

## Ethics of Emerging Technologies

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**Subject area:** Language or culture

<b>University:</b>	Technion
<b>Level:</b>	BA4, MA1, MA2, MA all years
<b>Teaching mode:</b>	hybrid: some students participate online, other students attend real-life
<b>Instructor(s):</b>	Dr. Wessel Reijers

### Short description

Emerging Technologies Like Ai, the Internet of Things, and Blockchain Technology, Have An Increasingly Transformative Impact on People and Society. in This Course, Students Will Be Introduced to the Different Ways to Theorize Technology, Reflect on Its Ethical Impacts, and Use Practical Tools to Integrate Ethical Reflection in Day-to-Day Projects.

### Full description

Emerging technologies like AI, the Internet of Things, and Blockchain Technology, have an increasingly transformative impact on people and society. In this course, students will be introduced to the different ways to theorise emerging technology, reflect on its ethical impacts, and use practical tools to integrate ethical reflection in day-to-day projects.

The course consists of three parts. The first part covers the basics: presenting major ethical issues with emerging technologies from a historical perspective, explaining the link between ethical theories and technology, and presenting different ways to think about technological mediation. The second part focuses on ethics of particular types of emerging technologies: of artificial intelligence (e.g., deep learning), artificial life (e.g., genetic modification) and existential machines (e.g., the atomic bomb). The third part contextualises the ethics of emerging technologies in a discussion of three global challenges: global citizenship and human rights, climate change, and violence.

The course uses methods of philosophical reflection, argumentation, empirical and historical research, and applied ethics.

### Learning outcomes

The Students Will Gain: Broader Knowledge About the Major Approaches in Normative Ethics and Philosophy of Technology.

A More Precise Understanding of Contemporary Themes in Ethics of Technology, with a Focus on Ai Ethics and Ai Principles (E.G., Privacy, Fairness, Explainability) - An Understanding of How Ethical Impacts of Emerging Technologies Play Out in Practice (E.G., Bias in Ai Systems, Conformism in

Social Credit Systems) - Broad Knowledge of Approaches in Technology Ethics to Translate- Reflection Into Action, Including Value Sensitive Design and Ethical Impact Assessment.

### General information

**Contact hours per week:** 2

**Total workload:** 65 (in student hours for the whole course)

**ECTS credits:** 2.2

**Language:** English

**Course start date:** 21 March 2023

**Course end date:** 31 July 2023

**Add. info about start date:** Spring semester at Technion starts on March 21st 2023, additional information will be available later on

**Weekly teaching day/time:**

**Time zone:** CET +1 (Estonia, Israel)

**Further information:** Technion does not use ECTS credits, the amount of ECTS mentioned above is an estimation. for further questions about the option to have this course recognized towards your degree and for how many ECTS credits, contact your home university.

**Prerequisites:** None

**Activities and methods:** Lectures

**Presence on campus:**

### Final examination

**Form:** Final writing assignment

**Date:**

**Location/format:**

**Re-sit possibility:**

**Transcript available:** on request

**Add. info/requirements:**

## Registration

To register for this course, follow the registration requirements of your **home university** as specified here: [www.euroteq.eu/courses-registration](http://www.euroteq.eu/courses-registration).

## Administration

**Number of places:** 5  
**Minimum participants:**  
**Internal course code:** 326002  
**Contact:** Bat-el Almogy, at [academic@int.technion.ac.il](mailto:academic@int.technion.ac.il)

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*This course is part of the EuroTeQ Engineering University joint course catalogue 2023. This is a collaborative activity of the partner universities DTU, L'X, TU/e, TalTech, CTU, TUM as well as Technion. Students from these universities can participate in the offered courses. It is the responsibility of the student to check if you fulfil the requirements to participate in a specific course. Students are also advised to check with their home institution how to get recognition of the ECTS credits gained in courses of the EuroTeQ course catalogue. For further information about EuroTeQ Engineering University, visit [www.euroteq.eu](http://www.euroteq.eu) or get in touch with the above-mentioned point of contact.*