SYSTEMS AND SYSTEMIC REQUIREMENTS ENGINEERING AND MANAGEMENT

Course Descriptions

This course equips participants with the appropriate understanding of the difficulty of writing good requirements, the use of requirement management as an approach for controlling change and measuring the degree of completion of a project over the development, build, test and deliver, portion of the system and software life cycle.

The course uses a mixture of active and passive teaching styles to maximize the effectiveness of the learning opportunity. Participants will be provided with a software tool (Tiger Pro) specially developed as an educational tool with which to write and test requirements.

Learning Outcomes

• Understand the importance of well-written requirements

• Understand why requirements errors cost more to correct than other types of errors in the system development process.

• Deal with poorly written requirements.

• Recognize poorly written requirements and be able to repair them. Create clear and concise well-written requirements.

• Mitigate the effect on cost and schedule due to poorly written requirements.

Who Should Attend?

• Personnel who specify the development of technology-based systems.
• Engineers and programmers elucidating requirements from customers.
• Designers who work with poorly written requirements.
• Software and hardware testers who need to figureout how to test requirements.
• Acquisition managers, contract specialists.
• Other personnel performing similar roles.

Course Rates

Early Bird Rates: 1,350 CHF. Regular Rates: 1,500 CHF.

Duration

9 days

Delivered By

Joe Kasser

Joseph Kasser has been a practicing systems engineer for almost 50 years and an academic for 20 years. He is a Fellow of the Institution of Engineering and Technology (IET), a Fellow of the Institution of Engineers (Singapore), the author of "Perceptions of Systems Engineering", "Holistic Thinking: creating innovative solutions to complex problems", "A Framework for Understanding Systems Engineering" and "Applying Total Quality Management to Systems Engineering"

and many INCOSE symposia and other conference and journal papers.

He is a recipient of NASA's Manned Space Flight Awareness Award (Silver Snoopy) for quality and technical excellence for performing and directing systems engineering and other awards.

He holds a Doctor of Science in Engineering Management from The George Washington University.

He is a Certified Manager, a Chartered Engineer in both the UK and Singapore and holds a Certified Membership of the Association for Learning Technology.

He has performed and directed systems engineering in the USA, Israel and Australia. He gave up his positions as a Deputy Director and DSTO Associate Research Professor at the Systems Engineering and Evaluation Centre at the University of South Australia in early 2007 to move to the UK to develop the world's first immersion course in systems engineering as a Leverhulme Visiting Professor at Cranfield University.

He spent 2008-2016 as a Visiting Associate Professor at the National University of Singapore where he taught and researched the nature of systems engineering, systems thinking and how to improve the effectiveness of teaching and learning in postgraduate and continuing education. He is currently based in Adelaide, Australia.

His many awards include:

• National University of Singapore, 2008-2009 Division of Engineering and Technology Management, Faculty of Engineering Innovative Teaching Award for use of magic in class to enrich the student experience.

• Best Paper, Systems Engineering Technical Processes track, at the 16th Annual Symposium of the INCOSE, 2006, and the 17th Annual Symposium of the INCOSE, 2007.

• United States Air Force (USAF) Office of Scientific Research Window on Science program visitor, 2004.

• Inaugural SEEC "Bust a Gut" Award, SEEC, 2004.

• Employee of the Year, SEEC, 2000.

• Distance Education Fellow, University System of Maryland, 1998-2000.

• Outstanding Paper Presentation, Systems Engineering Management track, at the 6th Annual Symposium of the INCOSE, 1996.

• Distinguished Service Award, Institute of Certified Professional Managers (ICPM), 1993.

• NASSA Goddard Space Flight Center Community Service Award, 1990.

• The E3 award for Excellence, Endurance and Effort, Radio Amateur Satellite Corporation (AMSAT), 1981, and three subsequent awards for outstanding performance.

• Letters of commendation and certificates of appreciation from employers and satisfied customers including the:
• American Radio Relay League (ARRL).
• American Society for Quality (ASQ).
• Association for Quality and Participation (AQP).
• Communications SatelliteCorporation (Comsat).
• Computer Sciences Corporation(CSC).
• Defence Materiel Organisation (Australia).
• Institution of Engineers (Singapore).
• IET Singapore Network.
• Loral Corporation.
• Luz Industries.
• Systems Engineering Society of Australia (SESA).
• University of South Australia.
• United States Office of Personnel Management (OPM).
• University System of Maryland.
• Wireless Institute of Australia.