

SYSTEMS ENGINEERING - PROFESSIONAL DEVELOPMENT PROGRAMME (SE-PDP)

Kursbeschreibungen

The SE-PDP addresses a fundamental need of many Organisations. With a shortage of senior Systems Engineers and Lead Systems Engineers, how can their teams rapidly increase their SE maturity and capabilities in a low risk, cost effective and fully customised professional development programme.

The SE-PDP is structured to be delivered over four on-site training sessions, covering three main areas of Systems Engineering:

1. End-to-end complex systems development (6-days)
2. Integrating specialities / quality attributes applicable to the Customer (3-days)
3. SE Matrix Management & Leadership (3-days)

The SE-PDP is only offered in-house and is highly customisable to project teams and their organisations.

Lernziele

• 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 Senior Systems Engineers, technical matrix leaders.
• In a moderated workshop develop sustainable solutions in the System of Systems context.

Wer Sollte Teilnehmen?

• Systems engineers
• System architects
• System analysts
• Project managers
• Product owners
• Engineering teams

Teilnehmergebühren

Please contact us for a customised offer.

Dauer

12 tage

Trainer



Seb Klabes

Sebastian hat zahlreiche Publikationen verfasst und bedient sich gerne im Methoden-Werkzeugkasten des Systems Engineering.

Nach seiner Tätigkeit am Verkehrswissenschaftlichen Institut der RWTH Aachen

als wissenschaftlicher Mitarbeiter arbeitete er am Deutschen Zentrum für Luft- und Raumfahrt und anschliessend als Projekt Systems Engineer bei Bombardier.

Derzeit leitet Sebastian die RAMS-Abteilung in der Mobility-Division von Siemens. Er engagiert sich aktiv im Komittee der Swiss Society of Systems Engineering und ist zertifizierter Systems Engineer (CSEP).

Sebastian genießt es, organisatorische und technische Herausforderungen mit einem "soliden" -Systemdenken zu begegnen.



Mike Johnson

Mike hat in unterschiedlichen Rollen in der Produktentwicklung vorwiegend im Bereich der Verteidigungs- und Luftfahrtindustrie gearbeitet, nachdem er seinen Master-Abschluss in Photonics und Optoelektronischen Geräten an der University of St. Andrews, UK, erhalten hat.

Mike hat immer in der Rolle des Systems Engineer gearbeitet und führte technische Entwicklungen mit interdisziplinären Teams. Er arbeitete fünf Jahre bei RUAG Space, Zürich. Während dieser Zeit wechselte er in das Management und führte die Systems Engineering Gruppe in die Produkteinheit Optoelektronik und Instrumente. Darüber hinaus gab er Systems Engineering Schulungen für Mitarbeiter des ganzen Unternehmens.

Mike übernahm anschliessend die Leitung des Systems Engineering Teams bei Roche Diagnostics International in Rotkreuz, Schweiz. Er bringt nun leidenschaftlich seine Erfahrungen und Kenntnisse der Systems Engineering an die Healthcare-Branche ein.

Mike ist begeistert von der Produktentwicklung und vor allem der Anwendung von Systems Engineering Methoden. Er ist einer der Gründer der Swiss Society of Systems Engineering (SSSE) und nimmt regelmäßig an IET- und INCOSE-Vorträgen / Seminaren teil. Er organisiert SWISSED, die Jahreshauptkonferenz der Schweiz für Systems Engineering.

Mike präsentiert regelmäßig auf Engineering-Konferenzen, darunter vor kurzem am SWISSED, UpFront Thinking und das INCOSE International Symposium.

Mike hat sowohl die CEng (IET 97325920) als auch die CSEP-Akkreditierungen erworben.



Mohammad Chami

MBSE-Experte mit einer soliden akademischen Ausbildung und industrieller Erfahrung in der Modellierung von Prozessen der Produktentwicklung und Produktartefakten. Dies inkludiert Erfahrung in der Implementierung von Methoden zur Systemmodellierung und der Anpassung der notwendigen Werkzeuge.

Weitere Qualifikationen:
• Mohammad hält zwei Master-Abschlüsse in Elektronik und Mechatronik und das OMG Certified Systems Modeling Professional Certificate (OCSMP)
• Hat die Bombardier Anerkennung der Ernennung zum "Engineering Management, Prozesse, Methoden und Werkzeuge" Experte
• ist Mitglied von INCOSE und beteiligt sich aktiv in dem deutschen und schweizeriscen Chaptern (GfSE, SSSE) und anderen Aktivitäten (z. B. OMG, NOSE, AFIS, MODELS).
• Autor oder Co-Autor zahlreicher Publikationen und gab verschiedene Vorträge und Vorträge auf internationalen Konferenzen.



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.



Marco Serra

Marco’s professional experience, built over almost 30 years of working with clients in North America, Europe and Southern Africa, spans diverse roles in the aerospace, automotive, defence and energy industries. For example, as Systems Engineer Marco was involved in the initial conceptual development and technology transfer assessment of a sample handling and analysis system intended to receive and analyse material returned to Earth on Nasa’s Mars Sample Return Mission. Marco also spends significant time consulting in the Oil & Gas and Energy industries providing system and component design support, conducting failure investigations, providing technical expertise in legal disputes, validating system designs, and developing analysis methodologies for complex fluid-mechanical simulations. More recently, Marco has been working on the

thermomechanical design of optical terminals for inter-satellite communications.

Marco holds a Masters Degree in mechanical engineering from the University of Pretoria, South Africa (1993). He also holds a Masters Degree in Engineering and Management from the Massachusetts Institute of Technology, USA (2002), with a focus on Systems Architecture, Systems Engineering, and System and Project Management.



Gordon Woods

Gordon has a wealth of experience in requirements management, driving innovations in the defence, aerospace and nuclear and rail industries. He has previously worked on fast jets, military drones, UK and US tank system and trainers, satellite systems and nuclear submarines. For the last eight years he has specialised in supporting requirements management in rail projects including HS2 and East West Rail in the UK; High Speed Rail, Mass Rapid Transit, Light Rail Transit projects in Malaysia; the Qatar metro and tram projects; the Riyadh metro and lately the NEOM Backbone railway projects in Saudi Arabia.

He has brought his own unique style to the elicitation and specification of requirements, the Verification and Validation of the design products and safety assurance, all within a progressive assurance environment.



Kevin Howard

Dr Kevin Howard has more than 40 years' experience in engineering. He initially worked in radar and radio frequency systems, and for the last 25 years has focused on Systems Engineering and managing complexity. He has been Chief Engineer for a range of systems ranging from military vehicles to space-based sensor systems. He has been VP Systems Engineering for a Global organisation providing safe city and big data technology. He now provides Systems Engineering consultancy, and as Engineering Director helped establish Optima Systems Consultancy Ltd as one of the leading Systems Engineering specialists providing consultancy to the defence and energy sectors around the world.

Kevin has a PhD in Optimising Complex Systems, supported by Post Graduate qualifications in Psychology and Business Administration. He is a Chartered Engineer, an external examiner for Cranfield University.