



UNIVERSITY
OF SKÖVDE

COURSE SYLLABUS

Human-Robot Interaction, third-cycle level

5 credits

Course code: IT0948F

Version number: 2.1

Valid from: 1 July 2024

Ratified by: Curriculum Committee for Third-cycle Studies

Date of ratification: 11 March 2024

1. General information about the course

The course is provided by the University of Skövde and is named Human-Robot Interaction, third-cycle level (Människa-robotinteraktion, forskarnivå). It comprises 5 credits .

The course is a part of the third-cycle subject area of Informatics.

2. Entry requirements

The prerequisites for this course are general entry requirements for third-cycle courses and study programmes, i.e. a second-cycle qualification or satisfied requirements for courses comprising at least 240 credits of which at least 60 credits were awarded in the second cycle (or the equivalent).

In order to fulfil the specific entry requirements, the applicant must have completed course requirements of at least 60 credits, including an independent project of at least 15 credits at the second cycle, within the subject Informatics, applicable areas of a similar kind or other fields assessed as directly relevant for thesis work in the subject Informatics.

An additional requirement is proof of skills in English equivalent of studies at upper secondary level in Sweden, known as the Swedish course English 6. This is normally demonstrated by means of an internationally recognized language test, e.g. IELTS or TOEFL or the equivalent.

3. Course content

The course aims to deepen the students' knowledge within the interdisciplinary field of HRI. Initially, the course introduces the emergence and roots of HRI, its interdisciplinary nature and its various applications.

The course also focuses on the scope and character of current HRI research, addressing the state of the art in HRI, as well as a foreseeable directions toward which the field is developing. It pays in-depth attention to the robot perspective, the human perspective and the interaction perspective of HRI.

The course also addresses the challenges of being an interdisciplinary research field as well as ethical and societal issues that may arise in research and development of HRI.

4. Objectives

After completed course the student should be able to:

- extensively describe, analyze and problematize the origin and the state of art of the

interdisciplinary field of human-robot interaction (HRI) including human-robot collaboration;

- extensively exemplify and contrast different perspectives on central foundations, principles, methods and theories within HRI;
- extensively describe, exemplify, and discuss the human perspective, the robot perspective and the interaction perspective of HRI; and
- analyze and argue ethical and societal issues that may arise in relation to HRI research.

5. Examination

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

To receive the grade Pass on the course, all examination parts have to be graded Pass.

The examinations of the course consist of the following modes of assessment:

- **Seminar Assignment**
2.5 credits, grades: G/U
- **Assignment**
2.5 credits, grades: G/U

Doctoral students with a permanent disability who have been approved for directed educational support may be offered adapted or alternative modes of assessment.

6. Types of instruction and language of instruction

The teaching is comprised of seminars/group discussions, project work, lectures and supervision.

The teaching is conducted in English.

7. Course literature and other educational materials

Bartneck, C., et. al. (2020). *Human-robot interaction: An introduction*. Cambridge, UK: Cambridge University Press. ISBN 9781108735407.

Scientific articles designated on the course website.

8. Doctoral student influence

Doctoral student influence in the course is ensured by means of course evaluation. The students are informed about the results of the evaluation and potential measures that have been taken or are planned, based on the course evaluation.

9. Additional information

Further information about the course, as well as national and local governing documents for higher education, is available on the website of the University of Skövde.