



## KNOTION CONSULTING

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# Enterprise Architecture Licensed Professional

VERSION <3.0>

Status: Under review

Date: 02.02.2009

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## INTRODUCTION

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This document defines the enterprise architecture curriculum currently delivered by Knotion Consulting. Although this documented defines the standard material and courses, customized training is available for specific clients with specific needs. Please contact us should you have a need for a specific customization for your business.

Five course opportunities exist:

1. Executive Briefing
2. TOGAF Certification
3. Advanced Enterprise Architecture
4. Applied Enterprise Architecture
5. Enterprise Architecture Kick-Start Program

## THE EXECUTIVE BRIEFING ON BUSINESS AGILITY

### INTRODUCTION

This short course is specifically designed to address business executives. It uses various business analogies and descriptions to convey the value and need for an enterprise level of thinking in the organization and the tools required to enable this.

The following key areas will be addressed in this course:

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. What's the problem and why are some of my efforts and projects not succeeding?</li> <li>2. What tools are available for me to use in the business agility arsenal and how do I use them in the broader context of shaping the business?</li> <li>3. Why enterprise architecture? Is this not just for techies?</li> <li>4. TOGAF 9 introduction</li> <li>5. Business architecture vs. business analysis</li> </ol> | <ol style="list-style-type: none"> <li>6. EA and the MBA.</li> <li>7. Enterprise level vs. solution level</li> <li>8. Local successes, global failures? We'll explore building a systemic organization using enterprise architecture.</li> <li>9. What next? Where do we start? We'll look at improving your architectural thinking and the integration of this thinking into your organization.</li> </ol> |
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### CERTIFICATE

Certificate of Completion and certification card

### WHO SHOULD ATTEND

C-Level executives, project managers, change managers, general management, business focussed individuals, enterprise architects. This is not a technology course

### COURSE DURATION

2 Days.  
Daily Schedule from approximately 9am to 5pm.

### PREREQUISITES

None

### EVALUATION

None

### COURSE FORMAT

Instructor led presentation style with breakout sessions

### MATERIALS

Lecturer Handouts  
Various reference material and text books are used and referred to during the sessions.

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## TOGAF 9 LEVEL 1 AND 2 CERTIFICATION

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The TOGAF course prepares delegates for certification against the current best practice as understood by Architects worldwide and documented under The Open Group's Architecture Framework. The opportunity to obtain this certification is also included in the course. It will include methodology, frameworks and solution blueprints and will address some concepts that are required for a broader understanding of EA.

At the end of the training participants will:

- Understand the new concepts introduced to TOGAF in version 9
- Understand the business rationale behind Enterprise Architecture and TOGAF
- Have an understanding of the overall structure and contents of the TOGAF 9 document and the key subject matter content
- Have an overall and detailed understanding of the ADM development cycle and all the phases that make up the cycle including for each phase:
  - Objectives and approach to the phase
  - Inputs to the phase
  - Steps
  - Outputs / Deliverables
- Be able to use the techniques defined for use in Architecture development including:
  - Stakeholders involved and their role, concerns + look at views and Viewpoints
  - Architecture Principles and Architecture patterns, views and viewpoints
  - Business Scenarios, with goals & objectives
  - Planning and analysis techniques
  - Interoperability
  - Assessing & Readiness of the business
  - Managing risk
- Understand the guidelines for adapting the ADM processes
  - For SOA, and Security considerations
  - Adapting for iterations and different enterprise levels
- Gain sound understanding of the Architecture Content Framework and the purpose / content of each of the elements including:
  - Content Metamodel
  - Architecture building blocks and their relationships to the A.D.M
  - Architecture Artefacts

- Architecture Deliverables
- Understanding of the Enterprise Continuum and the Architecture Repository, including
  - Contents of the Architecture Repository
  - Make-up of the Enterprise Continuum, including the Architecture and Solutions Continuum
  - Architecture Partitioning
- Have a detailed understanding of the concepts, taxonomy and graphical representations of the TOGAF Reference Models and their application, including:
  - Foundation Architecture
  - Technical Reference Mode (TRM)
  - Integrated Information Infrastructure Reference Model (III-RM)
  - Applications and Service
  - Qualities
  - Understand boundary-less information flow
  - The Standards Information Base
  - Core metamodel concepts
- How to establish an architecture capability
- Setting up / running an Architecture Board
- Understanding of:
  - Architecture compliance and contracts
  - Architecture governance and processes / role within TOGAF ADM
  - Architecture maturity assessments / models
  - Need for and make-up of Architecture skills framework
  - Tools, techniques and methods for architectural development

**CERTIFICATE**

There are two levels to TOGAF 9 certification. Certification to Level 1 is known as TOGAF 9 Foundation. Certification to Level 2 is known as TOGAF 9 Certified Level 2 and contains the learning requirements for Level 1. Formal TOGAF Level 1 and 2 Certification based upon the successful pass of the Open Group Exam.

**WHO SHOULD ATTEND**

Architects or those desiring to better understand the Architecture discipline. The course covers all facets of the Architecture Development Method and Framework and as such all types of Architects will benefit from the course. Both Business and Technical.

**COURSE DURATION**

5 Days.  
Daily Schedule from approximately 9am to 5pm.

**PREREQUISITES**

None

**EVALUATION**

Score of 75% or better in two online examinations in the afternoon of day 5.

**COURSE FORMAT**

Instructor based with exercises.

**MATERIALS**

Training manual  
Feel free to download the full TOGAF document from [www.opengroup.org](http://www.opengroup.org) and bring it with you.

## ADVANCED ENTERPRISE ARCHITECTURE

### INTRODUCTION

This course deals with the “business” of enterprise architecture and how to integrate this successfully into an organization.

The following highlights the structure of the course:

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. EA Strategy</li> <li>2. The EA Operating Models</li> <li>3. Architecture and Enterprise Disciplines and Delivery Cycles</li> <li>4. EA Assessments</li> <li>5. EA Planning</li> <li>6. Developing an EA Value Model</li> <li>7. The balanced scorecard for EA</li> <li>8. Developing an EA Marketing and Communications Plan             <ul style="list-style-type: none"> <li>o The Stakeholder Engagement Model</li> <li>o The EA Capability Model</li> <li>o Developing an EA resource management framework</li> </ul> </li> <li>9. Conducting a Stakeholder analysis</li> <li>10. Architecture Delivery Method through the architecture discipline</li> <li>11. Architecture delivery method through the business discipline</li> <li>12. Enterprise Architecture and Solution Architecture</li> </ol> | <ol style="list-style-type: none"> <li>13. Business Architecture             <ul style="list-style-type: none"> <li>o Business architecture using the SOA style</li> </ul> </li> <li>14. Information Architecture             <ul style="list-style-type: none"> <li>o SOA Layers</li> <li>o Functional SOA</li> <li>o SOBA and Process SOA</li> </ul> </li> <li>15. Business Systems Architecture             <ul style="list-style-type: none"> <li>o Application Architecture</li> <li>o Business Services Architecture</li> <li>o Integration architecture</li> </ul> </li> <li>16. Enterprise Solutions vs. Solution Delivery</li> <li>17. Using an ATAM to measure compliance</li> <li>18. Technology Architecture</li> <li>19. Rollout Plan and Migration</li> <li>20. Governance models for EA</li> <li>21. Business transformation using EA. Changing the organization</li> <li>22. Using EA as a systemic thinking tool</li> </ol> |
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### CERTIFICATE

Certificate of Completion and certification card.

### WHO SHOULD ATTEND

CIO, Chief architect, Enterprise Architect, Solution Architect

### COURSE DURATION

5 Days.  
Daily Schedule from approximately 9am to 5pm.

### PREREQUISITES

TOGAF Certification or some working experience is advisable but not essential.

### EVALUATION

Score of 75% or higher in a 60 minute multiple choice final examination in the afternoon of day 5.

## APPLIED ENTERPRISE ARCHITECTURE

### INTRODUCTION

This course builds upon prior knowledge and skills learned in the TOGAF 9 and advanced Enterprise Architecture Course. The course focuses on how to apply these concepts through a class-wide architecture project that develops and integrated set of EA artefacts. Initially students will use manual templates to do this.

The following key areas will be addressed in the applied EA course:

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. EA Assessment</li> <li>2. EA Planning – developing the EA strategy and operating model</li> <li>3. Business Architecture</li> <li>4. Information Architecture</li> <li>5. Governance and SOA Models</li> </ol> | <ol style="list-style-type: none"> <li>1. Information Architecture</li> <li>2. Application and Business Services Architectures</li> <li>3. Integration Architecture</li> <li>4. Technology Architecture</li> <li>5. Rollout Plan</li> </ol> |
|--|---|

### CERTIFICATE

Certificate of Completion and certification card – with tools and without tools.

### WHO SHOULD ATTEND

Architects, Business Analysts, Business Managers, Program Managers, Technology Managers, Technical Staff

### COURSE DURATION

5 Days.  
Daily Schedule from approximately 9am to 5pm.

### PREREQUISITES

Advanced EA

### EVALUATION

Score of 75% or higher in a 60 minute multiple choice final examination in the afternoon of day 5.

### COURSE FORMAT

Instructor led exercises utilising:

- Case Studies
- Excel Templates
- EA Toolset and Repository

### MATERIALS

Lecturer Handouts

Various reference material and text books are used and referred to during the sessions.

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## ENTERPRISE ARCHITECTURE KICK-START PROGRAM

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The EA Kick-Start program seeks to inject an EA program into an organization that has limited EA disciplines in place and/or requires a kick-start of their EA program. It combines some of the EA theory from the above course across an 8 week cycle to develop an actual EA skeleton framework for a company whereby they can build upon going forward through various iterations. It will have also equipped the team effectively with some of the theory to give the EA initiative the momentum required to be effective in the organization.

It must be highlighted that this is a semi-training, semi-actual deliverable approach. The outcome is by no means a completed EA or a complete set of artefacts. However, the team and students will have an actual EA and initial skeleton framework to have developed a solid understanding of the domain in order to take it further into the next iteration.

The program agenda is detailed below:

### **Week 1 - Training:**

Our traditional approach to these types of engagements is to first baseline all staff on a standard paradigm of architecture thinking. We therefore provide a five day training course and optional certification to ensure a consistent message is used by all parties.

The training will cater for the following:

- An Introduction Enterprise Architecture and Enterprise Architecture 2.0;
- An understanding of frameworks, continuum and methods;
- An introduction into the 10 disciplines of enterprise architecture;
- The development of blueprints across the business, information, data, application and technology domains using a method through a case study;
- The development of roadmaps and migration plans;
- Engagement models and how to engage with the business depending upon the operating model;
- The line between enterprise architecture and solutions architecture and delivery and a case study to work through.

## Week 2 - Governance, Maturity and Planning:

### 1. EA Planning

- Planning and project logistics around the effort of the Kick-Start program and the follow on iterations.

Helpful Inputs	Outputs
<ul style="list-style-type: none"> <li>• List of current projects</li> <li>• List of team members</li> <li>• EA Strategy</li> <li>• EA Operating Model</li> <li>• Organizational Structure</li> <li>• Committed resources for the full blueprint cycle</li> <li>• Current Toolsets</li> </ul>	<ul style="list-style-type: none"> <li>• Architecture Vision</li> <li>• Architecture Statement of work</li> </ul>

### 2. Governance Framework and Processes.

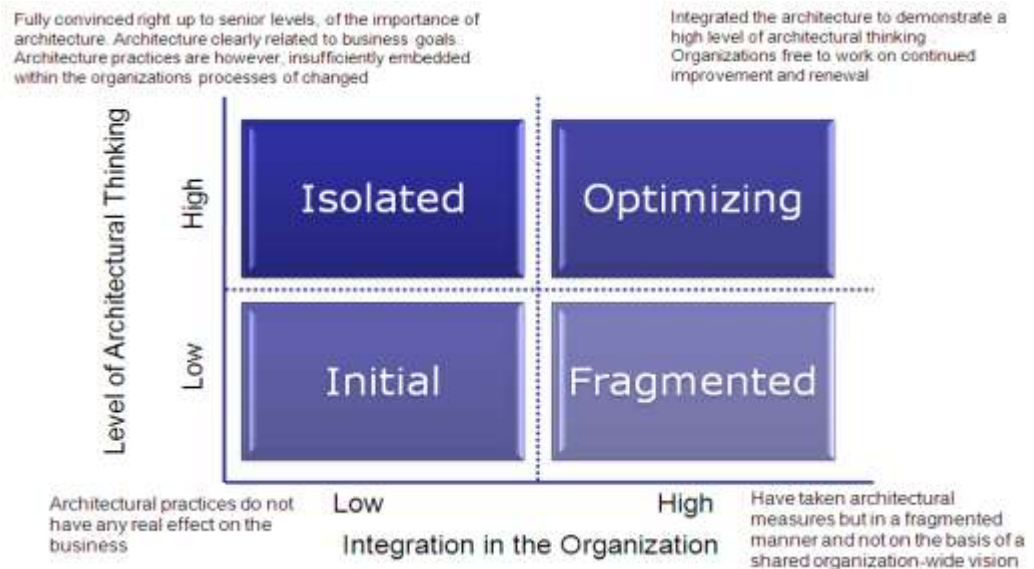
- Feeding off the initial governance processes documented in the EA operating model, the team will now address the establishment of the Architecture Review Board (ARB) as the primary entity responsible for the governance of architecture in the organization. The degree of process documentation as well as the degree of structure of the ARB is highly dependant on the chosen future state operating model of EA. If EA is technology centric, the governance processes and structure is vastly different from EA being business centric.
- The initial week will address the following tasks:
  - Define the future state ARB Model;
  - Define measurements for the success of the ARB;
  - Conduct the initial ARB meeting in its as-is state but with initial input into the process about the future view;

Helpful Inputs	Outputs
<ul style="list-style-type: none"> <li>• Business Governance Processes</li> <li>• IT Governance Processes</li> <li>• Current change control and configuration management processes</li> <li>• EA Operating Model</li> <li>• Current SDLC</li> <li>• Organizational structure, ARB included</li> <li>• Minutes of previous ARB meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Skelton EA Governance Processes</li> <li>• Skelton Architecture Contracts</li> <li>• Future State ARB Governance Processes and metrics</li> </ul>

### 3. EA Maturity Assessment

- Although multiple EA maturity assessments exist, we will use a lightweight version to take an initial temperature check of where your enterprise is currently positioned.
- We will use this assessment to position your enterprise in Figure 1 below - the Enterprise Architecture Positioning Matrix.
- A target position will be developed; this will take its input from the EA operating model.
- Recommendations will be defined that will update the EA Strategy on how to bridge the gaps between the various levels of maturity. Some of these recommendations will be implemented in the Strawman model early on in the lifecycle.

Helpful Inputs	Outputs
<ul style="list-style-type: none"> <li>• Copies of all architecture artefacts currently being developed</li> <li>• The current EA lifecycle</li> </ul>	<ul style="list-style-type: none"> <li>• EA maturity score and recommendations</li> </ul>



**Figure 1 - Enterprise Architecture Positioning Matrix**

## Week 3 and 4 – Governance and Business Architecture

### 1. Governance Framework and Processes cont...

#### Week 3:

- Complete lightweight EA Maturity assessment.
- Analyze feedback from the ARB sessions and make corrections; and
- Update and communicate changes and prepare for next session.

#### Week 4:

- Conduct the ARB meeting according to the new structure and processes;
- Measure the success of the new structure based upon initial metrics;
- Analyze feedback form the ARB Session;

Helpful Inputs	Outputs
<ul style="list-style-type: none"> <li>• Skelton EA Governance Processes</li> <li>• Skelton Architecture Contracts</li> <li>• Future State ARB Governance Processes and metrics</li> </ul>	<ul style="list-style-type: none"> <li>• Analysis report</li> </ul>

### 2. Business Architecture

- There is limited time available for a complete business architecture exercise across both the functional and the process domains;
- For the purposes of componentising functionality within the business to expose as services, we will undertake the development of a functional business model;
- Define components based upon the functional model. A high level functional model will drive service granularity and componentisation at a business level.

Helpful Inputs	Outputs
<ul style="list-style-type: none"> <li>• Current organization structure</li> <li>• Current business model (if available)</li> <li>• Current process model (if available)</li> <li>• Current Projects</li> </ul>	<ul style="list-style-type: none"> <li>• Preliminary To-Be Functional Business Model decomposed to a reasonable level</li> <li>• Initial component/service model</li> </ul>

## Week 5 and 6 – Governance and Information Systems Architecture

### 1. Governance Framework and Processes cont...

#### Week 5:

- Define an updated ARB Model; and
- Communicate changes and prepare for next session.

#### Week 6:

- Conduct the ARB meeting according to the new structure and processes;
- Measure the success of the new structure based upon initial metrics;
- Analyze feedback from the ARB session and provide recommendations for improvement;

Helpful Inputs	Outputs
<ul style="list-style-type: none"> <li>• Analysis report</li> </ul>	<ul style="list-style-type: none"> <li>• Updated ARB model</li> <li>• Analysis report</li> </ul>

### 2. Information Systems Architecture

- Development of the information architecture will address certain information consumption and creation rules. The information architecture shows what data is manipulated by which areas of the business and will help validate or update the business model. It will also be used as a crucial input into componentisation of business functionality for services.

Helpful Inputs	Outputs
<ul style="list-style-type: none"> <li>• Asset registers</li> <li>• Current data dictionary</li> <li>• Class and entity diagrams</li> <li>• Current process models</li> <li>• Preliminary Functional Business Model</li> </ul>	<ul style="list-style-type: none"> <li>• Conceptual Information Model                             <ul style="list-style-type: none"> <li>• Skeleton mapping of the data to business model</li> <li>• Initial understanding of relationships between the data and the business model</li> </ul> </li> </ul>

- Update the Application Architecture
  - Using the application architecture defined in phase one we will expand on the application blueprint and componentise functionality into underlying services and business services.
  - The To-Be application architecture will be documented as well as the initial integration and enterprise services model. This will provide an initial view into the infrastructure services and the information that moves between these and how these relate to the as-is application landscape.

Helpful Inputs	Outputs
<ul style="list-style-type: none"> <li>• Preliminary Functional Business Model</li> <li>• Information Architecture</li> <li>• Phase 1 application architecture</li> </ul>	<ul style="list-style-type: none"> <li>• To-Be application Architecture (Application Architecture)</li> <li>• Conceptual integration architecture</li> <li>• Utility services model</li> </ul>

## Week 7 and 8 – Technology Architecture and Rollout Plan

### 1. Develop the technology architecture for the execution landscape

- The team will use various technical reference models to help define the future state execution architecture for the to-be application blueprint identified in the information systems architecture phase.

Helpful Inputs	Outputs
<ul style="list-style-type: none"> <li>• Information Systems architecture</li> <li>• Technology Policies and principles</li> <li>• Procurement Policies</li> <li>• Non-Functional requirements</li> </ul>	<ul style="list-style-type: none"> <li>• Skeleton Technical Execution Architecture</li> <li>• Initial technical reference model (TRM) for the business</li> </ul>

### 2. Develop the migration plan

- Perform a gap analyses between the various as-is and to-be blueprints;
- Merge strategic initiatives an current projects with the architectural gap analysis;
- Develop budget and timing for required changes outlined in the roadmap to form the Business Case;
- Define ongoing monitoring and handling of changes (implementation change protocols) including governance;
- Provide support in gaining sign off from the business on the Business Case.

Helpful Inputs	Outputs
<ul style="list-style-type: none"> <li>• AS-IS Assessments</li> <li>• Business Architecture</li> <li>• Information architecture</li> <li>• Application Architecture</li> <li>• Technology Architecture</li> <li>• Current Projects</li> <li>• Strategic Initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Gap analysis (AS-IS and TO-BE)</li> <li>• Initial high level rollout plan</li> <li>• High level CSF's</li> </ul>

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**PRICING**

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Course	Duration	Costs*
The Executive Briefing on Business Agility	2 Days	R3500 per participant
TOGAF 9 Training Level 1 and Level 2 combined to TOGAF Certified Level	5 Days	R15 500 per participant.
Advanced EA	5 Days	R15 000 per participant
Applied EA	5 Days	R15 000 per participant
EA Kick-Start Program	8 Weeks <sup>#</sup>	POA <sup>#</sup>

\*The above prices exclude V.A.T. and are subject to a minimum of five (5) candidates per course.

<sup>#</sup>The EA Kick-Start Program duration and cost is dependent on the specific needs and maturity level of your organisation.

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**COURSE SCHEDULE & REGISTRATION**

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For a schedule of course dates and locations please visit [www.knotion.net](http://www.knotion.net). Once you have selected the course that you wish to attend please complete the registration details form and we will process and confirm your registration.

For more information please make use of our call back service on +27 (0)11 317 3754. Leave a message with your details and one of our consultants will contact you to provide you with the information that you require.