SYSTEMS ENGINEERING - PROFESSIONAL DEVELOPMENT PROGRAMME (SE-PDP)

Descripción del Curso

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.

Resultados

• 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.

Quién Debería Asistir

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

Precios del Curso:

Please contact us for a customised offer.

Duración

12 días

Curso impartido por

Seb Klabes

Sebastian ha escrito y revisado diversas publicaciones y disfruta implementado los principios de la ingeniería de sistemas.

Posteriormente a haber trabajado en el Institute of Transport Science de RWTH

Aachen como asociado en investigación, trabajó en el German Aerospace Center como Oficial de Proyecto y como Ingeniero de Project Systems en Bombardier. Actualmente encabeza el departamento RAMS en la división de movilidad de Siemens. Está activamente involucrado en el Comité Swiss Society of Systems Engineering. Es un profesional de ingeniería de sistemas certificado e imparte formación sobre ingeniería de sistemas en Siemens.

Sebastian disfruta afrontando desafíos organizacionales y técnicos con un system thinking solido.

Mike Johnson

Mike ha trabajado liderando roles desafiantes de desarrollo de productos predominantemente en las Industrias de Defensa y Espacio desde que completó su Maestría en Fotónica y Dispositivos Optoelectrónicos en la Universidad de St Andrews, Reino Unido.

Ha trabajado predominantemente en los roles de Ingeniero de Sistemas, liderando desarrollos técnicos que involucran equipos interdisciplinarios que a menudo consisten en Ingeniería Mecánica, Eléctrica, Tecnología, Software e Ingeniería Óptica. Trabajó en RUAG Space, Zürich durante cinco años. Durante este período se trasladó a la administración, liderando el grupo de Ingeniería de Sistemas en la unidad de producto Optoelectrónica e Instrumentos. Además, impartió cursos de capacitación en ingeniería de sistemas a los empleados de toda la compañía, capacitando a cerca de 100 ingenieros, desde principiantes hasta avanzados.

Después de haberse trasladado a Roche Diagnostics International para dirigir el equipo de Ingeniería de Sistemas en Rotkreuz, Suiza, está ahora aplicando apasionadamente su experiencia y conocimiento de Ingeniería de Sistemas a la industria de la Salud.

Le apasiona el desarrollo de productos y especialmente la aplicación de Ingeniería de Sistemas. Es uno de los fundadores de la Sociedad Suiza de

Ingeniería de Sistemas (SSSE) y asiste regularmente a conferencias / seminarios IET e INCOSE en Suiza. Es el organizador de SWISSED, la conferencia suiza anual sobre Ingeniería de Sistemas. Además, es el cofundador de SE-Training GmbH, empresa especializada en la entrega de cursos de formación en Ingeniería de Sistemas de alta calidad en Suiza.

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

Mohammad Chami

Experto en Model based systems engineering, con sólida experiencia tanto académica como industrial, modelando lenguajes, procesos, desarrollando y empleando métodos para modelaje de sistemas y personalización de sus herramientas.

Otras cualificaciones:
Mohamed tiene dos Masters académicos en Electrónica y Mecatrónica y el OMG Certified Systems Modeling Professional Certificate (OCSMP)
Tiene el “Bombardier Recognition of appointment” como experto en “Engineering Management, Processes, Methods and Tools.

Es miembro de INCOSE y participa activamente en sus ediciones, GfSE SWISSED, y otros eventos (ej. OMG, NOSE, AFIS, MODELS).

Es autor y co-autor de numerosas publicaciones y ha presentado varias conferencias internacionales.

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.