INFC75, Digital Innovation and Transformation, 7.5 credits

Digital innovation och transformation, 7,5 högskolepoäng

First Cycle / Grundnivå

Details of approval

The syllabus was approved by The Board of the Department of Informatics on 2024-05-29. The syllabus comes into effect 2024-09-15 and is valid from the spring semester 2025.

General information

The course can be taken as part of the Bachelor's Programme in Design of Information Systems, or as a separate course.

Language of instruction: English

Main field of study	Specialisation
Informatics	G2F, First cycle, has at least 60 credits in first-cycle course/s as entry requirements
Information Systems	G2F, First cycle, has at least 60 credits in first-cycle course/s as entry requirements

Learning outcomes

Upon completion of the course, students will have acquired an understanding of and competences in creating, developing, and commercialising digital innovations through a blend of theoretical knowledge and practical application, with considerations of the potential impact of innovative technological solutions on business and society. Students will be equipped with an understanding of digital transformation, grounded in the digital innovation processes, methods, techniques, and tools explored in the course. They will also have the skills for ensuring operational efficiency and developing new ideas in solving organisational and societal problems.

Knowledge and understanding

To pass the course, the student must demonstrate knowledge of and understanding of

- methodologies, techniques, and tools used in applying various strategic frameworks to bring/deploy information technologies to innovate and transform organisational processes and value offering
- theoretical and practical aspects and process of digital innovation, digital transformation and managing digital innovation, to create, distribute, and commercialise digital solutions effectively
- principles for digital innovation and open innovation

Competence and skills

To pass the course, the student must demonstrate competence and skills individually or in groups to

- use techniques for requirement engineering, market analysis, and finding new opportunities for innovative digital systems
- conduct IT-driven projects in a professional environment using models and project management tools and frameworks to align new technologies with organisational demands
- create innovative digital solutions to existing problems, with short- and long-term strategic planning
- use and develop digital business models, while practically demonstrating the investigation and application of an innovation in a digital transformation process
- critically reflecting on emerging digital technologies and be proficient and skilled in pitching techniques and methods for offering a particular new digital system

Judgement and approach

To pass the course, the student must demonstrate the ability to

- evaluate organisational strategies, assess current situations, problems, and needs, and arrange problem-solving approaches for delivering high-quality digital solutions through effective communication and critical thinking
- evaluate opportunities for developing novel digital business models, ideas, solutions, and demonstrating inventive, self-directed, and purpose-driven decision-making
- assess and value key issues related to implementation and infrastructure, ensuring effective planning and execution of digital solutions aligned with organisational goals and societal values

Course content

The course covers the following areas:

- Informations systems based business development
- Digital transformation
- Open innovation
- Managing innovation and digitalisation

- Digital strategy for innovation

Course design

The teaching consists of lectures, lessons, workshop sessions, seminars, and supervision

The course includes compulsory components, which are stated in the schedule.

Assessment

The assessment is based on group assignments, a project assignment, and an individual assignment.

Re-examinations are offered in close conjunction with the first examination.

The test and course grades are determined by the course examiner. The examiner is entitled to change the grades given by the teachers on the course if this does not violate Chapter 6, Section 24 of the Higher Education Ordinance (1993:100).

Academic misconduct such as cheating, plagiarism, fabrication and falsification is considered a serious offence in higher education (see Chapter 10 of the Higher Education Ordinance). The disciplinary measures that may be taken as a result of such offences are caution or suspension for a limited period of time from the university (and all the faculties of the university).

Examinations

- Group Assignments, 2 cr, grading scale U-G, group examination
- Project Assignment, 2.5 cr, grading scale A-U, group examination
- Individual Assignment, 3 cr, grading scale A-U, individual examination

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Grades

Grading scale includes the grades: U=Fail, E=Sufficient, D=Satisfactory, C=Good, B=Very Good, A=Excellent

Grade (Definition) Points or percentage out of maximum points. Characteristic.

A (Excellent) 85-100. A distinguished result that is excellent with regard to theoretical depth, practical relevance, analytical ability and independent thought.

B (Very good) 75-84. A very good result with regard to theoretical depth, practical relevance, analytical ability and independent thought.

C (Good) 65-74. The result is of a good standard with regard to theoretical depth, practical relevance, analytical ability and independent thought and lives up to expectations.

D (Satisfactory) 55-64. The result is of a satisfactory standard with regard to theoretical depth, practical relevance, analytical ability and independent thought.

E (Sufficient) 50-54. The result satisfies the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought, but not more.

U (Fail) 0-49. The result does not meet the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought.

To pass the course, the students must have been awarded the grade of E or higher.

Grading rules and definitions

Grades are awarded according to a graded scale from A (highest) to U (lowest), with E as the minimum passing grade.

When the exam/assignment is not graded, the grades G (Pass) or U (Fail) will be applied.

Course grades

When calculating course grades, the graded components will be weighted according to the following formula:

The number of credits for the exam is multiplied with the exam score. The total value is then divided by the total number of credits for the exams/assignments included. The resulting average is then rounded off to the nearest whole number. The number indicates the relevant course grade in accordance with the grading definitions above.

For exams/assignments which are graded and scored, the grades A to U will be used in accordance with the grading definitions above. The exam score will be used directly in the calculation.

For exams/assignments which are graded but not scored, the grades A to U will be used and converted as follows: A = 92, B = 80, C = 70, D = 60, E = 52.

Exams/assignments which are not graded but awarded with G (Pass) or U (Fail) will not be included in the calculation of the course grade.

Entry requirements

To be admitted to the course, the student must have passed the general requirements and the courses: "Informatics: Introduction to Information Systems, 1-30 cr" and "Informatics: Information Systems and Business Development, 31-60 cr" or the equivalent. English 6/English B.

An exception for the general entry requirement in Swedish will be granted when the course is given in English.

Further information

It is compulsory to attend the introduction meeting, where a roll call will be taken. Absence without notification means that the admitted student will lose his/her seat on the course.

For transitional provisions with regard to previous courses, please contact the study adviser for an individual assessment.

If the course is discontinued, there may be limited opportunitie for re-examination. Please contact the study adviser for information.