

## Workshop: Risk Analysis

**Date:** 2014-06-  
**Venue:**

The goal is to introduce the principles of the most widely used risk analysis methods. The students will learn how to select suitable risk analysis methods for their technology projects. The basics of the risk magnitude estimation are presented. The organization of a risk analysis project is discussed, including effective risk management, tools, documenting and practices. Bring a scientific calculator with you.

<b>Risk Analysis</b>	
<b>8:00</b>	<i>WELCOME and introduction to course program + coffee</i>
<b>8:30</b>	<b>1. Basic Terms and Concepts</b> <ul style="list-style-type: none"> <li>- Risk analysis importance</li> <li>- Concepts, definitions, terms, standards</li> </ul>
<b>10:15</b>	<ul style="list-style-type: none"> <li>- Risk detection methods, principle</li> <li>- Selecting methods, ensuring sufficient risk detection</li> </ul>
	<i>COFFEE break</i>
	<b>2. Preliminary Risk Analysis</b> <ul style="list-style-type: none"> <li>- Potential Problems Analysis, Hazard Analysis, simple risk detection</li> <li>- Risk magnitude, how to calculate and use in risk classification</li> </ul>
	- Exercises
<b>12:00</b>	<i>LUNCH</i>
<b>13:00</b>	- Exercises/ team work
	<b>3. Risk Analysis for Processes and Systems</b> <ul style="list-style-type: none"> <li>- Process structure, subsystems, operational modes</li> <li>- Methods, overview: Hazop, FMEA, Action Error Analysis, RAM etc.</li> <li>- Risk reduction, SIL, LOPA</li> </ul>
<b>14:15</b>	<i>COFFEE break</i>
	- Exercises / team work
	<b>4. Risk Management Systems</b> <ul style="list-style-type: none"> <li>- Risk management system: basic tools, documenting</li> <li>- Risk management, Reliability management, Safety management, examples</li> </ul>
	<b>5. Summary</b> <ul style="list-style-type: none"> <li>- Overview</li> <li>- Discussion: Minimum requirements in a technology project.</li> </ul>
<b>16:30</b>	<i>CONCLUSIONS, discussion</i>

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