

DEPARTMENT OF APPLIED INFORMATION TECHNOLOGY

TIA010 Innovation Strategy for the Digital Economy, 15 credits

Innovationsstrategi i det digitala industrisamhället, 15 högskolepoäng Second Cycle

Confirmation

This course syllabus was confirmed by Department of Applied Information Technology on 2014-06-25 and was last revised on 2018-01-30 to be valid from 2018-01-30, spring semester of 2018.

Field of education: Science 100%

Department: Department of Applied Information Technology

Position in the educational system

The course can be given as a free-standing course.

The course can be part of the following programmes: 1) Applied Data Science Master's Programme (N2ADS), 2) IT Management, Master's Programme (N2ITM) and 3) Digital Leadership Master's Programme (N2DIG)

Main field of studies Specialization

Informatics A1N, Second cycle, has only first-cycle

course/s as entry requirements

Entry requirements

- Bachelor degree (180 hp) or
- At least seven years documented work experience from IT development and/or business development.
- English proficiency should be equivalent to the level of English Course B from Swedish Upper Secondary School.

Learning outcomes

After passing the course the student should be able to:

Knowledge and understanding

- Describe and explain the rationale and logic behind traditional industrial innovation.
- Describe and explain fundamental material properties of digital technology and analyze how these properties interfere with the logic of traditional industrial innovation.

Competence and skills

- Develop sustainable innovation strategies for digital products.
- Analyze the implications of digitalization on markets, organizations, and technological design.

Judgement and approach

- Compare and differentiate industrial innovation and digital innovation.
- Evaluate sustainable innovation strategies for digital products.

Course content

This course focus on the different challenges facing industrial organizations as they seek to capitalize on digital technology. The course provides in-depth knowledge of inherent tensions, similarities and differences that exists between traditional industrial innovation and digital innovation and also the understanding of fundamental properties of digital technology. Furthermore, the course also provides skills and ability to analyze, design and evaluate alternative strategies for building sustainable digital innovation practices in industrial settings.

The course consists of two sub-courses structured in blocks.

Sub-courses

1. Theory (*Teori*), 7.5 higher education credits

Grading scale: Pass (G) and Fail (U)

- Industrial innovation
- Digitalization
- Digital innovation
- Innovation strategy

The sub-course have lectures and seminars with related discussions in the course's electronic learning platform and workshops to communicate, monitor and stimulate the student's understanding of the theoretical contents of the blocks.

2. Application (*Tillämpning*), 7.5 higher education credits Grading scale: Pass with Distinction (VG), Pass (G) and Fail (U)

- Industrial case study
- Writing assignment

The sub-course provides tutoring in analyzing the consequences of digitalization and development and evaluations of sustainable innovation strategies for digital products. The students will be doing a case study and will take part in an poster exhibition.

Form of teaching

The course will apply formative assessment as a tool for learning in all forms of teaching. Therefor the student is expected to contribute actively to their own and others' learning in all parts of teaching.

The teaching is taught through lectures, seminars, workshops, discussions in the course's electronical platform, tutoring and taking part in an poster exhibition.

Language of instruction: English

Assessment

The sub-course Theory is assessed through individual minute papers, active participation in the related seminar, discussion in a digital forum and with an oral examination in group that is recorded.

A minute paper describes a particularly interesting term or concept that has been discussed during a session and identifies a yet unexplored topic. The course contains up to 20 minute papers, submitted online after the session. In cases where students have not attended a session, the minute papers shall be written with explicit references to the course literature.

The sub-course Application is assessed through an industrial case study, a written assignment reflecting on the case study, examination of two other students written assignments and participation in a poster exhibition.

If a student, who has failed the same examined component twice, wishes to change examiner before the next examination, a written application shall be sent to the department responsible for the course and shall be granted unless there are special reasons to the contrary (Chapter 6, Section 22 of Higher Education Ordinance).

In cases where a course has been discontinued or has undergone major changes, the student shall normally be guaranteed at least three examination occasions (including the ordinary examination) during a period of at least one year from the last time the course was given.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).

The sub-course Theory is graded with Pass (G) or Fail (U). The sub-course Application is graded Pass with distinction (VG), Pass (G) or Fail (U).

In order to receive Pass on the whole course, Pass is required for both sub-courses. In order to receive Pass with distinction on the whole course, Pass is required for the sub-course Theory and Pass with distinction (VG) is required for the sub-course Application.

Course evaluation

After completion of the course the students are to be given the opportunity to participate in a course evaluation electronically. The result of the course evaluation is to be made accessible to the students. The next time the course is given the processed result of the course evaluation is to be presented to the students including possible changes brought about as a result of the course evaluation.

Additional information

The course is given at half speed.