

# SYSTEMS THINKING AND BEYOND

### **Course Descriptions**

Holistic thinking is a combination of analysis, systems thinking and critical thinking. After an introduction to systems thinking and critical thinking, Participants will learn how to apply holistic thinking in a systemic and systematic manner to deal with structured and unstructured problems.

## **Learning Outcomes**

- The ability to deal with open ended problems with no unique solutions.
- Improved problem solving, systems and critical thinking abilities.
- The ability to go beyond systems thinking in the analysis of a problem and determination of a solution.

#### Who Should Attend?

- Managers and leading engineers facing complicated problems.
- Managers wanting to improve their thinking and communication skills.
- Engineers looking for promotion into management positions.
- Systems engineers who want to learn how to use and then go beyond systems thinking.

#### **Course Rates**

Early Bird Rates: 2,160 CHF. Regular Rates: 2,400 CHF

#### **Duration**

4 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.