

COURSE SYLLABUS

User-centered Cybersecurity and Privacy, 10 credits

Användarcentrerad cybersäkerhet och personlig integritet, 10 högskolepoäng

domain:

Course Code:TACG15Education Cycle:First-cycle levelConfirmed by:Dean Oct 15, 2024DisciplinaryTechnology

 Revised by:
 Nov 4, 2024
 Subject group:
 DT1

 Valid From:
 May 1, 2025
 Specialised in:
 G2F

Version: 2 Specialised III. GZF

Main field of study: Informatics

Intended Learning Outcomes (ILO)

After a successful course, the student shall:

Knowledge and understanding

- display knowledge of the cybersecurity subject from a socio-technical viewpoint.
- demonstrate comprehension of models that describe cybersecurity behaviour
- show familiarity with how cybersecurity awareness can be raised among individuals

Skills and abilities

- demonstrate skills of identifying relevant research on how cybersecurity awareness can be raised in specific situations
- demonstrate the ability to develop an artefact that aims at raising cybersecurity awareness

Judgement and approach

- demonstrate the ability to suggest design solutions aimed at raising cybersecurity awareness
- demonstrate the ability to defend design choices

Contents

The course starts with an overview of cybersecurity from a socio-technical perspective and outlines essential concepts, definitions and standards in the area. This is followed by an introduction to models that describe user behaviour in cybersecurity (such as compliance theory, deterrence theory and protection motivation theory) and how we can help people raise their cybersecurity awareness.

In the project, students will work in groups to create a comprehensive campaign aimed at raising awareness about cybersecurity issues. The campaign targets the education of a specific audience on best practices, risks, and solutions related to a topic in cybersecurity (e.g., phishing, password management, and data protection). The project helps students develop skills in research, communication, and practical security measures. Students collaborate to create an awareness-raising activity for the selected topic using a method of their choice. The assignment involves research, planning, execution, and evaluation, enabling students to apply both creative and

practical skills while addressing a multi-faceted problem that has social and cultural dimensions. After presenting the campaign to peers and receiving feedback, the students revise their campaign and submit a final report, including a reflection on their individual contributions and lessons learned.

The course includes the following elements:

- Overview of the cybersecurity area: Focus on definitions, concepts, and terminology
- Cybersecurity in a socio-technical context
- Overview of models that describe cybersecurity behaviour
- Overview of activities that can raise cybersecurity awareness
- A project exploring the design of cybersecurity awareness-raising activity

Type of instruction

The teaching in the course consists mainly of lectures, project, tutoring, and seminars

The teaching is conducted in English.

Prerequisites

General entry requirements and passed courses 60 ECTS credits in first-cycle. Proof of English proficiency is required.

Examination and grades

The course is graded Fail (U) or Pass (G).

Registration of examination:

Name of the Test	Value	Grading
Project	10 credits	U/G

Course literature

The literature list for the course will be provided eight weeks before the course starts.

Articles which will be announced at the start of the course.