

**SYLLABUS**

# **Safety I 7.5 credits A0002N**

**Robusta system I**

**Course syllabus admitted: Autumn 2013 Sp 1 - Spring 2014 Sp 4**

DECISION DATE  
**2013-02-13**

# Safety I 7.5 credits A0002N

## Robusta system I

### First cycle, A0002N

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G VG	Informationsteknik	Computer Technology

## Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language and The course assumes basic knowledge of Computer Science or Systems Science, 30 ECTS: D0006N Objectoriented Analysis and Design, D0007N Objectoriented programming, D0019N Software Development with Java, D0020N Information Systems Development or equal courses.

## Selection

The selection is based on 1-165 credits.

## Examiner

Tero Päivärinta

## Course Aim

After the course the student will be able to:

1. Evaluate and reflect on the work requirements and explore different models specifically tailored requirements for a system critical perspective
2. Reflect on the guidance models for socio-technical systems designed for mission-critical development
3. Reflect on how design affects computer-assisted system (critical) based on some rollers perspective investigators, developers and users.
4. Analyze various technological advances and operational procedures that support the protection activities in the broad sense
5. Reflect upon socio-technical systems and to which extent they use the principles of mission-critical development
6. Manage risk process and system reliability.

## Contents

The course deals with concepts within the area and different critical systems applications and the general requirements on these systems. Important is the techniques for analyses to classify and identify conceivable threats and incidents that can be used in different phases of a system's life cycle and in business continuity planning. The management of the processes within risk analyses is also an important part of the course. These processes affect the design of the system and make it possible to calculate risks and reliability of the system. Some standard and quality management also introduced.

## Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

During the course the student works with individual tasks and group work. The tasks are solved by using the course literature or papers. The student uses different methods and techniques and it is important to choose the right method, technique or computer support for each task. Before and after the tasks are solved there are lectures to present and discuss different solutions. Teaching is in English and on Internet for distance students or at campus for the students living here. IT support: Learning management system (Fronter), video conference system, e-mail and phone

## Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

1,2,3,5: Assignments (Individual tasks and/or group work) 2,5 hp

1-6: Written examination, 5 hp

## Remarks

Teaching support: Information, assignments and e-mail is handled through the Learning Management System Fronter. Technical requirements: Access to PC with Windows XP, microphone, web cam and permission to install software. Internet connection, minimum 0,5 Mbps.

## Overlap

The course A0002N is equal to A7007E, IED418

## Literature. Valid from Autumn 2013 Sp 1

Will be announced later.

## Course offered by

Department of Computer Science, Electrical and Space Engineering

## Items/credits

Number	Type	Credits	Grade
0003	Individual exam/written exam	5	U G VG
0004	Assignment	2.5	U G#

## Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

## **Last revised**

by Jonny Johansson, HUL SRT 2013-02-13

## **Syllabus established**

by institutionen för industriell ekonomi och samhällsvetenskap 2007-02-28