



SE ADVANCED

Course Descriptions

This intensive 5-day course is delivered by four experts, each with a distinct range of knowledge, skills, and experience, meaning you will gain a diverse and comprehensive view of advanced SE, and an unparalleled, interactive learning experience.

This course has been devised to compliment your work within complex product development as you take on more responsibility and mature into more senior roles.

Learning Outcomes

- Identify common attributes and causes of complexity.
- Master the application of Systems Engineering methodologies to complex system developments.
- Master key technical management competences required for matrix/project leaders.
- Apply soft skills applicable for technical matrix/project leaders.

- In a moderated workshop develop sustainable solutions in the System of Systems context.

Who Should Attend?

Intended for those who have completed an SE Foundations course or those looking to progress to/or currently in technical matrix leadership positions.

Course Rates

Early Bird: 3375 CHF | Regular: 3750 CHF

Duration

5 days

Delivered By



Seb Klaves

Sebastian has authored and reviewed numerous publications and likes to implement systems engineering principles.

After working at the Institute of Transport Science of RWTH Aachen as research associate, he worked at the German Aerospace Centre as Project Officer and as Project Systems Engineer at Bombardier.

Currently, Sebastian is heading the RAMS department at Siemens' Mobility division. He is actively involved in the committee of the Swiss Society of Systems Engineering, is a certified Systems engineering professional and is giving systems engineering training at Siemens.

Sebastian enjoys approaching organisational and technical challenges with a

'rock solid' systems thinking approach.



Mike Johnson

Mike has worked leading challenging product development roles predominantly in the Space and Defence Industries since completing his Masters degree in Photonics and Optoelectronic devices at the University of St Andrews, UK.

He has worked predominantly in the roles of Systems Engineer, leading technical developments involving inter-disciplinary teams often consisting of Mechanical, Electrical, Technology, Software and Optical Engineers. He worked at RUAG Space, Zürich for five years. During this period he moved into management, leading the Systems Engineering group in the product unit Optoelectronics and Instruments. In addition he gave Systems Engineering training courses to the employees across the whole company, training circa 100 Engineers from a beginners to an advanced level.

Having moved to Roche Diagnostics International to lead the Systems Engineering team in Rotkreuz, Switzerland, he is now passionately applying his experience and knowledge of Systems Engineering to the Healthcare industry.

He is passionate about product development and especially the application of Systems Engineering. He is one of the founders of the Swiss Society of Systems Engineering (SSSE) and regularly attends Swiss based IET and INCOSE lectures/seminars. He is the organiser of SWISSED, Switzerland's annual conference on Systems Engineering. In addition, he is the co-founder of SE-Training GmbH, specialising in high quality delivery of Systems Engineering training courses in Switzerland.

Chartered Engineer (IET 97325920) and Chartered Systems Engineering Professional (CSEP).



Marco Di Maio

Marco has had many roles in Systems Engineering: Professor at a technical university, and Consultant for and Employee in the development of complex systems. He was the managing director of projectglobe - a boutique consultancy firm specialising in Model Based Systems Engineering (MBSE) and Information Management (IM) to support innovation driven engineering projects. Major customers are the fusion research community, the automotive industry, and 3D laser-welding and robotics companies.

Marco holds a PhD in nuclear engineering and a Masters in Operational Research. In his role as research fellow at Europe's largest fusion laboratory, JET near Oxford, he devised a novel diagnostic system, which earned him a world-wide patent. Marco then worked for the automotive industry managing product development and launch projects for the emerging markets of Eastern Europe and Russia before co-founding projectglobe with the purpose to devise novel methodologies, frameworks and tools that combine MBSE with IM to enable effective innovation and product development.

Together with partners from industry and academia, projectglobe have developed CLOSE - a Closed-Loop MBSE methodology based on robust semantic reference model. This model allows to automatically generate the required engineering artefacts in the correct format for SE teams and domain experts alike. The loop is closed by so-called "Experimentable" Digital Twins that provide in-the-loop feedback for all developers throughout the whole product life cycle. CLOSE runs on projectglobe's fractal data engine and thus allows for unlimited scalability in managing all project information.



Sandra Roth

Sandra is a leadership, team and change management coach with a decade of experience in R&D as a usability engineering expert, user experience leader and SW development department head in a global medical device manufacturer.

Sandra has a M.Sc. in Psychology, a Ph.D. in Human Computer Interaction and holds several coaching degrees.