TIG150   Research Foundations in the Digitalization of Society, 15 credits

Samhällets digitalisering: Forskningsgrunder, 15 högskolepoäng

First Cycle

Confirmation

This course syllabus was confirmed by Department of Applied Information Technology on 2020-12-01 to be valid from 2021-01-18, spring semester of 2021.

Field of education: Science 100%
Department: Department of Applied Information Technology

Position in the educational system

The course is a free standing course in the first cycle, yet builds on TIG140 in describing the research foundations for phenomenon such as AI, RPA, Blockchain et cetera. We recommend taking the course as a follow-up or in parallel with TIG140, yet TIG150 does not require pre-requisite insight from TIG140 or other similar courses.

Main field of studies	*Specialization*
Informatics	G1N, First cycle, has only upper-secondary level entry requirements

Entry requirements

General entrance requirements

Learning outcomes

On successful completion of the course the student will be able to:

Knowledge and understanding
- describe foundational theories and processes associated with the digitalization of society;

- describe foundational terminology, -methodological approaches and -issues within the digitalization of society;

Competence and skills
- present and discuss the effects of foundational research concepts, practical implications and alternative perspectives on the digitalization of society;

Judgement and approach
- independently argue for and against different perspectives on the digitalization of society, with clear reference to research literature;
- evaluate and assess the effects of theoretical foundations and perspectives on the digitalization of society.

Course content

The course deals with foundational perspectives on the digitalization of society. With the research base for phenomenon such as RPA, AI, Blockchain, Digital entrepreneurship and Agile transformation having a long tradition, the course addresses underlying theoretical perspectives that aid us in getting a deeper understanding of where the phenomenon come from and where they may lead.

Examples of foundational research perspectives include agency theory and bureaucracy and the link to digital governance, change management and the link to agile transformation, disintermediation and openness and the link to blockchain et cetera. The course mirrors the course Research Frontiers in the digitalization of society (TIG140) through offering a deeper perspective on emerging technologies and phenomenon in relation to digitalization. In its design, the course follows the format of: "In order to fully understand [emerging technology I], we may utilize theories associated with [X, Y, Z]".

The course is divided into three overall modules of 5 credits each, each part containing recurring elements consisting of literature studies, knowledge assessment, lecture and discussion. The students are free to choose the order of elements and/or modules.

Form of teaching

Literature studies, self-study, lectures and group discussions. All components of the course are carried out remotely.

Language of instruction: English

Assessment

The students are assessed continuously through quizzes and active participation in group discussions. After each module, an overall assessment is made of whether the student has acquired knowledge, ability and skill in relation to the learning objectives through a compilation of past performance.

A student who has taken two exams in a course or part of a course without obtaining a pass grade is entitled to the nomination of another examiner. The student needs to contact the department for a new examiner, preferably in writing, and this should be approved by the department unless there are special reasons to the contrary (Chapter 6 Section 22 of the Higher Education Ordinance).

If a student has received a recommendation from the University of Gothenburg for special educational support, where it is compatible with the learning outcomes of the course and provided that no unreasonable resources are required, the examiner may decide to allow the student to sit an adjusted exam or alternative form of assessment.

In the event that a course has ceased or undergone major changes, students are to be guaranteed at least three examination sessions (including the ordinary examination session) over a period of at least one year, but no more than two years, after the course has ceased/been changed. The same applies to placements and professional placements (VFU), although this is restricted to just one additional examination session.

Grades

The grading scale comprises: Pass (G) and Fail (U).
In order to be awarded a Pass for the whole course, a student must get a Pass for all three modules.

Course evaluation

Course evaluation is carried out digitally after the course has been completed. The result of the course evaluation is the basis for continuous quality work. The results of the course evaluation and possible changes to the course will be shared with students who participated in the evaluation and students who are starting the course.

Additional information

The course is given as an online course, whereby access to a computer with internet access is a prerequisite for participation.