



high
tech
institute

STOP GUESSING. **START ARCHITECTING** **SYSTEMS THAT HOLD UP.**

Modern high-tech products combine mechanics, electronics, software, physics, and human interaction. As systems grow in complexity, architectural decisions become harder to justify – and system risks become harder to foresee.

Many engineering teams recognize these challenges:

- Requirements change late and conflict across disciplines
- Architectural decisions remain implicit or difficult to defend
- Integration problems appear late in the development process
- Local optimizations undermine overall system performance
- Systems architects must guide decisions without formal authority.

Systems Architect(ing) Training
5 days · Stuttgart (DE)

Swipe to see how →

THE ROLE OF THE SYSTEMS ARCHITECT

The Systems Architect closes that gap

Systems Architecting is the discipline of designing and realizing complex, multidisciplinary engineering systems. It ensures that complex products remain coherent, scalable, and fit for purpose. The Systems Architect translates stakeholder requirements into a clear and consistent systems architecture. This architecture serves as the technical blueprint for design, integration, and validation of the system-of-interest.

This role is based on a solid understanding of:

- the problem domain and operational context
- the business and stakeholder environment
- relevant human factors
- the solution domain, including technologies, interfaces, and constraints
- technology roadmaps and preceding systems architectures;

The Systems Architect defines the system vision, maintains architectural consistency, and provides the technical context that enables effective collaboration across multidisciplinary engineering teams.

WHAT YOU WILL GAIN?

Architectural Capabilities You Will Develop

After completing this training, participants are able to:

- position the Systems Architecting process within the Product Creation Process
- understand and apply the role, responsibilities, activities, and deliverables of the Systems Architect
- operate effectively as a Systems Architect within lean and agile development environments
- capture key requirements and link them to drivers, trade-offs, and architectural decisions
- apply the CAFCR 5-view framework to structure and communicate architectures
- use multidisciplinary models and views to manage complexity
- define an early system integration strategy to reduce late-stage risks
- develop and maintain a system roadmap from an architectural perspective
- communicate architectural choices clearly and pitch technical decisions to management.

5 Training Days

- System architecture process in relation to Product creation process;
- Roles and tasks of a systems architect;
- Lean, agile, incremental development processes;
- 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 systems architect role;
- Roadmapping;
- Financial aspects.

Monday

Welcome and introduction
Systems architecture context

Exercise:
Organization and responsibilities

Engineering processes, agile process
Role, Task & Profile of the Systems Architect

Exercise:
PL/SA/ProdM
Role play

Tuesday

Requirements capturing

Exercise:
Key drivers graph

Documentation and reviewing Modeling & Views

Exercise:
Modeling & Views

Wednesday

CAFCR

Exercise:
5 small 1-on-1 exercises linked to CAFCR views with lots of interaction and feedback

Story telling

Exercise:
CAFCR views
Intermediate status presentation

Thursday

Systems integration strategy
Human aspects with systems architecting

Exercise:
Teamplay motivating an integration strategy

Roadmapping Product lifecycle

Exercise:
Roadmapping

Friday

Financial computations
Hints&tips presentation for management

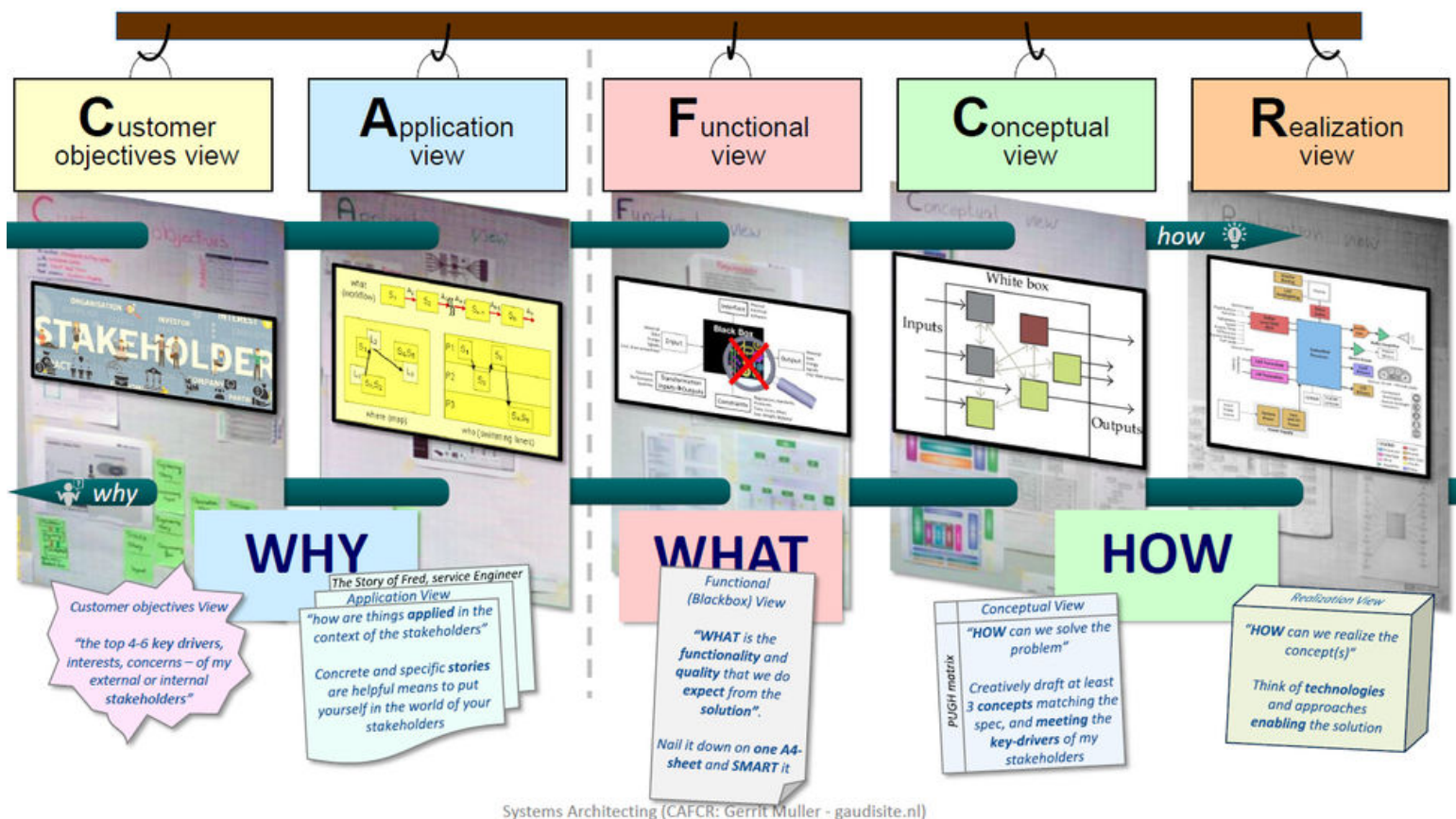
Exercise:
CAFCR views revisited.
Prepare senior management presentation

Final presentations of the CASE for "Senior management Board"

Wrap up, evaluation & certificates

**Every morning and afternoon lots of group interaction and exercises either linked to participants environments or linked to a real-life case as a main thread throughout the whole week.*

METHODS



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.

WHY THIS SYSTEMS ARCHITECTING TRAINING?

Proven in Industrial Practice

- **2,200+** participants from leading international high-tech companies
- Applied in multidisciplinary industrial environments (e.g. automotive, semiconductor, high-tech systems)
- **40 PDUs** applicable for INCOSE certification renewal.



The training distinguishes itself through:

- structured use of the CAFCR framework to connect problem and solution domains
- team-based, iterative exercises, culminating in a realistic architecture pitch
- integrated treatment of technical, business, and human factors, including lean and agile processes
- experienced trainers with strong industrial backgrounds and a hands-on teaching approach.



GER SCHOEBER

**Systems architecting
expert**

MEET YOUR TRAINER

Ger Schoeber started his career in 1984 as a software developer at Philips after studying electronics, software and computer science. Five years later he moved to High Tech Automation where he grew into systems architecture and project management. In 2001 he founded Task Switch, his own consultancy for multidisciplinary systems architecting, and began training systems architects the same year at Philips CTT.

He has worked as a consultant at Sioux before joining the Hotraco Group as Manager Innovation & Technology. In 2021 he moved to Lightyear.

Schoeber was president of the Dutch INCOSE chapter and holds the ESEP INCOSE certification.

Drawing on his own early missteps as a young architect, he shows how much theory and practice can diverge in real projects.

TESTIMONIALS

8.2 ★ ★ ★ ★ ★

8.2/10 average recommendation
(last 3 editions)

"This course gave me the tools and framework to see the big picture and make sure I hadn't forgotten anything."

-Sebastian Pricking

"The training is organized in a setting with a mixed group. A lot of views came together. The interactions we had with each other were valuable. I learned a lot from hearing how others approach something."

-Stefan Rutjes

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

-Bobby Daniel

"I very much liked the balance between theory and practice."

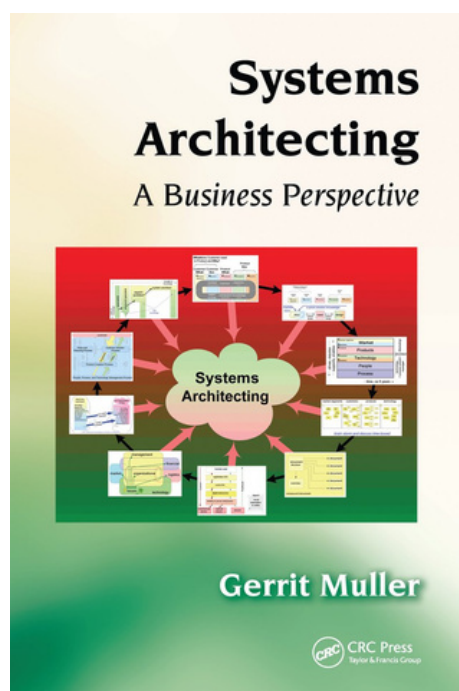
-Rene van Acquoij

WHO SHOULD ATTEND?

- **Intended for:** (potential) systems architects, systems group leaders, systems engineers, senior designers, and project leaders.
- **Required:** a few years of experience in system or product development.
- **Background** can be in any discipline, such as: mechanics, physics, mechatronics, optics, electronics, or software.
- **Essential:** interest in integral multi-disciplinary architectural issues and affinity with the business aspects.

WHAT'S INCLUDED

- **Course binder**
- **Book “System Architecting – A Business Perspective” by Gerrit Muller.**
- **High Tech Institute certificate**
- **Welcome package including a HTI tote bag, pencil and notebook.**
- **Lunch on all training days and coffee breaks.**
- **Small group size that makes it ideal for networking.**



REGISTRATION AND PRACTICAL DETAILS

**Dates: 30 Nov - 4 Dec
(09.00-17.00)**

You can register on our website:
<https://hightechinstitute.nl/courses/training-system-architect-ing/>

Price: €3,740 excl. VAT
Maximum Group Size: 16
Payment: invoice or credit card

**Unsure if this course matches your
needs? Email us for a quick fit
assessment.**



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