

Introduction to the Business Ethics, Economics and Law of Artificial Intelligence and Digitalisation

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Administration and Syllabus

Administration

When and where does the lecture take place?

- ▶ first lecture: Tuesday, 5th April 2022
- ▶ last lecture: Tuesday, 5th July 2022
- ▶ lecture time: 9:15 am – 10:45 am
- ▶ location: building 22, room H2 (Hörsaal 2)

Lecturer:

- ▶ Eduard Buzila, Research Fellow
- ▶ office: building 22, room A-312
- ▶ email: Eduard.Buzila@ovgu.de
- ▶ office hour: 12am-1pm, Tuesday **(only by appointment)**

Administration

Grading

- ▶ final written exam (100%)
- ▶ open **and** multiple choice questions (no malus points!)
- ▶ 60 minutes, 60 points
- ▶ date and time: **21 July, from 11:00 - 12:00**
- ▶ place: see announcement examination office FWW

Administration

Questions & Answers (Q&A) are **optional**:

- ▶ time: 3pm-5pm
- ▶ location: building 22, room A-203
- ▶ dates:
 - ▶ 1st Q&A: 26th April
 - ▶ 2nd Q&A: 24th May
 - ▶ 3rd Q&A: 21st June
 - ▶ 4th Q&A: 5th July

Tentative syllabus

The lecturer reserves the right to make changes to the syllabus!

1. Introduction to Artificial Intelligence
2. Introduction to the History of Artificial Intelligence
3. Machine Learning, Deep Learning and Explainable AI
4. Artificial Intelligence and Digitalisation
5. Ethics, Business Ethics, Economic Ethics
6. Ethics of Artificial Intelligence
7. Economics of Artificial Intelligence
8. Cloud Computing and Cloud Economics
9. Law of Artificial Intelligence

Syllabus

Description

This course is an introduction to the business ethics, economics, and law of artificial intelligence and digitalisation. Terms such as ethics, artificial intelligence (AI), digitalisation, machine learning, deep learning, data mining, big data, transaction cost, opportunity cost, black box problem, trust, explainable AI, privacy, regulation, GDPR and liability are discussed in class.

Syllabus

Texts

- ▶ Bartneck, Christoph et al. *An Introduction to Ethics in Robotics and AI*. Springer 2021. Access via university library = orange coloured hyperlink. (Click on title)
- ▶ Lütge, Christoph and Mathias Uhr. *Business Ethics: An Economically Informed Perspective*. Oxford 2021.
- ▶ Russell, Stuart and Peter Norvig. *Artificial Intelligence: A Modern Approach*. 4th Edition. Pearson 2022.
- ▶ Nilsson, Nils J. *The Quest for Artificial Intelligence: A History of Ideas and Achievements*. Cambridge 2010.

Syllabus

Texts

- ▶ Vieweg, Stefan H. *AI for the Good: Artificial Intelligence and Ethics*. Springer 2021.
- ▶ Charniak, Eugene and Drew McDermott. *Introduction to Artificial Intelligence*. Addison-Wesley 1984.
- ▶ Hervey, Matt and Matthew Lavy. *The Law of Artificial Intelligence*. Sweet & Maxwell 2021.
- ▶ Bynum, Terrell Ward and Simon Rogerson (eds.). *Computer Ethics and Professional Responsibility*. Blackwell 2004.

Syllabus

Texts

- ▶ Floridi, Luciano. *The Ethics of Information*. Oxford 2013.
- ▶ Floridi, Luciano. *The 4th Revolution: How the Infosphere is Reshaping Human Reality*. Oxford 2014.
- ▶ Liao, S. Matthew (ed.). *Ethics of Artificial Intelligence*. Oxford 2020.
- ▶ Dubber, Markus D. et al. (eds.). *The Oxford Handbook of Ethics of AI*. Oxford 2021.
- ▶ Agrawal, Ajay et al. (eds.). *The Economics of Artificial Intelligence: An Agenda*. Chicago 2019.

Syllabus

Course Aims and Methods

- ▶ The aim of this course is to familiarise students with the concepts of artificial intelligence and digitalisation.
- ▶ Furthermore, students should be able to apply methods that they studied in previous classes (e.g. microeconomics) in order to analyse the positive and negative aspects of the implementation or non-implementation of AI and digitalisation with regard to society in general and the economy in particular.
- ▶ Students should also study new methods from ethics and law in order to broaden their methodological toolbox.

Syllabus

Course Aims and Methods

- ▶ In order to achieve these goals students need to learn how to think analytically.
- ▶ Hence, it is very important to be critical and analytical about what you learn in this lecture (and also in any other lecture): This field is **not** settled yet, there are **multiple** approaches and views on different topics.
- ▶ You should **not** underestimate the lecture and especially the exam - without dedication you will fail.
- ▶ Therefore, it is important to attend the lecture and to read up the discussed topics.

Syllabus

Course Aims and Methods

- ▶ This lecture might be regarded as a preparatory course if you want to study AI further, e.g. Master ORBA.

