

eUTOPIA

Summer School: AI in Business and Healthcare

Introduction (2/2)

August 18, 2026

Agenda

- **Lecture overviews**
- Group assignments
- Directions
- Q&A



Lecture #1: History of AI

***Oskar Broberg* (University of Gothenburg)**

Content: Digitalization has transformed how information is produced, shared, and analyzed over the past fifty years. This lecture explores the interplay between technological developments and the economic transformations they have driven. It concludes by discussing key societal challenges related to transparency, accountability, and inequality.

Reading:

- Wiggins, C., & Jones, M. L. (2023). *How data happened: A history from the age of reason to the age of algorithms*. W. W. Norton & Company. **(Chapter 12)**



Lecture #2: AI fundamentals

Patrick Zschech (TU Dresden)



Content: AI encompasses a diverse set of computational approaches that enable machines to perform tasks typically associated with human intelligence, such as perception, reasoning, prediction, and decision-making. This lecture introduces the major AI paradigms and explains the core ideas behind them, along with their respective strengths and limitations. Participants will gain a conceptual understanding of how AI capabilities have evolved and how the characteristics of different approaches influence when and how they can be applied in practice.

Readings:

- Janiesch, C., Zschech, P., & Heinrich, K. (2021). Machine learning and deep learning. *Electronic Markets*, 31(3), 685-695. <https://doi.org/10.1007/s12525-021-00475-2>
- Li, M. M., Reinhard, P., & Leimeister, J. M. (2026). Agentic AI: From autonomous agents to enterprise agentic AI systems. *Business & Information Systems Engineering*, forthcoming. <https://doi.org/10.1007/s12599-026-01009-w>

Lecture #3: AI & Business value

Susanne Strahringer, Martin Wiener (TU Dresden)



Content: While new AI use cases seem endless, their business value is often uncertain. Drawing on theoretical frameworks and real-world examples, this lecture explores how AI applications create business value. The focus is on systematically evaluating AI use cases across monetary and non-monetary dimensions to prioritize and justify investments in AI-based solutions.

Readings:

- Montard, A., Diedrich, D., & Catlin, T. (2026). Where AI will create value—and where it won't. *McKinsey Quarterly* (April 29). <https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/where-ai-will-create-value-and-where-it-wont>
- Ward, J., Daniel, E., & Peppard, J. (2008). Building better business cases for IT investments. *MIS Quarterly Executive*, 7(1), Article 3. <https://aisel.aisnet.org/misqe/vol7/iss1/3>

Lecture #4: Responsible AI

Aleksandre Asatiani (University of Gothenburg)



Content: This lecture explores the principles and challenges of responsible AI. It examines ethical issues related to the design, deployment, and use of AI systems, including fairness, accountability, and societal impact. Particular attention is given to the explainability, interpretability, and transparency of increasingly complex AI systems. The lecture also explores approaches to establishing guardrails, enabling human oversight, and fostering responsible and accountable AI practices within organizations.

Readings:

- Asatiani, A., Malo, P., Nagbøl, P. R., Penttinen, E., Rinta-Kahila, T., & Salovaara, A. (2021). Sociotechnical envelopment of artificial intelligence: An approach to organizational deployment of inscrutable artificial intelligence systems. *Journal of the Association for Information Systems*, 22(2), 325-352. <https://doi.org/10.17705/1jais.00664>
- Floridi, L. (2023). *The ethics of artificial intelligence: Principles, challenges, and opportunities*. Oxford University Press. **(Chapter 4)**

Lecture #5: AI adoption



Francesca Dal Mas (Ca' Foscari University of Venice)

Content: AI is widely seen as a transformative force in healthcare, promising new business models and solutions to challenges such as rising costs, workforce shortages, and personalized care. Yet adopting AI in medicine is not merely a technical task. This lecture examines AI as a socio-technical transformation, highlighting the ethical, professional, and organizational tensions surrounding responsibility, trust, bias, and acceptance. It also critically explores how regulation, professional identity, and human factors shape the real-world adoption of AI in medical practice.

Reading:

- Dal Mas, F., Massaro, M., Fijałkowska, J., Ndou, V., & Raguseo, E. (2026). Artificial intelligence in trauma and emergency surgery: A quantitative study of perceived technology acceptance. *Technovation*, 154, 103548.
<https://doi.org/10.1016/j.technovation.2026.103548>.

Lecture #6: AI regulation

Stephen Gilbert (TU Dresden)



Content: Since their inception, large language models (LLMs) have been applied to health and medicine, with risks becoming apparent early on, including harmful outputs to vulnerable users. This lecture traces the evolution of LLMs and their applications in healthcare, examines global regulatory approaches and their underlying philosophies, and discusses the challenges posed by agentic and “simulated AGI” systems. It also explores emerging solutions, including regulatory sandboxes, test benches, AI chaperones, and LLM-driven just-in-time adaptive interventions.

Readings:

- Duffourc, M. N., Verhees, F. G., & Gilbert, S. (2026). Artificial intelligence characters are dangerous without legal guardrails. *Nature Human Behaviour*, 10, 218-221. <https://doi.org/10.1038/s41562-025-02375-3>
- Ostermann, M., Freyer, O., Verhees, F. G., Kather, J. N., & Gilbert, S. (2025). If a therapy bot walks like a duck and talks like a duck then it is a medically regulated duck. *npj Digital Medicine*, 8, 741. <https://doi.org/10.1038/s41746-025-02175-z>

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Group assignments

Group A (6)

- Hahn, Eric
- Hiekel, Carl Samuel
- Knobloch, Michelle
- Romeo, Anna
- Sozza, Nicola
- Welmsö, Klara

Group B (6)

- Kantelberg, Alexandra
- Poser , Paul
- Tuci, Valerio
- Widenhammar, Markus
- Will, Felicitas
- Zanella, Angelica

Group C (6)

- Ambjörnsson, Lila
- Birkner, Luca
- Dal Bianco, Sara
- Hommel, Fritz
- Huzenko, Oleksandr
- Sajjadi, Sahar

Group D (6)

- Antonello, Marco
- El Mitoui, Ghita
- Enkh-Amgalan, Amina
- Guzun, Octavian
- Hoffmann, Friedrich
- Walter, Klara-Marie

Group E (6)

- Caiazza, Giorgia
- Callegari, Edoardo
- Do, Ha Yen Nhi
- Groot Wassink, Chris
- Schenk, Marc
- Tiwari, Mihika

Group F (6)

- Hansson, Leo
- Hesse, Anni-Frid
- Lucchetti, Gaia
- Mahdi Souzani, Arian
- Prager, Tom
- Turco, Ilenia

Group G (6)

- Karpö Gustafsson, Ellen
- Poncato, Giada
- Tran, Tommy Van Trung
- Venseth, Stine
- Zabel, Leonhard
- Zandonà, Tommaso

Group H (6)

- Berton, Giada
- Darwish, Malek
- Ivanova, Ivet
- Ladwig, Lucia
- Mariani, Laura
- Poppitz, Jaden

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Münchner Platz
Dresden/Münchner Platz
Münchner Str.
Central station



Münchner Str.
Münchner Pl.
Münchner Pl.
Münchner Pl.

Salvador-Allende-Denkmal

Münchner Pl.

TUD | Georg-Schumann-Bau

FSR-Büro...

Professur für Energiewirtschaft

Georg-Schumann-Straße

IMMERHIN

Bäckerei Möbius

Mechanische Armbanduhren, Tanja...
Watch store

Copy Cabana
Digitaldruckerei

George-Bähr-Straße

George-Bähr-Straße

George-Bähr

insgrüne coffeebar



Side entrance

Georg-Schumann-Stele

TUD | Hülße-Bau

Hülße-Bau

Technische Universität
Dresden Professur für...

Fakultät für Maschinenwesen der...

Main entrance



Festsaal

Fristenbriefkasten
TU Dresden

Helmholtzstraße

Helmholtzstraße

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Website

Dresden University of Technology

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Faculty of Business and Economics

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EUTOPIA SUMMER SCHOOL 2026: AI IN BUSINESS AND HEALTHCARE



The EUTOPIA Summer School on "AI in Business and Healthcare" will take place in Dresden from **August 24 to 28, 2026** (on-site component). Within the [EUTOPIA University Alliance](#), it is a joint initiative of the Faculty of Business and Economics and the [EKFZ for Digital Health](#) at TU Dresden, the Faculty of Science and Technology and the School of Business, Economics and Law at the University of Gothenburg, and the School of Management at Ca' Foscari University of Venice.

Downloads

- Syllabus
- Readings
- Slide decks

<https://tu-dresden.de/bu/wirtschaft/studium/eutopia-summer-school-2026>

  

TU Dresden | Faculty of Business and Economics

EUTOPIA Summer School: AI in Business and Healthcare

Credits: 5 ECTS

Dates: August 24-28, 2026 (on-site component)

Location: TU Dresden (TUD)

Teaching language: English

Instructors: Aleksandre Asatiani (University of Gothenburg), Oskar Broberg (University of Gothenburg), Francesca Dal Mas (Ca' Foscari University of Venice), Narmin Ghaffari Laleh, Stephen Gilbert, Hannes Schlieter, Susanne Strahringer, Martin Wiener, Patrick Zschech (all TUD)

Eligibility: The Summer School can be included as an (additional) elective in all study programs of the Faculty of Business and Economics at TUD. It is also open to students from the Venice School of Management at Ca' Foscari University of Venice, as well as students from the Faculty of Science and Technology and the School of Business, Economics and Law at the University of Gothenburg. The Summer School is limited to **50 participants**. Subject to availability, students from other EUTOPIA member universities (<https://eutopia-university.eu>) may also be admitted.

Entry requirements: Participants must have successfully completed coursework amounting to at least 45 ECTS credits in business, economics, or closely related fields of study (e.g., Business Education and Management Training, Business Information Systems, Industrial Engineering, Informatics, Management).

Content

The Summer School is structured around three main thematic areas: **(1) AI foundations**, **(2) AI in business**, and **(3) AI in healthcare**. It provides students with both theoretical knowledge and practical insights into the inner workings of AI applications, with a particular focus on autonomous AI solutions, including generative and agentic AI. Students will learn to critically evaluate AI applications from multiple perspectives—such as economic, ethical, regulatory, and technical—and to assess their potential to transform business operations and healthcare delivery. Building on the knowledge and insights gained, students will develop, present, and discuss innovative AI use cases in business and/or healthcare contexts.

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