

## Join Sysam at High Tech Institute

# System Architecting Masters

A System Architect Development Program – essentials for leadership in highly demanding development environments

The High Tech Institute's nine months long System Architecting Masters (Sysam) program focuses on practical no nonsense system architecting, as well as the essential leadership skills that are vital to exercise this role in technical development environments.

Sysam offers a deeply immersive, rigorous experience for professionals in research, development and engineering organizations who are committed to driving meaningful change within themselves, their teams, and their organizations.

Participate with your own current, strategic relevant, project. Start directly with this business case and receive coaching and feedback from seasoned system architects and peers. As a result, the training is effective from the start, which means that your investment will be repaid in the first year. The following years you earn.

Sysam bridges research-backed and proven concepts with practice, empowering you to transform knowledge and skills into impact. The insightful curriculum - delivered face to face as well as online - promotes the application of system architecting and system engineering frameworks to real-life leadership and business challenges.

Take part in a group of 12 hand-selected tech professionals that value collaboration, diverse perspectives, and the exchange of knowledge to craft effective solutions and approaches.

Experience an immersive classroom, online system architecting program and coaching that propels you, your team and your organization to the next level. Participants will transform from senior engineers to excellent technical leaders.

From senior engineer to excellent technical leader





### Leading experts with practical systems experience

Learn from leading experts with practical system engineering and system architecting experience in complex development and engineering environments.



Curriculum

Based on research and best practices, rigorous coursework.

### For whom?

Professionals in a technical development and engineering environment

- at least five years of experience
- at least half a year experience in a system architecting or system engineering role or a leading position that requires you to communicate with a team, customers and management
- an ambition to bring your leadership skills to a higher level and improving your overall effectivity

### What to expect?

Before the start of the training, a supervisor (a manager or colleague that is responsible for personal growth), participant and trainer discuss learning goals and project case as an intake.

- 9 months part-time
- 3 classroom courses of 4 days each
- Euspen/ PostHBO certification/ preparation for INCOSE
  Academic Equivalency.
- X to XX hours total time commitment per week
- At the end of the training, a supervisor will be invited to join the final presentation.



#### **Real-world application**

Course assignments guide you in applying your learnings real-time for immediate impact.



#### Feedback and coaching

High-touch interaction with and coaching from our trainers and personalized, actionable feedback.



#### Connect with peers

Collaborate and connect with a diverse group of peers for knowledge sharing, intervision and support.



### Classroom/Hybrid virtual

A classroom experience at your fingertips: meaningful, virtual engagement that goes beyond a face-to-face experience.



#### **Hard skills**

Able to apply systems engineering processes using the NASA Systems Engineering Handbook as a reference.

#### Soft skills

Bring people together: challenge, convince, inspire and lead.

#### Realization

The right mindset to achieve great results. Reasoning according the CAFCR framework connects leadership and processes.

The theory within the System Architecting Masters program is amongst others based on the CAFCR framework of Gerrit Muller and the NASA Systems Engineering Handbook that provides top-level guidance for good systems engineering practices.



### PROGRAM

Sysam runs for three periods of three months. Each quarter starts with an intensive program of four days. In this program, we use short blocks to discuss the theory and apply it to the projects that participants bring in as a case. In between the classroom sessions, participants are given assignments, there are intervision sessions, they make reports and receive feedback and coaching from the trainers.

### DETAILS

Application Deadline: December 1, 2020 Program Dates: January 12, 2021 – October 12, 2021

### Interested in learning about Sysam? Try one of the following:

#### **Connect with Us:**

- Email: training@hightechinstitute.nl
- Phone: +31 85 401 36 00

### Join the live introduction sessions

Monday, October 26, 2020, 17:00 -17:45 hrs (free) Live 1 day on-line Sysam pilot - Monday, November 16, 2020, morning and afternoon sessions, with introduction of CAFCR and introduction leadership skills (€260)



#### **Complete a Self-Assessment**

You can access a brief questionnaire [hyperlink] at the High Tech Institute website that will help identify if the System Architect Master program is the right fit for your goals and objectives. The Sysam-team will contact you upon completion of the self-assessment, offer guidance, based on your responses and - if approved - invite you for an intake.



#### Intake

Before the start of the program, trainers, together with your manager, discuss learning goals and agree on the project targets for the participants to work on during the program.

#### Module I The basics

In the first block of 4 days, we will dive into the role of the architect and help you to make a first draft set up of your project. What is the playing field? What are the rules and the many different stakeholders? We will discuss the value an architect brings to the table and the operating models you can use to get things done.

We will also work on all stakeholders and their requirements. How can you gain their trust and how should a system architect make them really confident and happy and earn value/money in the process? Requirements gathering is more than just putting down what is asked for. It is about understanding what is needed. For this, we will use CAFCR as an essential framework for the architect.

Essential communication skills will be the central theme of the training. Topics include creating involvement from within the organization, getting the right information and how to engage and get stakeholders on board, right from the start. To be successful in this, soft skills and leadership are essential.

At the end of the 4-day course, you will present your case to stakeholders, where persuasion and turning resistance into buy-in are the ultimate goals.

We will also look forward to the next steps that involve homework, intervision, buddy, call coaching.

Three weeks before module II there will be a one-onone coaching session and two weeks before module II there is an online presentation.

#### Module II Building the Case

At the integration, verification and validation phase things can get pretty intensive. We will look at the early application of integration strategies to prevent an overload of issues (technical risk management). With integration in sight, it could well be that pressure is building and as resistance increases, escalations are bound to occur. How do you avoid stumbling into these pitfalls? You will learn how to transform resistance coming from others into buy-in. You will practice this with your own project in real-life simulations. Added work and pressure also means more stress. You need to know what stress is, how to recognize it and how to balance it for you and your team. You will develop a personal stress management plan to cope with the tension/strain. Second is road mapping, how to develop relevant roadmaps and create one for your own project. All this we will do by practicing and applying it to your own project.

Throughout this week, we will be bringing it all together to build your business case: how to make the stakeholders happy, both external and internal, and make money along the way.

Again, we will also look forward to the next steps that involve homework, intervision, buddy, call coaching. An important milestone in the program is the final presentation of your project progress to your senior manager.

Before presenting, you will make a draft project presentation and receive feedback from the trainers. The presentation will be planned between modules II & III.

#### MODULE III Leadership

In this module, we will dive into four subjects. The first is model-based systems engineering and digital twins and the material you use to communicate effectively about your project. In order to make the step to leadership and influence stakeholders, delegating tasks to your team should run smoothly. You will learn how to do this. Your personal leadership is also important on the journey to being an effective leader. What are your qualities and how can you deal with having your 'hot buttons' get pushed?

In this module, we will help you to map your personality and coach you to grow your personal power as a leader.

To wrap up, you will make a personal training program to secure you the further implementation of your learnings.

#### **Final evaluation**

To evaluate the progress and project results, an outtake will be planned after the program together with the trainers and your senior manager.



### When is it time to join Sysam?

Sysam helps you to avoid common pitfalls in system development and engineering. You might recognize some them the mentioned below.

- timing is a problem. Projects run late and over budget
- products do not meet the requirements the client needs
- technical decisions are done too much separately from other important aspects of the business
- technical leaders are not visible enough in the organisation
- it is not clear where the responsibilities of the system engineer or system architect starts and ends
- systems do not meet the stakeholders expectations, not only from a functional, but especially from a quality point of view

### **Program Manager System Architecting**



**Ger Schoeber** became a systems architecture trainer in 2002 and has trained over a thousand people in this field, both nationally and internationally. Schoeber has a background as a software and systems engineer. For more than three decades, he has served as a system architect and an innovation and technology manager for small and large companies alike. Ger is in charge of the content of the system and software training courses at High Tech Institute.

### **Program Manager Leadership in Technology**



**Jaco Friedrich** studied hydraulic engineering in Wageningen and started his career at the engineering firm Arcadis. As it was the human side of his work interested him the most, Friedrich went on to study body-oriented psychology. He then developed a stress management training for his technical colleagues. Since 2011, he runs the training organization Settels, Savenije & Friedrich, a company that is the exclusive partner of soft skills and leadership training for High Tech Institute.