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Systems Architect(ing)

Start date
30-11-2026

Location
Multiple locations

Price per participant
€3,740.00 excl. VAT.

Duration
5 consecutive days

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Introduction

System Architecting is the art and science of designing and building complex multi-disciplinary systems. The responsibility and the challenge for the System Architect is to translate the requirements of the many stakeholders into a system architecture blueprint, and technically leading a team to engineer, integrate and validate the resulting System-of-Interest. The System Architect will do this based on understanding the problem domain, the business context, the human context, a solid knowledge of the solution domain, technology innovation roadmaps and preceding architectures. The System Architect provides the vision, develops the outline for an integral design, keeps the overview, takes care of the design consistency and provides the context for the development and engineering activities that will be carried out by, sometimes large, multi-disciplinary teams of engineering specialists.

With **2,100+ participants** from leading international high-tech companies, this training is one of our most recognized programs. In short, this training stands out due to:

- the use of the multi-disciplinary CAFCR framework for structuring requirements across solution and problem domain
- team-based, iterative exercises culminating in a real-world pitch
- holistic integration of technical, business and human factors–including lean & agile processes
- Professional Development Units (PDUs): 40 PDUs for INCOSE certification renewal
- the expert trainers with deep industry background and hands-on teaching approach

This training is designed to let participants themselves experience the System Architect's role, task, activities and responsibilities in the multi-disciplinary environment. Participants will use instruments, like CAFCR, to tackle architectural issues, like how to balance the many, often conflicting requirements, how to set up a Roadmap and the experience the basics for creating a Business Case.

Practical information

Location
Multiple locations

Duration
5 consecutive days

Frequency
4 times per year

Price
€3,740.00 excl. VAT.

Included
Lunch buffet
Course book
Course binder
Energy break

Certification
HTI Certificate
Microcredentials
PDUs INCOSE

Delivery
Open enrollment (for individual participation)
In-company (for a group of employees)

Your trainers

Ger Schoeber

Ad Vermeer

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The course gives a complete overview of the broad playing field and a variety of viewpoints that a System Architect needs to manage. It contains many exercises, worked out in small groups, that help to experience the broadness of the field. The addressed subjects help to understand the influence of the organization structure, the importance of focusing not only on technical aspects but also on business, process and human aspects and how to deal with these multidisciplinary viewpoints.

This training is available for open enrollment as well as for in-company sessions. For in-company sessions, the System Architect(ing) training can be adapted to your situation and specific needs.

Target audience

This course is intended for (potential) system architects, system group leaders, system engineers, senior designers and project leaders. A few years of experience in system or product development, from any discipline like mechanics, physics, mechatronics, optics, electronics or software, with an interest in the integral multi-disciplinary architectural issues and affinity with the business aspects is essential.

It is trusted by engineers and leaders from global high-tech companies in semiconductors, mechatronics, optics, and software.

In case you are a Systems Architect or Systems Engineer with at least 5 years of experience and want to become excellent in your job: check out the Advanced Systems Architect(ing) training.

Objective

After successful completion of this course, the participant will have insight in:

- the place of the System Architecting process in the Product Creation Process;

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- the activities, deliverables, responsibilities and profile of the System Architect;
- the role of the System Architect in lean and agile processes, optimizing efficiency and effectiveness;
- how to capture the important requirements and link these to key drivers;
- the 5-view CAFCR framework, supporting the System Architecting process;
- the value of multi-disciplinary models and views;
- the importance of an early start of defining the system integration strategy;
- the creation of a roadmap and the role of the System Architect in that process;
- the importance of communication and how to pitch a technical message to higher management.

Method

Every morning and every afternoon session consists of an interactive exploration of one of the subjects, a bit of lecture of the subject where the theory is explained and enlightened with practical examples of the seasoned trainers. A subject is finalized with an exercise, brainstorming and working in small parallel groups on the assignment.

In addition, participants work in small competing teams throughout the whole week in 4 iterations on a main-thread exercise from a 'back-of-the-envelope' assignment to a final presentation pitch.

You will receive a hard copy course binder with hand-outs of the presentation. You will also receive the book 'System Architecting – a business perspective', by Gerrit Muller.

Program

- System architecture process in relation to Product creation process;
- Roles and tasks of a system architect;
- Lean, agile, incremental development processes;

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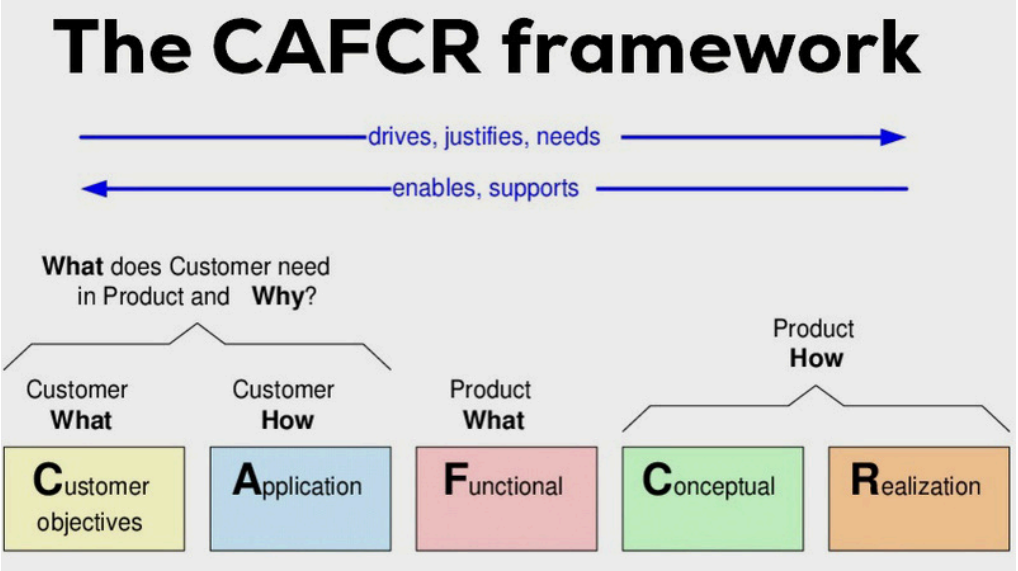
- Modeling and views;
- The CAFCR framework;
- Requirements capturing;
- Functional and non-functional or quality requirements;
- System partitioning and decomposition;
- System integration strategies;
- Human aspects of the system architect role;
- Roadmapping;
- Financial aspects.

*The 4 participants with the best pitch for their case will be rewarded with a copy of the book '**ASML's Architects**'.*

CAFCR FRAMEWORK
During this training the CAFCR framework, or CAFCR model, will be introduced. It contains the following views: Customer objectives, Application view, Functional view, Conceptual view, Realization view. You will learn how to use the CAFCR model during 5 small 1-on-1 exercises with lots of interaction and feedback.



The CAFCR framework by Gerrit Muller (www.gaudisite.nl).

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What participants say

"Interactive, interesting, effective, gets you into a new mindset."

Pieter Dirk Berkhout - Thetford

"Interesting & insightful due to cross-industrial nature."

Bobby Daniel - NXP

"I'm very enthousiastic about the course. Especially by the way Ger teached us and the content of the course itself."

Anne Koet - Neopost Technologies

Ready to register?

Reserve your seat via our website or make a provisional reservation to hold your place while you finalize your plans.

Have questions?

We are happy to help you find the right course. Reach us at training@hightechinstitute.nl or call us at +31 85 401 3600.

About High Tech Institute

For more than 15 years, High Tech Institute has been helping engineers and tech professionals develop the skills needed to succeed in the high-tech industry. Through expert-led training programs, in-company courses, and industry events, we combine deep technical expertise with practical application.