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# CESAMES ACADEMY

## Training Sessions Catalog



« *Architect a complex world* »

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# Table of Contents

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<b>CESAMES Academy and its certificate course</b>	2
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## Short Training Sessions

### Introductory Training

Master the fundamentals of the system architecture	5
Master the fundamentals of the enterprise architecture	6
Master the architecture and agility methods to succeed in its transformation projects	7

### Booster Training

Organize a decision-making workshop using collaborative engineering methods	8
Capture needs & master requirements engineering	9

### Advanced Training

Design cost-effective families and product lines with modular architecture	10
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## Long Training Sessions

On-the-job training in System Architecture (inside-company training)	11
On-the-job training in Enterprise Architecture (inside-company training)	12

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# CESAMES ACADEMY

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## Why choose CESAMES ACADEMY ?

In an increasingly complex environment, with heavy and fluctuating external constraints, as well as ever more numerous and demanding stakeholders, architectural methods are becoming essential to ensure the competitiveness of companies.

At CESAMES, we have been training and supporting for more than 5 years the major accounts of Industry, Services and Administration. We work to help them secure and successfully design and develop their complex transformation products and projects.

Our goal: make you efficient quickly! For this, our training and coaching are carried out on your projects, so that you can implement immediately and concretely, the theoretical and conceptual aspects transmitted.



### A SKILL-RISING COURSE IN SYSTEMS ARCHITECTURE

In order to meet the needs of our clients and to offer trainings adapted to all levels of maturity, CESAMES Academy offers a multi-level and certifying skill-rising course in system architecture or in enterprise architecture.



### YOUR TRAINERS? CONFIRMED ARCHITECTS

The trainers and coaches of CESAMES Academy have a real knowledge of the operational context of the problem of their clients because they are former operational themselves. Their business and sector knowledge, combined with their architectural expertise, make CESAMES trainers and consultants highly efficient, relevant and adaptable for our clients.



### THE CESAM METHODOLOGICAL FRAMEWORK

Our intervention model is based on the CESAM method, a framework for architecture and systems modeling, developed since 2010 in strong interaction with major industrial players. This framework, intended for system architects, engineers and designers, aims to help them better master the complex integrated systems they work on a daily basis. CESAM is already used in large accounts; More than 3,500 engineers, project managers and managers have already followed our training, in France and abroad.

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# THE SKILL-RISING COURSE FOR SYSTEMS ARCHITECTURE

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Discover the path to increasing competence in system architecture and enterprise architecture: CESAM. The latter is based on the CESAM Pocket Guide and on the "system architect" and "enterprise architect" competency repositories, recognized by the French State and the European Qualification Framework.



## THE COURSE ?

The CESAM course demonstrates the ability of a person to implement architectural methods - a key-tool for business competitiveness - in a number of given contexts. It is associated with a CESAM multi-level professional certification and gives access to the title of "enterprise architect" or "system architect" (EQF - Level 7).



## FOR WHOM ?

The CESAM course is aimed at all system architects, engineers, project managers, managers or directors who wish to better master the complex integrated systems they work on a daily basis. Thanks to the formal CESAM method, the level of knowledge and experience in engineering and systems architecture of a person can be evaluated regardless of their seniority and level in the Company.



## WHY ?

A company with CESAM certified actors puts it forward to prove factually the capacity of its resources to implement the CESAM method and thus obtain markets. It also uses it to animate the rise in competence and motivate her teams.

An employee who joins the CESAM course has his skills and expertise recognized within his company and with an ecosystem of major international players. Finally, it incorporates a community with high added value that promotes the sharing of good practices and maturity.



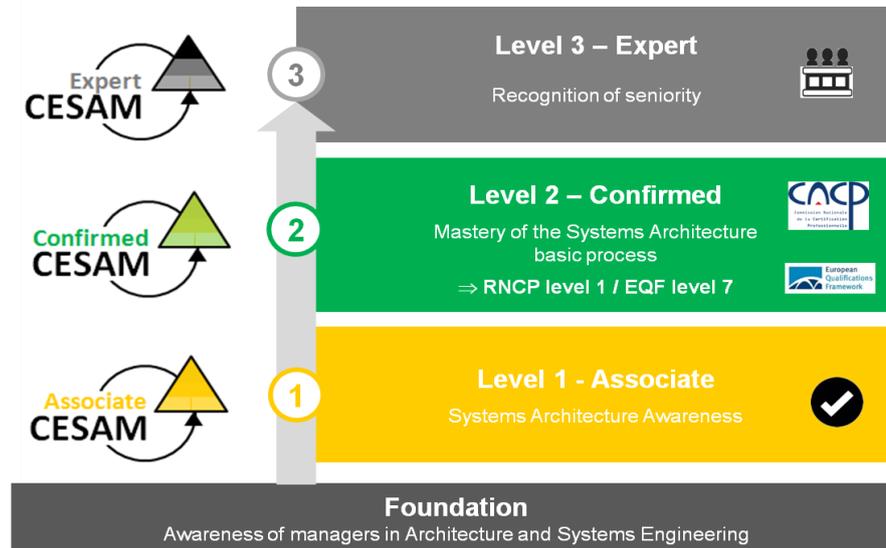
## THE DIFFERENCE ?

Broader certified skills. CESAM evaluates the architect's ability to build the right architectural overviews and to bring project stakeholders together on the same vision and solution. CESAM is complementary to the INCOSE (System Engineering) and TOGAF (Enterprise Architecture) certifications.

However, unlike other organizations whose certifications are based on peer recognition, CESAM Level 2 is recognized by the European Qualification Framework (EQF - Level 7).

# THE SKILL-RISING COURSE

## CESAM course: the maturity levels & its certifications



It should be noted that the three levels of the CESAM certification are naturally aligned with those of INCOSE (International Council on System Engineering) and TOGAF (The Open Group Architecture Framework)

## The different types of training of the CESAM course

### INTRODUCTORY TRAINING - 2 to 3 days

The introductory training is designed to cover the needs of awareness of the architectural approach of your management and to allow your architects to better understand all the issues and key architectural processes. Certification: At the end of the training, the participant has one month to pass the online evaluation in order to obtain the "CESAM Associate" certification.

### ON-THE-JOB TRAINING - 6 to 12 months

This training (6 to 12 months) is to start a learning work from a project "life size" on which the person to train is working. Alternating theories, practical contributions and project coaching, it is a remarkable tool to build skills. Certification: At the end of the training, the trainees are certified "CESAM Confirmed" and can submit an architectural file to a Jury to qualify as "System Architect" or "Enterprise Architect" .

# MASTER THE FUNDAMENTALS OF SYSTEM ARCHITECTURE

## 3- Days

Industrial organizations are finding it increasingly difficult to master the complexity of their systems. Insufficient maturity of the integration processes and silo operations are often the cause of these problems. The system architecture is the key answer to these difficulties. It allows you to better control the costs, quality and performance of complex industrial systems that you design and / or manage using systemic modeling and collaborative dynamics.

### Training objectives

At the end of the training, you will be able to:

- Understand the main principles of the system architecture to implement a system architecture approach within your organization;
- Understand what a need and a requirement are
- Architect the needs of your system
- Architect the environment of your system
- Put in place a functional and organic architecture.

**Target audience:** engineers, project managers, managers and directors

**Prerequisites:** at least 3 years of experience in the design and management of complex industrial systems

**Content of the training:** we dedicate a large part of our modules to practice to facilitate learning. During 3 days, you implement your acquired on exercises that you choose.

DAY 1	DAY 2	DAY 3
<p><b>1. Introduction: the principles of the system architecture</b></p> <ul style="list-style-type: none"> <li>▪ The complexity of industrial systems</li> <li>▪ Panorama of the system architecture</li> <li>▪ Elements of systemic <i>Exercise: architectural classification</i></li> <li>▪ Introduction to SysML <i>Exercise: Internal block diagram</i></li> </ul>	<p><b>2. Requirements engineering and requirements</b></p> <ul style="list-style-type: none"> <li>▪ What is a need and a requirement? <i>Exercise: identification of needs and requirements</i></li> <li>▪ The engineering process of needs and requirements</li> <li>▪ Development of needs and requirements <i>Exercise: Needs Architecture</i></li> </ul> <p><b>3. Operational Architecture</b></p> <ul style="list-style-type: none"> <li>▪ Panorama</li> <li>▪ Environmental Architecture <i>Exercise: environmental architecture</i></li> <li>▪ Analyse of needs</li> <li>▪ Life Cycle and Context Analysis <i>Exercise: life cycle</i></li> </ul>	<p><b>4. Functional and organic architecture</b></p> <ul style="list-style-type: none"> <li>▪ Elements of functional architecture</li> <li>▪ Elements of organic architecture</li> </ul> <p><b>5. Some advanced themes</b></p> <ul style="list-style-type: none"> <li>▪ System vision in practice Verification and validation <i>Exercise: verification and validation</i></li> <li>▪ Abstraction mechanisms</li> <li>▪ Elements of collaborative architecture <i>Exercise: collective alignment</i></li> </ul>

### Introductory

#### AGENDA

March 14-16, 2018  
 May 16-18, 2018  
 October 17-19, 2018  
 December 17-19, 2018

#### FORMAT

Inter-company  
 or Intra-company

#### PLACE

CESAMES Academy  
 15 rue La Fayette  
 75009 Paris  
 France

#### DURATION

21 hours (3 Days)  
 9.00 AM-12.30 AM  
 1.30 PM-5.00 PM

#### EDUCATIONAL SUPPORT

Workbook containing the training support. Digital version on request

#### TRAINER

A senior architect  
 CESAMES

#### COST

Inter-company  
 3.000 € VAT/pers.  
 (includes lunches and coffee breaks)  
 Intra-company  
 Quote on request

#### CERTIFICATION

"CESAM Associate" –  
 Online quiz of 40 questions.  
 200 euros VAT / pers.



#### FOLLOWED

Attendance sheet signed by the trainees and the trainer each half-day and attestation of attendance

#### EVALUATION

Evaluation at the end of the module and satisfaction questionnaire

# MASTER THE FUNDAMENTALS OF ENTERPRISE ARCHITECTURE

## 3- Days

The enterprise architecture is a systemic analysis approach and an international methodological standard of integrated business & IT design. The implementation of this approach helps to control the complexity of organizations and information systems to improve their efficiency and performance.

### Training objectives :

At the end of the training, you will be able to:

- Understand the systemic paradigm on which enterprise architecture is based;
- Introduce the great architectural views that describe a business;
- Present the major enterprise architecture processes that structure the business architect's profession;
- Introduce architectural modeling languages (BPMN & UML) that allow to equip the enterprise architecture approach;
- Understand how the enterprise architecture approach can be used in practice in a business environment.

**Target audience:** engineers, project managers, managers and directors

**Prerequisites:** at least 3 years of experience in the field of design and management of organizations and information systems.

**Training Content:** The purpose of the training is to provide an overview of the basics and key processes of enterprise architecture. It is based on a mix of architectural "concepts", case studies and discussions.

DAY 1	DAY 2	DAY 3
<p><b>1. The fundamentals of enterprise architecture</b></p> <ul style="list-style-type: none"> <li>▪ The complexity of organizations and information systems</li> <li>▪ Introduction to Enterprise Architecture</li> <li>▪ Elements of systemic analysis</li> <li>▪ The structuring views of a company <i>Exercise: architectural classification</i></li> <li>▪ Transformation trajectories <i>Exercise: definition of a trajectory transformation</i></li> </ul>	<p><b>2. Requirements and requirements engineering</b></p> <ul style="list-style-type: none"> <li>▪ The notion of need and requirement <i>Exercise: identification of needs and requirements</i></li> <li>▪ Repositories of needs and requirements</li> <li>▪ The needs and requirements architecture process <i>Exercise: Needs Architecture</i></li> </ul> <p><b>3. Business Architecture Overview</b></p> <ul style="list-style-type: none"> <li>▪ Environmental Architecture <i>Exercise</i></li> <li>▪ External interactions architecture <i>Exercise</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ Integrated enterprise architecture <i>Exercise: hierarchy of processes</i></li> <li>▪ Organizational Architecture <i>Exercise</i></li> </ul> <p><b>4. Elements of IT architecture</b></p> <p><b>5. Some advanced themes</b></p> <ul style="list-style-type: none"> <li>▪ Enterprise Architecture in Practice</li> <li>▪ Abstraction mechanisms</li> <li>▪ Project architectural elements</li> <li>▪ Elements of collaborative architecture <i>Exercise: collective alignment</i></li> </ul>

### Introductory

#### AGENDA

March 21-23, 2018

November 21-23, 2018

#### FORMAT

Inter-company

ou Intra-company

#### PLACE

CESAMES Academy

15 rue La Fayette

76009 Paris

France

#### DURATION

21 hours (3 days)

9.00 AM-12.30 PM

1.30 PM-5.00 PM

#### EDUCATIONAL SUPPORT

Workbook containing the

training support. Digital

version on request

#### TRAINER

CESAMES Senior Architect

#### COST:

**Inter-company**

3.000 € VAT/pers.

(including breakfast & coffee breaks)

**Intra-company**

Quote on request

#### CERTIFICATION

"CESA Associate CESAM" –

Online questions.

200 euros VAT / pers.



#### FOLLOWED

Attendance sheet signed by

the trainees and the trainer

each half-day and

attestation of attendance

#### EVALUATION

Evaluation at the end of the

module and satisfaction

questionnaire

# MASTER ARCHITECTURE & AGILITY METHODS FOR SUCCESSFUL TRANSFORMATION PROJECTS 3 DAYS

Architecture and agility are often perceived as antagonistic. Yet they are two factors necessary for the success of your transformations. The implementation of an architecture approach makes it possible to make the objectives of your transformation consistent with the expectations of the stakeholders, the constraints of the environment and the business and IT activities of your company. In addition, the success of your project is based on your ability to lead it with agility, incremental incremental steps that create value to reach the expected target. Our training will show you that the combination of the implementation of agile methods and enterprise architecture approaches is the key success factor for your transformation projects.

## Training objectives

At the end of the training, you will be able to:

- Understand the fundamentals of an enterprise architecture approach;
- Understand the fundamentals of agile Lean startup methods;
- Integrate and apply the general framework of architecture in the agile approach;
- Understand and apply the different stages of the framing / reframing activities of the team / product teams;
- Understand how the information system architecture approach can facilitate its agile evolution.

**Target audience:** Architects, Product Owner, Scrum Master, Enterprise Architects, Project Managers, Managers and Directors

**Prerequisites:** have at least 3 years of experience in the field of information system design integrating Business and IT.

**Content of the training:** The training aims to give an overview of the basics and key processes of an agile architectural approach. It is based on a mix of methodological contributions, case studies and discussions.

DAY 1	DAY 2	DAY 3
<p><b>1. The foundations of EI</b></p> <ul style="list-style-type: none"> <li>▪ Value and coherence</li> <li>▪ Principles of Enterprise Architecture (AE)</li> <li>▪ Structuring views of the AE <i>Exercise: Environmental Analysis</i></li> </ul> <p><b>2. The foundations of agile methods and lean startup</b></p> <ul style="list-style-type: none"> <li>▪ Value and small steps</li> <li>▪ Principles of lean startup</li> <li>▪ Functioning in "feature teams" <i>Exercise: minimum viable product</i></li> </ul> <p><b>3. EA to stay on course with agile runs</b></p> <ul style="list-style-type: none"> <li>▪ Difficulties of a frameless agile mode</li> <li>▪ V-cycle differences and agile mode</li> <li>▪ General Framework for EI Integration in the Agile Approach</li> <li>▪ The framing / cropping model guided by the EA <i>Exercise: Structuring the framing mode of a project</i></li> </ul>	<p><b>4.1st step of the framing: macro operational analysis</b></p> <ul style="list-style-type: none"> <li>▪ Environment and missions</li> <li>▪ Needs and constraints</li> <li>▪ Use cases and operational scenario</li> <li>▪ Valuation of CUs by value <i>Exercise: Operational Analysis</i></li> </ul> <p><b>5. 2nd stage of framing: macro behavioral analysis</b></p> <ul style="list-style-type: none"> <li>▪ Process and activities impacted</li> <li>▪ Translation through CUs of "feature impacts"</li> <li>▪ requirements and functional requirements</li> <li>▪ Structure in the team / product team</li> <li>▪ Valuation of features by value <i>Exercise: Behavioral Analysis</i></li> </ul>	<p><b>6. 3rd step of the framing: macro analysis of IT impacts and prioritization by run</b></p> <ul style="list-style-type: none"> <li>▪ Application functional impact analysis on the IS</li> <li>▪ Methods for quantifying IT impacts</li> <li>▪ Valuation of IT impact of features</li> <li>▪ Feature backlog prioritization workshop and constitution of the first RUN <i>Exercise: Prioritization Workshop</i></li> </ul> <p><b>7. The contributions of the architecture out of framing</b></p> <ul style="list-style-type: none"> <li>▪ Management of the framing / regular reframing of the teams / product team</li> <li>▪ Architect the SI to facilitate its evolution by feature</li> </ul>

## Introductory

### AGENDA

July 9-11, 2018

November 14-16, 2018

### FORMAT

Inter-company  
or Intra-company

### PLACE

CESAMES Academy  
15 rue La Fayette  
75009 Paris  
France

### DURATION

21 hours (3 days)

9.00 AM-12.30 PM

1.30 PM-5.00 PM

### EDUCATIONAL SUPPORT

Workbook containing the training support. Digital version on request

### TRAINER

CESAMES Senior Architect

### COST:

**Inter-company**

3.000 € VAT/Pers.

(including breakfast & coffee breaks)

**Intra-company**

Quote on request

### CERTIFICATION

"CESAM Associate" –

Online quiz of 40 questions.

200 euros VAT / pers.



### FOLLOWED

Attendance sheet signed by the trainees and the trainer each half-day and attestation of attendance

### EVALUATION

Evaluation at the end of the module and satisfaction questionnaire

# ORGANIZE A DECISION-MAKING WORKSHOP THANKS TO COLLABORATIVE ENGINEERING 2 DAYS

***Make the actors of your projects converge on a shared vision of a complex product / service***

All traditional business sectors now have to design complex products in environments that are also becoming more and more complex each day. Mastering this internal and external complexity requires collaborative engineering.

All relevant stakeholders must be able to co-design the complex product / service by performing the necessary architectural trade-offs as early as possible. Benefits: "Design correct" systems that integrate all the needs and constraints of their environments.

### **Training objectives**

At the end of the training, you will be able to:

- Understand the fundamentals of engineering and collaborative architecture;
- Practice the basic methods of engineering & collaborative architecture;
- Understand how to concretely implement a collaborative design workshop that converges the actors of a system project on a shared vision of a product or a complex industrial system.

**Target audience:** engineers, project managers, managers and directors

**Prerequisites:** none

**Training Content:** The training aims to provide an overview of the basics and key processes of architecture and collaborative engineering. It is based on a mix of architectural "concepts", case studies and discussions.

DAY 1	DAY 2
<p><b>0. Introduction of the module</b></p> <p><b>1. You said "engineering and collaborative architecture? "</b></p> <ul style="list-style-type: none"> <li>▪ Serious Game: the tender of MagTrans</li> <li>▪ Panorama of collaborative engineering</li> </ul> <p><b>2. Engineering techniques and collaborative architecture</b></p> <ul style="list-style-type: none"> <li>▪ Sociodynamic elements: how to influence actors within a project?</li> </ul> <p><i>Exercise: socio-dynamic analysis of a project environment</i></p>	<ul style="list-style-type: none"> <li>▪ Animation techniques of design meetings</li> <li>▪ Exercise: preparation of a collaborative architecture workshop</li> <li>▪ Co-design and collaborative architecture workshop</li> </ul> <p><i>Exercise: animation and implementation of a collaborative architecture workshop</i></p> <p><b>3. Conclusion</b></p>

## **Booster Training**

### **AGENDA**

April 5-6, 2018

July 2-3, 2018

October 22-23, 2018

### **FORMAT**

Inter-company  
or Intra-company

### **PLACE**

CESAMES Academy

15 rue La Fayette

75009 Paris

France

### **DURATION**

14 hours (2 days)

9.00 AM-12.30 PM

1.30 PM-5.00 PM

### **EDUCATIONAL SUPPORT**

Workbook containing the training support. Digital version on request

### **TRAINER**

CESAMES Senior Architect

### **COST:**

**Inter-company**

2.000 € VAT/Pers.

(including breakfast & coffee breaks)

**Intra-company**

Quote on request

### **FOLLOWED**

Attendance sheet signed by the trainees and the trainer each half-day and attestation of attendance

### **EVALUATION**

Evaluation at the end of the module and satisfaction questionnaire

# CAPTURING NEEDS AND MASTERING REQUIREMENTS ENGINEERING

## 2 DAYS

### *Capturing value and prioritizing the best solutions*

PMI's annual Pulse of the Profession® 2014 Global Study found that "inadequate collection of needs and requirements" remained the primary cause of failure of complex product and industrial design projects. In particular, this study shows that the two most important skills in capturing needs and requirements engineering are active listening and a clear articulation of the requirements produced both with each other and with the needs of the environment.

#### Training objectives

- Our training provides the key skills for the success of a complex product or industrial system design and development project, which is based on capturing the "right" needs and identifying the "right" requirements.
- In addition to the fundamentals of needs capture and requirements engineering techniques, at the end of the training you will be able to:
  - Succeed in identifying all the needs of stakeholders;
  - Share and prioritize needs and requirements
  - Reflect the implications of changing needs or requirements;
  - Communicate the value of a solution to stakeholders.

**Target audience:** engineers and project managers

**Prerequisites:** at least 3 years of experience in the design and management of complex industrial products. Know the fundamentals of the system architecture.

**Content of the training:** the training is based on a mix of architectural "concepts", case studies and discussions

DAY 1	DAY 2
<p><b>0. Introduction of the module</b></p> <p><b>1. Overview of Requirements Capture and Requirements Engineering</b></p> <ul style="list-style-type: none"> <li>▪ Notions of system architecture</li> <li>▪ Overview of the requirements architecture process and requirements</li> </ul> <p><b>2. Capture and needs architecture</b></p> <ul style="list-style-type: none"> <li>▪ Preparation of the procedure <i>Exercise: definition of a needs capture plan</i></li> <li>▪ Objectives and progress of the process <i>Exercise: collecting and writing needs</i> <i>Synthesis</i></li> </ul> <p><b>3. Engineering and Requirements</b></p> <ul style="list-style-type: none"> <li>▪ Architecture</li> <li>▪ Objectives and progress of the process</li> </ul>	<p><i>Exercise: coverage analysis of a repository of needs and requirements</i> <i>Synthesis</i></p> <p><b>4. Requirements capture and requirements engineering in practice</b></p> <p><i>Example of use of needs &amp; requirements in practice</i></p> <ul style="list-style-type: none"> <li>▪ Capture, engineering and management of needs and requirements on the product</li> <li>▪ Capture, engineering and management of needs and requirements on the project</li> </ul> <p><b>5. Verification and validation</b></p> <ul style="list-style-type: none"> <li>▪ Overview of the verification and validation process</li> <li>▪ Links between Requirements &amp; Requirements Engineering and Verification &amp; Validation <i>Exercise: analysis and specification of a test case</i></li> </ul> <p><b>6. Conclusion</b></p>

#### Booster Training

#### AGENDA

January 18-19, 2018  
June 19-20, 2018

#### FORMAT

Inter-company  
or Intra-company

#### PLACE

CESAMES Academy  
15 rue La Fayette  
75009 Paris  
France

#### DURATION

14 hours (2 days)  
9.00 AM-12.30 PM  
1.30 PM-5.00 PM

#### EDUCATIONAL SUPPORT

Workbook containing the training support. Digital version on request

#### TRAINER

CESAMES Senior Architect

#### COST:

**Inter-company**  
2.000 € VAT/Pers.  
(including breakfast & coffee breaks)  
**Intra-company**  
Quote on request

#### FOLLOWED

Attendance sheet signed by the trainees and the trainer each half-day and attestation of attendance

#### EVALUATION

Evaluation at the end of the module and satisfaction questionnaire

# DESIGN FAMILIES AND PRODUCT LINES AT CONTROLLED COSTS 2 DAYS

Advanced Training

## *The methods of modular architecture*

Industry organizations and manufacturers of complex products and services now face fragmented markets where each segment is characterized by fierce competition and a high degree of specificity demanded by customers and end-users. There is therefore a real competitive advantage to be able to offer cost-effective products that best meet the needs of customers and end users.

Our training responds to this industrial challenge: how to make customized products at controlled costs and risks? You learn how to maximize the reusability of existing components, while mastering the diversity of a family / product line, leading to flexible and modular architectures.

### Training objectives

At the end of the training, you will be able to:

- Understand the issues, challenges and foundations of modular architecture;
- Implement, in practice, an operational, functional & organic architecture approach in the context of a family or a product line;
- Know the strategic, managerial, organizational and financial impacts of setting up a family policy or product line.

**Target audience:** engineers and project managers

**Prerequisites:** at least 3 years of experience in the design and management of complex industrial products. Know the fundamentals of the system architecture.

**Content of the training:** the training is based on a mix of architectural "concepts", case studies and discussions

DAY 1	DAY 2
<p><b>1. Introduction of the module</b></p> <ul style="list-style-type: none"> <li>▪ Panorama of families and product lines</li> </ul> <p><b>2. Business Architecture of a Family / Product Line</b></p> <ul style="list-style-type: none"> <li>▪ Identification of stakeholder variability and use cases</li> <li>▪ Definition of the segmentation grid of the environment &amp; products</li> <li>▪ Identification of the variability of needs <i>Exercise: Operational Architecture Architecture of a Family / Product Line</i></li> <li>▪ Synthesis</li> </ul> <p><b>3. Functional and organic architecture of a family / product line</b></p> <ul style="list-style-type: none"> <li>▪ Objectives, progress and deliverables</li> </ul>	<ul style="list-style-type: none"> <li>▪ Generic &amp; family-specific functions and functional requirements / product lines</li> <li>▪ Generic and family-specific components and organic requirements / product lines <i>Exercise: functional analysis of a family / product line</i></li> <li>▪ Synthesis</li> </ul> <p><b>4. Family strategy / product line</b></p> <ul style="list-style-type: none"> <li>▪ Definition of a platform strategy and a diversity management policy</li> <li>▪ Definition of an instantiation strategy and the governance of a family / product line <i>Exercise: defining a family / product line strategy</i></li> <li>▪ Synthesis</li> </ul> <p><b>5. Conclusion</b></p>

### AGENDA

February 8-9, 2018  
June 7-8, 2018

### FORMAT

Inter-company  
or Intra-company

### PLACE

CESAMES Academy  
15 rue La Fayette  
75009 Paris  
France

### DURATION

14 hours (2 days)  
9.00 AM-12.30 AM  
1.30 PM-5.00 PM

### EDUCATIONAL SUPPORT

Workbook containing the training support. Digital version on request

### TRAINER

CESAMES Senior Architect

### COST:

**Inter-company**  
2.000 € VAT/Pers.  
(including breakfast & coffee breaks)  
**Intra-company**  
Quote on request

### FOLLOWED

Attendance sheet signed by the trainees and the trainer each half-day and attestation of attendance

### EVALUATION

Evaluation at the end of the module and satisfaction questionnaire

# ON-THE-JOB TRAINING IN SYSTEM ARCHITECTURE

Industrial organizations are finding it increasingly difficult to master the complexity of their systems. Insufficient maturity of the integration processes and silo operations are often the cause of these problems. The system architecture is THE key answer to these difficulties. It allows you to better control the costs, quality and performance of complex industrial systems that you design and / or manage using systemic modeling and collaborative dynamics.

Architecture is an operating discipline. We must both master concepts and know how to put them into practice.

Our training system is therefore based on an alternation of methodological contributions (training sessions) and practical work on concrete projects managed by the trainees themselves (operational support). It requires an investment of each trainee about 1 day per week (time spent on file) for the duration of the training.

## Training objectives:

At the end of the action-training, you will be able to:

- Understand the main principles of the system architecture to implement a system architecture approach within your organization;
- Understand what a need and a requirement are
- Architect the needs of your system
- Architect the environment of your system
- Build a functional and organic architecture;
- Use systemic modeling methods;
- Promote the convergence of stakeholders towards the same transformation trajectory.

**Target audience:** senior engineers, project managers and architects

**Prerequisites:** Anyone working on complex industrial products with at least 3 years of experience in the field

## Training content

DURATION	MODULE	ENTITLED
2 days	1	System Architecture Introductory
2 days	2	Needs & requirements Engineering
2 days	3	Operational Architecture
2 days	4	Functional Architecture
2 days	5	Constructional Architecture
2 days	6	Systemic modeling
2 days	7	Safety
2 days	8	Verification & Validation
2 days	9	System Project Management
2 days	10	Collaborative Architecture

## Long Training

### FORMAT

Intra-company

### DURATION

170 hours (6 to 12 month)

### COST

On quote request

### EDUCATIONAL SUPPORT

Workbook containing the training medium. Digital version on request

### TRAINER

CESAMES Senior Architect

### CERTIFICATION

CESAM Confirmed +  
State title in System  
Architecture (RNCP level 1)  
et EQF (level 7)



### FOLLOWED

Attendance sheet signed by the trainees and the trainer each half-day and attestation of attendance

### EVALUATION

Evaluation at the end of the module and satisfaction questionnaire

# ON-THE-JOB TRAINING IN ENTERPRISE ARCHITECTURE

Architecture is an operating discipline. We must both master concepts and know how to put them into practice.

Our training system is therefore based on an alternation of methodological contributions (training sessions) and practical work on concrete projects managed by the trainees themselves (operational support). It requires an investment of each trainee about 1 day per week (time spent on file) for the duration of the training.

Our training-action allows participants to mature quickly and permanently on issues of enterprise architecture. companies, for their part, secure their evolution and permanently anchor the enterprise architecture approach in the day-to-day practices of business and IT.

## Training aims :

At the end of the action-training, you will be able to:

- organize and architect a transformation;
- foster the convergence of stakeholders towards the same transformation trajectory

**Target audience:** project managers, managers, urban planners, senior corporate architects

**Prerequisites:** be in charge of complex organizational transformation projects or information systems management (process, organization and IT) on behalf of large companies.

## Training content

DURATION	MODULE	ENTITLED
2 days	0	Problem Solving
3 days	1	Panorama of Enterprise Architecture
2 days	2	Definition of the architectural vision
3 days	3	Business Architecture & IT
2 days	4	Consolidation of the Business Architecture and IT
3 days	5	Trajectory and Transformation Project
2 days	6	Instruction of a Project

## Long Training

### FORMAT

Intra-company

### DURATION

170 hours (6 to 12 month)

### COST

On quote request

### EDUCATIONAL SUPPORT

Workbook containing the training support. Digital version on request

### TRAINER

CESAMES Senior Architect

### CERTIFICATION

CESAM Confirmed +  
State title in System  
Architecture (RNCP level 1)  
et EQF (level 7)



### FOLLOWED

Attendance sheet signed by the trainees and the trainer each half-day and attestation of attendance

### EVALUATION

Evaluation at the end of the module and satisfaction questionnaire



# CESAMES ACADEMY

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