Led

1

- 5 days
- 4 lessons per day
- Full time
- 45 min presentation
- 45 min workshops with. group

- Classroom
- Classwork – Miro
- Course Material – MS Teams

- Interactive – 0%
- Discussion – 20%
- Research – 0%
- Workshop/Application –40%
- Presentation – 40%

Online Instructor Led

2

- 9 weeks
- 4 hrs per week plus homework Total 6 hrs/wk
- 45 min lessons
- 1 hr group work
- Homework

- Final presentation to instructor for grade
- Online (Teams)
- Homework – Miro
- Course Material – MS Teams

- Interactive- 0%
- Discussion – 20%
- Research – 10%

Workshop/Application – 40% Presentation - 30%

Mentoring Online

3

- 10 weeks
- 2 hrs Online Self-Paced
- 2 hrs Homework
- 2 hrs Mentor meeting to review homework
- Final presentation to mentor for grade

- Online Instructor Reviewed Homework
- Homework – Miro
- Course Material – Chronus

- Interactive – 20%
- Discussion – 25%
- Research – 10%
- Workshop/Application – 50%
- Presentation – 0%

Please check that your laptop or computing device can access:

Miro – An online diagramming and whiteboarding tool used for displaying lasa canvases and cards as well as for shared access to homework group work.
MS Teams – Shared collaboration and file access for course content and material.
Chronus – Online platform for mentoring and learning.

WHAT YOU WILL LEARN (BEHAVIORAL OBJECTIVES)

- What are architecture lifecycles, deliverables, and engagements
- Methods to work across business, technical and management stakeholders
- Ways of understanding and using customer centric design approaches
- Tools and techniques for value measurement, tradeoff analysis, design and quality attributes
- Critical skills in navigating change management from ideation to execution
- Better ways to combine agile delivery with architecture excellence
- How to improve an architecture practice engagement model
- How to plan and manage the competencies you need throughout an architecture career

COMPETENCY FOCUS AREAS

This course specifically looks to improve the students understanding and skills in the following BTABoK Competency Areas (https://iasa-global.github.io/btabok/).

BTS

- Valuation
- Investment Prioritization

Human Dynamics

- Presentation Skills
- Peer Collaboration
- Leadership
- Situational Analysis

Design

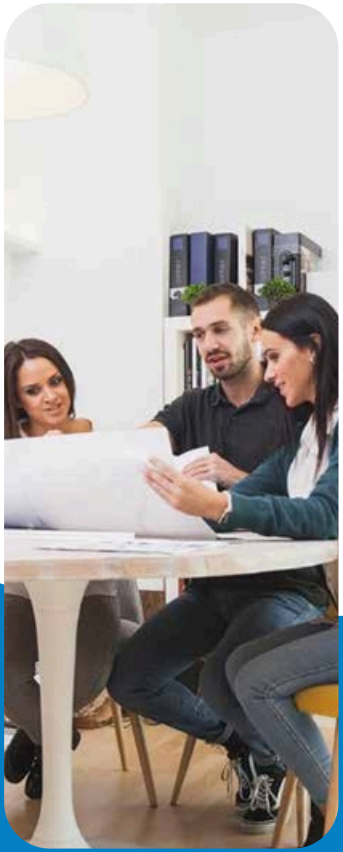
- Architecture
- Description
- Patterns
- Decomposition
- Design Languages

Quality Attributes

- Managing
- Quality
- Attributes
- Performance
- Resilience

IT Environment

- Application Development
- Inf rastructure



WHO IS THE COURSE FOR?

The IASA Core Course is ideal for IT professionals interested in transitioning to BT architecture roles, experienced BT architects seeking formal recognition, technical team leaders wanting to deepen their strategic and business-focused architectural knowledge, and business analysts aiming to bridge the gap between business and technology.

EXAMPLE INSTRUCTORS

David Jones
Chief Architect
https://www.linkedin.com/in/jonesdavid/

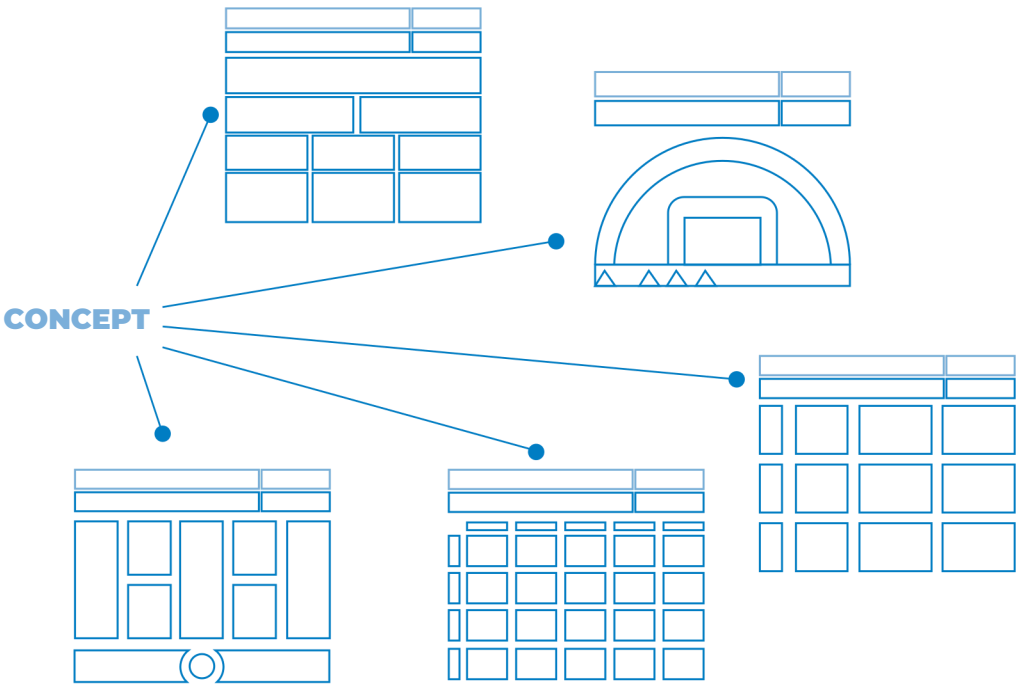
Paul T. Preiss
CEO & Founder
https://www.linkedin.com/in/ppreiss/

REWARDING YOUR WORK

The Core course is based on two modes of work. 1) using the provided case study of a coffee shop company called Tinkleman, or 2) working on your own products, projects or work. The application of the skills in class is deeply embedded into the learning process. You will be expected to demonstrate every concept in a detailed workshop done by yourself and others in your working group. In addition we give additional points against the certification for any student that completes all work and turns in as a graded final project. This additional work results in both higher utilization of the learned skills and a much more rewarding experience.

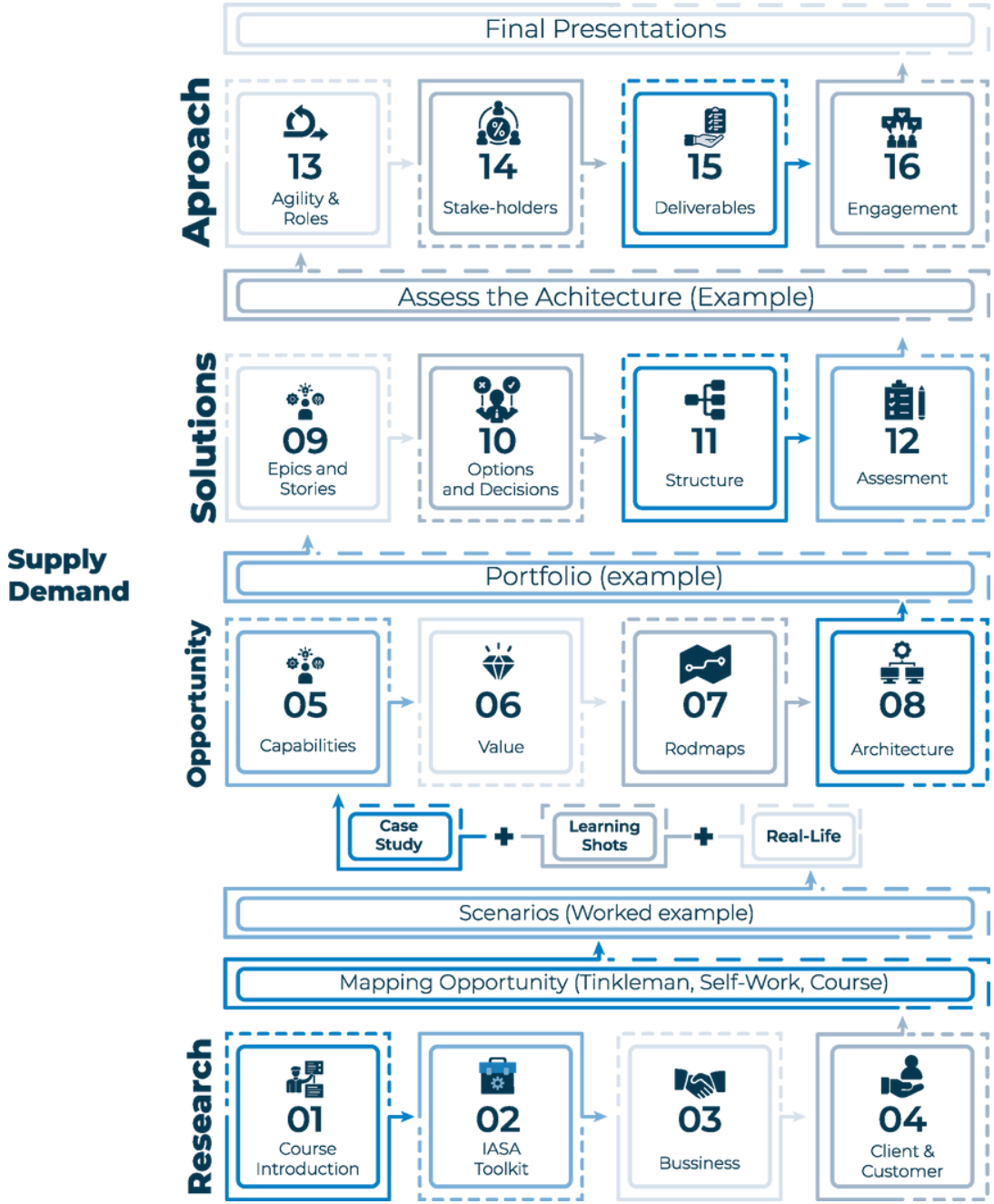
STRUCTURED CANVAS APPROACH

Each Section we will introduce you to a range of Canvas and Cards; these bring to life the theory as well as provide a workspace for you to experiment, document and share the information you collect and the analysis you perform.



DRIVING A STAKEHOLDER AND CUSTOMER APPROACH

The BTABoK uses a customer and stakeholder driven approach to understanding value and to creating a transformation focused architecture practice. The course teaches a rigorous method for understanding stakeholders, customers, personas, customer/stakeholder journeys as well as using empathy and human approaches to building trust and creating solutions. This method has proven invaluable to architects from solution to business.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Engagement
Assess the Achitecture (Example)
Solutions
09
Epics and Stories
10
Options and Decisions
11
Structure
12
Assesment
Supply
Demand
Portfolio (example)
Opportunity
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Rodmaps
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Architecture
Case Study
Learning Shots
Real-Life
Scenarios (Worked example)
Mapping Opportunity (Tinkleman, Self-Work, Course)
Research
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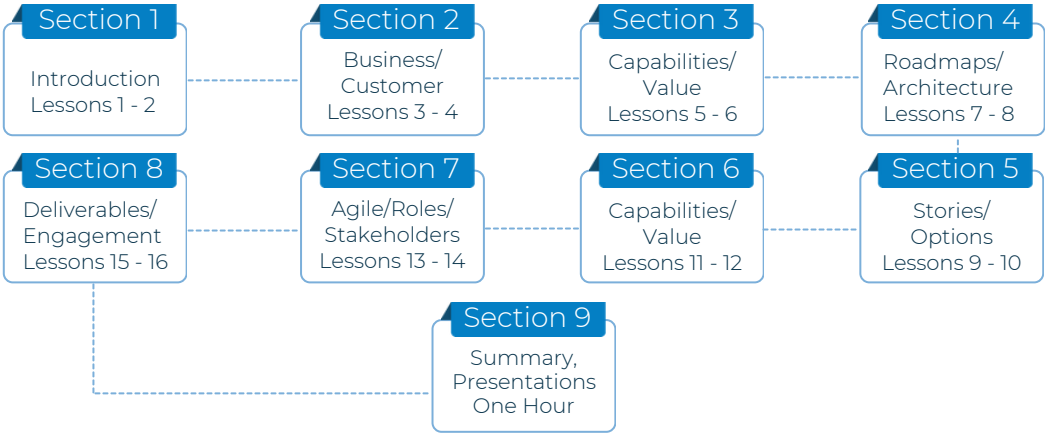
Course Introduction
02
IASA Toolkit
03
Bussiness
04
Client & Customer

COURSE SYLLABUS



SECTION 1 – INTRODUCTION

The introduction gives you a long view of the entire course and introduces you to the tools and resources available to you. The introduction sections help you understand the nature of architecture, the role and the level and skills of the course. We explore the reasons you are attending, definitions of architecture and the core concepts and structured canvas approach you will use both individually and with groups.

Section 1 – Getting in Gear

Behavioral Objectives:

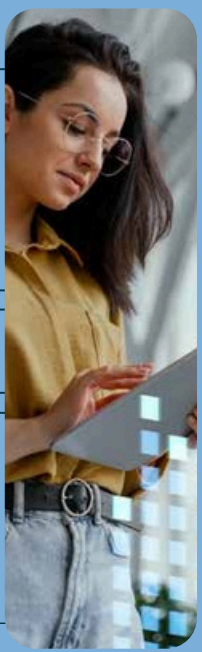
- Define personal course objectives
- Define customer outcome goals
- Describe your customer
- Figure out who is going to enter the leaderboard challenge

Self-paced materials:

- Iasa self and peer assessments (class invitations to be sent)

Practice/demonstration of techniques and tools

- Workshop 01: What Is Architecture
- Workshop 02: Pains/Gains
- Workshop 03: Draw Toast
- Workshop 04: Decision Biases
- Workshop 05: Experimentation



Section 2 - Business and Customer

Understanding your client's business model is crucial for technologists aiming to deliver value-centric solutions. This entails grasping how the client generates and allocates revenue, differentiates from competitors, and positions for growth opportunities. It also involves comprehending their organizational culture, market value propositions, and network connections. Additionally, insights into their architectural and technical staffing, solution delivery processes, and cloud maturity level are essential. A customer-centric approach necessitates placing the customer at the core of the development process. This involves empathetically understanding their needs, anxieties, motivations, and aspirations within their business context. It requires technologists to broaden their skill sets beyond technology to encompass business, design, and human dynamics. Fortunately, numerous tools and techniques facilitate this transition, enabling technologists to model the customer journey effectively and adopt a customer-focused mindset in driving technological solutions.

Section 2 – Business and Customer

Behavioral Objectives:

- Define a business model
- Understand your clients customer
- Define innovation in business
- Advise and lead using detailed knowledge of customer's

Self-paced materials:

- Business Models
- Customer Personas
- Customer Journeys

Practice/demonstration of techniques and tools

- Worksheet 03: Business Model
- Canvas: Business Model Canvas
- Canvas: Customer Journey
- Card: Personas

Section 3 – Capabilities and Value

Understanding business capabilities provides a stable framework and a common language for focusing on and improving different aspects of the business. Additionally, it facilitates the implementation of a services architecture, which offers flexibility and adaptability in both business and technical domains. Services operate as black boxes to consumers, allowing for seamless integration and reusability. This enables the rapid creation of value by composing existing services, leveraging resources efficiently. Furthermore, to justify investments in objectives, businesses must align them with measurable value creation. Solutions are then mapped to business objectives, informed by an understanding of the client's business model, ecosystem, and customer journey. This holistic approach ensures that efforts and resources are effectively directed towards achieving meaningful business outcomes.

Section 3

Behavioral Objectives:

- Describe your client's capabilities and how they impact services.
- Think in terms of client value from capabilities to customers
- Describe an innovative business case.

- **Self-paced materials:**
- Services
- Business Capabilities
- Value Calculations
- Benefits Realization
- Business Cases

Practice/demonstration of techniques and tools

- Canvas: Capability Description
- Card: Lean Business Case (NABC)
- Card: OKR
- Card: Cost/Risk/Benefit

Section 4 – Roadmaps and Architecture

Aligning strategies within an organization optimizes value by driving corporate, business unit, and capability initiatives in the same direction. This alignment ensures that objectives cascade effectively from corporate strategy down to business technology and sales strategies. Roadmaps play a crucial role in providing stakeholders with a clear understanding of current initiatives and future plans, fostering coordination and alignment. The architectural description serves as a comprehensive artifact resulting from upfront discovery and collaboration with clients. It guides delivery, operations, support, and evolution of systems, ensuring continuity even in the absence of architects. This tool empowers decision-makers with the necessary resources to uphold architectural intent and make informed decisions throughout the lifecycle of the project.

Section 4

Behavioral Objectives:

- Get involved in the organizations investment roadmap to make recommendations. Get buy off on new ideas as a trusted advisor
- Develop, track and communicate benefits realization and measurement
- Define and develop and architecture description with the client

Self-paced materials:

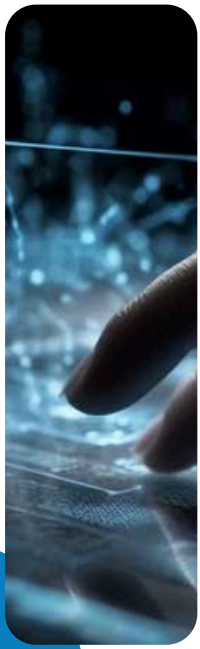
- Architecture Descriptions:
- Road-mapping
- Investment Priorities

Practice/demonstration of techniques and tools

- Spreadsheet: Complexity Analysis
- Canvas: Strategic and Product Roadmap
- Document: Architecture Description

Section 5 – Stories and Options

Of course you want to have close interaction with and stay in regular connection with delivery teams! You'll give them guidance so they know when you should be involved in a decision that might change the architecture. However, the requirements you provide to the delivery teams should be clear enough and provide enough information about what is being delivered and the decisions that led to your approach. The epics and requirements must be strongly enough described so that the architecture succeeds whether you are there or not.
Systems thinking enables a wholistic understanding of a system. Allowing us to see the system from different viewpoints, from the perspective of different stakeholders, and at differing levels of complexity. All of this increases our understanding and with it comes our ability to identify what are known as leverage points. Those points that we need to work through if we want to see the system deliver the outcomes we want with the least risk and cost.



Section 5

Behavioral Objectives:

- When Architects talk to other Architects and get challenged (eg. competitive, on features, etc), challenge back by asking thought provoking questions.
- Define and describe architecturally significant requirements. Be able to defend and describe the impact of the requirements and how it shapes the solution.
- Understand the current architecture landscape, evaluation of options and the development of a context and benefits realization view.
- Describe and define the relationship between options, decisions and requirements.

Self-paced materials:

- Understanding Stakeholder Ecosystems
- Architecturally Significant Requirements
- Architecture Decisions:

Practice/demonstration of techniques and tools

- Card: ASRs – Features, Value, Quality Attributes, Constraints
- Card: ADR – Options, Decision Record
- Canvas: Service Blueprint

Section 6 – Structure and Assessment

How secure is secure enough? How fast? How reliable? Does the client seem more concerned with security or usability? Reliability or solution speed? Latency or how current the data is? Time-to-market or level of scalability? Your client will likely not be able to understand the tradeoffs and make the decisions that map to their business objectives, imperatives, and risk aversion without you being able to determine which quality attributes are relevant and what the tradeoffs are between them, as well as the funds and time available to deliver the solution to market. The quality attribute decisions or tradeoffs must be clear to the delivery teams and they must create a test environment that verifies the quality attributes defined are measurably achieved.

Section 6

Behavioral Objectives:

- Describe an architecture using multiple viewpoints to define its total shape and impacts in both functional and quality attributes.
- Facilitate a design thinking session and mentor the customer through more holistic design methods
- Use both formal and informal methods to analyze a peer and a customer architecture description.

Self-paced materials:

- Context View
- Modern Patterns
- Technical Debt
- Architecture Assessment

Practice/demonstration of techniques and tools

- Views/Viewpoints Development – Context, Developer, Information, Delivery
- Quality Attributes Viewpoint Selection – Performance, Security, RAS, Usability
- Decision Cascade(s)
- Architecture Analysis – ATAM, PBAAM, or SARM – QAT Cards

Section 7 – Agile, Roles and Stakeholders

We will define architecture team roles, the extended team impacts and related activities. This is where you put together your punch list of resources needed to deliver and operate.
We will also review tools so you can start to understand how to better communicate with people and what approaches they are likely to be receptive to. As an architect, you communicate with experts and there isn't a right or wrong to your decisions. You decide between tradeoffs that are specific to the context you are working in.

Section 7

Behavioral Objectives:

- Define an agile team structure which optimizes a client engagement
- When engaged in stakeholder interactions the architect should have a leadership persona and engage based on a deep understanding of stakeholder needs.
- Define Stakeholders using multiple tools to better define a stakeholder management plan
- Actively define architecture team roles, the extended team impacts and related activities.

Self-paced materials:

- Stakeholder Management Plans
- Agile Architecture @ Scale Introduction
- Dev/Ops and Teams

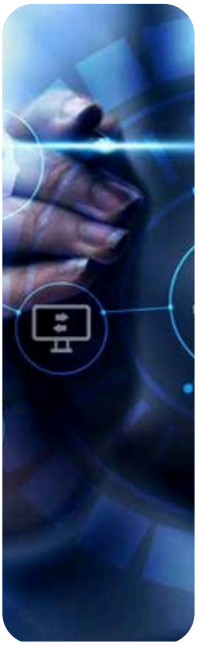
Practice/demonstration of techniques and tools

- Canvas: Power Interest Grid canvas
- Document: Stakeholder Management Plan
- Canvas: Agile Team Designer

Section 8 – Deliverables and Engagement

Architecture teams have to engage an organization, the BTABoK simply allows them to be objective and concrete about those activities as well as to set clear objectives and use the same language in doing so. For example, the stakeholder article provides tools and techniques to improve stakeholder management. The engagement model does not requie that a team use all of the concepts (articles). In fact a team may actively choose to not use a particular concept. One large organization which used Iasa training actively rejected using business cases, value methods, benefits realization etc. for a time (they have since begun using them as their digital maturity needs grew).

In general architecture deliverables are treated as large documents for projects. What is often called the architecture description. The notion of the architecture description is well documented in the iso 042010 Standard up by the ISO. The ice 04-2010 provides for architecture descriptions at that connect to views and viewpoints. And deliver on a description of a particular architecture.



Section 8

Behavioral Objectives:

- Describe an architecture teams deliverables for an end to end process as a trusted advisor to business and leaders of execution.
- Describe critical processes for the architecture team at an organization.
- Describe common elements of an engagement model for a client and how adaptations might impact their progress.

Self-paced materials:

- Engagement Models Overview https://btabok.iasaglobal.org/engagement-models-introduction/
- Defining Team Deliverables https://btabok.iasaglobal.org/

Practice/demonstration of techniques and tools

- Canvas: Engagement Model Process

Section 9 – Putting It All Together

Finally, we reflect on what was covered and clear up any confusion that might occur as you apply these tools and techniques. We will work together towards your final presentation.
And, as you might expect, architecture is a practice, and growth is a continuum. We will clarify anything you have questions about and provide next steps and links to resources that will help you on your journey.

Section 9

Behavioral Objectives:

- Define you customer outcomes and describe your wins and losses
- Demonstrate changes in your behavior towards customers and businesses
- Compile your team engagement model

Practice/demonstration of techniques and tools

- Customer Success Scorecard
- Account Management Plan
- Team Engagement Model
- Customer Success Package

FEEL FREE TO CONTACT US IF YOU
HAVE ANY QUESTIONS.

IASA

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We are excited for your professional career, let's begin your journey **together!**

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