

HUM-384

The ethics of robots

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Cursus	Sem.	Type
Humanities and Social Sciences	BA5	Obl.

Language of teaching	English
Credits	2
Session	Winter
Semester	Fall
Exam	During the semester
Workload	60h
Weeks	14
Hours	2 weekly
Courses	2 weekly
Number of positions	80

Summary

This course enables students to sharpen their proficiency in tackling ethical challenges linked to robots. Students acquire the competence to define a robot and identify ethical questions linked to technology and to the increased use of robots in society. Students develop competency in handling norm

Content

The ethics of robots: addressing societal and legal challenges

The increasing production and use of “robots” raises numerous ethical, legal and societal questions. These range from conceptual issues (“What is a robot?”) to technological-ethical issues (“How should robots act?”) and to societal-political issues (“What if robots are widely deployed?”) and legal questions (“How should accountability be handled in regard to robots and AI?”). The focus of attention has long been on military robots but the deployment of robotic technology in all areas of society dramatically increases the number of issues that call for an answer.

The following issues will be dealt with:

- What is a robot?
- Can robots truly act autonomously?
- Who is responsible for the actions of robots?
- What are the most pressing ethical questions for the different types of robots?
- How does the law deal with these questions?
- How should we design robots in order to overcome ethical challenges?
- How should we address the consequences of the wide deployment of robots?

Keywords

robots, ethics, law, innovation, responsibility

POLY-perspective :

- interdisciplinary perspective
- citizen perspective

<https://www.epfl.ch/schools/cdh/cdhs-vision/>

Learning Outcomes

By the end of the course, the student must be able to:

- Define the concept of robots
- Define the different contexts in which the concept is used
- Assess / Evaluate the distinct thematic challenges raised in specific contexts of the uses(or applications) of robots: military, medical, service, transportation, and logistics

- Systematize these contexts with explicit design requirements and their ethical justifications
- Identify the broader justice issues raised by the wide deployment of robotic technology
- Assess / Evaluate the different senses/conceptions/interpretations of agency, autonomy and responsibility in the context of robots
- Interpret current social/legal challenges

Transversal skills

- Demonstrate the capacity for critical thinking
- Write a scientific or technical report.
- Take account of the social and human dimensions of the engineering profession.

Teaching methods

The course will be organized as an interactive and participative course. Students have to read texts for each session and to be ready for critical discussion.

Expected student activities

weekly reading of preparatory texts
active participation in class
writing of papers

Assessment methods

Students will be assessed twice :

- One-pager including the key elements of a preparatory text – 30% of the grade
- Short paper on a freely chosen issue (or topic) (10 pages) - 70% of the grade

Supervision

Office hours	No
Assistants	No
Forum	No
Others	by appointment

Resources

Bibliography

Tzafestas, S. G. 2016. Roboethics. A Navigating Overview. Switzerland, Springer
Lin, P., Abney, K. and Bekey, G. A. eds., 2014. Robot Ethics: The Ethical and Social Implications of Robotics. London, MIT Press
Ford, M., 2015. Rise of the Robots: Technology and the Threat of Jobless Future. New York, Basic Books.

Ressources en bibliothèque

- [Roboethics : a navigating overview / Spyros G. Tzafestas](#)
- [Robot ethics : the ethical and social implications of robotics / ed. by Patrick Lin, Keith Abney, and George A. Bekey](#)
- [Rise of the robots : technology and the threat of a jobless future / Martin Ford](#)