

Modul: 5173080

Introduction to the Ethics and Regulation of AI

Modulprofil

Prüfungsnummer

5173080

Dauer

1 Semester

Häufigkeit des Angebots

Jedes Wintersemester

SWS

4

ECTS-Credits (CP)

5.0

Workload

Angeleitete Studienzeit:

Präsenzzeit: 60 Std.

Selbststudienzeit: 90 Std.

Gesamt: 150 Std.

Lehrveranstaltungsart(en)

Seminaristischer Unterricht

Lehrsprache

Englisch

Organisation

Modulverantwortung

Prof. Dr. Markus Oermann

Dozierende

Prof. Dr. Markus Oermann

Verwendbarkeit

MAI

Studiensemester

2. Semester

Art des Moduls

Pflichtmodul

Verpflichtende Voraussetzungen gemäß SPO

None

Empfohlene Voraussetzungen

None

Inhalte

The module introduces core ethical theories and explores key AI-related ethical challenges, such as agency, bias, data protection, democracy, job transformation, and sustainability. It examines methods and standards for integrating ethical assessment into AI development, referencing major international guidelines (EU, OECD, UNESCO, Council of Europe, G7) and the new EU AI Act. Current legal debates are covered, including copyright in training data, for AI-generated content, and evolving EU liability frameworks for AI.

Overview on the content of the module:

- Ethics 101 and the traditional schools of Ethics
- Clusters of ethical challenges related to AI:
 - agency and human/machine relation
 - power and responsibility
 - biases and discrimination
 - data ownership/data protection (including basics structures of data protection law)
 - democracy, election integrity, free discourse and the problem of AI driven malinformation, disinformation and deep fakes
 - AI as catalyst of radical transformation?: job displacement/transformation of work
 - AI and sustainability
- Approaches and standards on how to integrate ethical assessment in professional workstreams/development of AI and AI applications
- Selected established international ethical guidelines and their take on these challenges: EU, OECD, UNESCO, Council of Europe, G7
- Overview on the EU AI Act
- Further current legal and regulatory discussions on AI:
 - How to deal with the use of copyright protected material as training data?
 - How to deal with AI's output in terms of copyright law?
 - What's ahead: status quo of the reform of the liability regime for AI in the EU

Prüfung

Verpflichtende Voraussetzung gemäß SPO für die Teilnahme an der Prüfung

Keine

Art der Prüfung

Schriftliche Prüfung (sP) gemäß
§ 23 APO

Dauer/Form der Prüfung

90 Minuten

Die konkrete Festlegung der
abzuleistenden Prüfung erfolgt
im Studienplan

Prüfungssprache

Englisch

Voraussetzung für die Vergabe von Leistungspunkten

Keine

Lernergebnisse

After completing the module, students will be able to...

- critically analyze central clusters of ethical challenges of AI, compare their effects on different areas of application and develop recommendations for dealing with these challenges
- integrate an ethical assessment in professional workstreams/AI development processes
- evaluate requirements of data protection law for AI and analyze gaps in the EU General Data Protection Regulation in the context of AI
- evaluate international guidelines on ethical AI in a differentiated manner, work out similarities and differences and formulate well-founded proposals for their implementation in their own professional environment
- evaluate basic legal requirements of the EU AI Act on AI systems and General Purpose AI-Models
- critically assess current legal debates on the use of copyrighted material as training data and the protection of AI outputs and develop and defend their own points of view
- assess AI practices based on basic structures of civil liability and have insights on the status quo of next phase of the EU's regulation of AI regarding the liability regime for AI
- communicate and cooperate better with ethical and legal professionals in their future professional environment

Literatur

Coeckelbergh, Mark (2021): AI ethics, Cambridge, MA: MIT Press.
Dignum, Virginia (2019): Responsible Artificial Intelligence: How to Develop and Use AI in a Responsible Way, Cham: Springer Int. Publ.
Further basic texts will be announced or made available in the first session