Joint Faculties of Humanities and Theology

# KOGB02, Robots in Society: Past, Present and Future, 3 credits

*Robots in Society: Past, Present and Future, 3 högskolepoäng*

**First Cycle / Grundnivå**

## Details of approval

The syllabus was approved by The Pro Dean of First and Second Cycle Studies at The Joint Faculties of Humanities and Theology on 2025-02-11 (U 2025/91). The syllabus comes into effect 2025-02-11 and is valid from the autumn semester 2025.

## General information

The course is offered as a free-standing course.

*Language of instruction:* English

| *Main field of study* | *Specialisation* |
|---|---|
| - | G1N, First cycle, has only upper-secondary level entry requirements |

## Learning outcomes

Upon successful completion of the course, the student will be able to:

### Knowledge and understanding

- explain historical developments in robotics and their societal implications,
- define and exemplify key concepts such as automation, agency, autonomy, and social robotics,

### Competence and skills

- apply knowledge of robotics to assess real-world cases of robotic integration in society,

- discuss the strengths and limitations of different robot applications from both a technical and societal perspective,

### Judgement and approach

- evaluate ethical considerations in the development and deployment of robots,
- assess the potential future impact of robotics on work, education, healthcare, and social interactions.

## Course content

This course offers a comprehensive exploration of the role of robots in society, tracing their historical development, examining current advances, and considering future possibilities. Students will gain an overview of various types of robots, their capabilities and limitations, the integration of AI in robotics, and the societal impacts of these technologies.

The course covers the following areas:

- Historical Development of Robotics: The course begins by exploring the history of robotics, from early industrial robots to humanoid robots. This section covers key milestones and pioneers who have shaped the evolution of robotics.
- Current Advances: The course examines the present and latest developments in robotics technology, including humanoid robots, autonomous vehicles, swarm robotics, and drones.
- Capabilities and Limitations: What robots can and cannot do, their ability to interact with humans and learn from their environment, and the technical and ethical challenges involved.
- Societal Impact: How robots affect various aspects of our lives, including employment, economy, social interactions, and ethics.
- AI in Robotics: How artificial intelligence enhances robot functionality and decision-making processes.

## Course design

Instruction is provided through lectures and seminars. Active participation in discussions and group work is expected. Students will participate in one obligatory group assignment.

If, due to circumstances beyond their control, such as accidents, sudden illness or similar, students are unable to carry out a compulsory component, the University is responsible for ensuring that an equivalent alternative or another time for the component is offered. This also applies to students participating in activities in an elected position as a student representative.

## Assessment

The course is assessed through one group assignments and an invigilated exam.

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: Fail, Pass, Pass with distinction
For a passing grade in the course, the grade "Pass" is necessary on both the group assignment and the exam. For the grade "Pass with distinction", the student will need that grade on the exam.

## Entry requirements

General requirements

## Further information

- The course is offeered at the Department of Philosophy, Lund University.