



EWICS TC7

Technical Subgroup on Education and Training in Dependable Systems Engineering

Udo Voges
Forschungszentrum Karlsruhe
Institut für Angewandte Informatik
Email: voges@iai.fzk.de



Mission of EWICS

"To promote the economical and efficient realisation of programmable industrial systems through education, information exchange, and the elaboration of standards and guidelines."



Aims of EWICS

- *Assess the state of the art methods and tools for critical software and system development and maintenance in industrial environments.*
- *Develop standards and guidelines for the development and assessment of safe and secure systems.*
- *Disseminate information and knowledge in this field.*



Education and Training in Dependable Systems Engineering Subgroup

Current goal:

- **Develop a guideline containing a list of courses and topics that are considered necessary for a safety engineer working in the area of safe and secure operation of highly dependable systems.**



Education and Training in Dependable Systems Engineering Subgroup

- **Education for achieving the degree of a Master of Science in Safety Engineering.**
- **Graduates shall be able to work in responsible positions e.g. in assessing organizations, in regulatory bodies, for manufacturers of safety-related equipment or at utilities.**



Education and Training in Dependable Systems Engineering Subgroup

- **Training on the job / continuous education.**
- **Participants shall update their knowledge and learn about new developments / standards / tools / techniques etc.**



Basic Structure of Guideline (1)

Book of Knowledge for Safety Engineering Concerning Computer-based Systems

Part I Introduction

1. Scope and Objective
2. Intended Audience
3. Structure of the Guidelines
4. Explanations
5. Terms and Definitions



Basic Structure of Guideline (2)

Part II Guideline

1. **Mandatory Courses**
2. **Optional Courses**
3. **Additional Courses**
4. **Required Knowledge**
5. **List of Relevant Standards**
6. **References and Links**



Status

First draft of Guideline

Liaison with EU NoE ReSIST



Subgroup E & T – Contacts

Udo Voges (Chairman)

Email: udo.voges@kit.edu

Zdzislaw Zurakowski (Vice-Chairman)

Email: zz@pvd.pl

<http://www.ewics.org>