

SYLLABUS

Information Security Risk Management 7.5 credits A7012E

Riskhantering för informationssäkerhet

Course syllabus admitted: Autumn 2023 Sp 1 - Present

**DECISION DATE
2022-08-30**

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Riskhantering för informationssäkerhet

Second cycle, A7012E

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	U G VG	Systemvetenskap	Informatics/Computer and Systems Sciences

Main field of study

Information Security

Entry requirements

Minimum 120 credits of university studies including 60 credits in the areas of computer science or systems science, business administration or equivalent.

Good knowledge in English, equivalent to English 6.

Selection

The selection is based on 30-285 credits

Course Aim

After the completion of this course, the student will be able to:

1. Identify and explain the concepts of risks types and categories, the relevance of risk management, risk management methods, risk analysis, risk analytics and security awareness.
2. Analyse and map organizational information, knowledge, information technology and physical assets to further conducting security risk analysis.
3. Select, use and apply models/methodologies for identifying information security risks and minimization/mitigation strategies and costs/benefits of those risks.
4. Analyse and reflect upon how companies and organisations can protect and safely share information and knowledge as well as use IT-resources in a collaborative environment without spreading the information in a way that can harm the organisations.
5. Define a plan for creating, managing, and utilizing knowledge of information security risks for conceptualising or enhancing a program for security and awareness in an organization.

Contents

The course deals with basic concepts within the area of security risk identification and management and is focused on different stages within risk assessment process to identify, prioritise, assess and control risks associated with organizational assets such as information, knowledge and IT as well as other resources. Practical examples such as: how organizational dynamics are mapped for further analysis of security risks; how it is possible to create and share information and knowledge safely and to utilise means for responding to identified security risks without losing the ease of access to information, knowledge and IT-resources are important to address. The management of processes concerning the risk management, minimization and mitigation of risks through various control mechanisms are also discussed. Considerations are also made on the use of IT tools, logs and internal as well as external risk related data or information.

Realization

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

Learning takes place through participation in lectures, interaction with other students and the lecturer through the asynchronous learning platform, and participation in seminars in which the assignments are discussed. During the course, the student work with individual assignments focusing on different stages within risk assessment process and critical analysis on one fellow student's group work. Individual learning is ongoing, explicated and shared by the students through reflections of the individual assignments.

The group assignment aims to practice how risk assessment is done in a company or organization. The student's ability to cooperate with other students and to experience practical challenges of working in an IT security team can be practised during the execution of group assignments and the feedback received from a fellow student's critical analysis.

Teaching is in English and on Internet for distance students or at campus for the students living here. IT support: Learning management system (Canvas), e-mail and phone.

Canvas Learning Management System is used for delivering course material, information and submissions. Knowledge is shared and created within the course through virtual meetings with teachers and other students for discussions, supervision, teamwork and seminars. For student on campus there will be meetings on campus.

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. The course is examined as follows:

- Written individual assignments relating to the course aims 1-4, 3.5hp (U, G, VG)
- Group assignments relating to all of the course aims, 4hp (U, G, VG)

In order for a student to get VG in the whole course, a VG grade must be accomplished in the individual assignments and in the group assignments.

For the G grade, a student should achieve the grade G in the individual assignments and in the group assignments.

All included examination parts must be completed for the final grade on the course.

Grades are given according to the scale: U, G, VG.

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Remarks

Technical Requirements: access to PC with Windows 7, microphone, Web cam and permission to install software. Internet connection (minimum 0,5 Mbps).

Overlap

The course A7012E is equal to A7005N

Course offered by

Department of Computer Science, Electrical and Space Engineering

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Individual assignments	U G VG	3.5	Mandatory	A19	
0002	Group assignments	U G VG	4	Mandatory	A19	

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, Director of Undergraduate Studies 2022-08-30

Syllabus established

by Jonny Johansson, HUL SRT 2019-02-15