School of Economics and Management

# INFC25, Informatics: Human - Computer Interaction, Analysis, 7.5 credits

*Informatik: Människa-dator-interaktion, analys, 7,5 högskolepoäng*

**First Cycle / Grundnivå**

## Details of approval

The syllabus was approved by The Board of the Department of Informatics on 2013-09-20 and was last revised on 2024-09-18. The revised syllabus comes into effect 2025-03-15 and is valid from the autumn semester 2025.

## General information

The course is optional within the Bachelor's Programme in Design of Information Systems. It is also given as a freestanding 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

The overall aim of the course is for the student to gain a solid general knowledge of how to evaluate and analyse different types of computer applications. The course gives starting points for the design of computer applications and knowledge of values and judgements.

Usability has become an increasingly important evaluation criterion for interactive computer systems. Good usability and a positive experience of an interactive computer system now provide a crucial competitive advantage.

Human-computer interaction is the study of the design, evaluation and implementation of interactive computer systems. The purpose of the course is to give the participants a good insight into different methods for and approaches to design, methods and approaches in the evaluation of interfaces, tools, prototype methods and architectures for the implementation of interactive systems.

### Knowledge and understanding

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

- different evaluation methods and conceptualisation methods
- different methods in relation to an artefact that is to be redesigned
- the term ‘user’
- ergonomic and psychological demands and requirements
- how different media can be integrated into different types of computer application
- how different interaction models can be used in different types of computer application

### Competence and skills

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

- contribute to a system’s usability based on analyses of user demands and needs
- explain system limitations within interaction design
- analyse and evaluate different types of computer application with the help of established methods

### Judgement and approach

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

- explain and evaluate the role of the designer in interaction-related processes
- evaluate the pros and cons of methods of interaction design and determine how the methods can provide a basis for the development of real-world solutions
- critically evaluate methods of analysis and design of interactive systems from a user-centred perspective

## Course content

The course covers central ideas within the area of human-computer interaction as well as theory and methods. The course also covers questions of methods that concern the planning and carrying out of studies in the context of construction/design of a program/system and the evaluation of such.

During the course, the following topics are addressed:

- user-centred design
- perspectives on human-computer interfaces
- design of information systems and interaction
- interaction models for different types of computer application
- standards and guidelines for dialogue construction

- reflection on system development trends
- methods and techniques for analysis and evaluation.

## Course design

The teaching consists of lectures, workshops, supervision and laboratory sessions.

## Assessment

The assessment is based on an on-campus written exam, evaluation exercise and design exercise.

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*

- On-Campus Written Exam, 3.0 cr, grading scale: U-A, individual examination
- Evaluation Exercise, 1.5 cr, grading scale: U-G, group examination
- Design Exercise, 3.0 cr, grading scale: U-A, group 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 student must have been awarded the grade of E or higher.

### Grading rules and definitions

*Examination grades*

Examinations are graded according to the grading scale U-A or the grading scale U-G (Fail-Pass).

*Course grade*

A passing grade on all examinations is required to pass the course.

1. For each examination with the grading scale U-A, the obtained points are multiplied by the number of credits for the examination. Grades without points are converted as follows: A = 92, B = 80, C = 70, D = 60, E = 52.
2. The products of the included examinations are summed up and divided by the total number of credits of the included examinations.
3. This results in a weighted average which determines the course grade. 85–100 gives the grade A, 75-84 gives the grade B, 65-74 gives the grade C, 55–64 gives the grade D, 50–54 gives the grade E.

Examinations with the grading scale U-G are not included in the calculation of the course grade.

## Entry requirements

Admission to the course requires general requirements and English 6 as well as the courses: ”Informatics: Introduction to Information Systems, 1-30 cr” and ”Informatics: Information Systems and Business Development, 31-60 cr” or the equivalent.

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 their seat on the course.

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

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