

Introduction to Machine Learning in Business Economics

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Learning Outcomes

- The objective of this course is to provide you with the **machine learning tools** that **data scientists** use in **business analysis**.
 - In particular, you will likely find this course **very useful** when it comes to **writing the Bachelor thesis!**
- The course covers basic **methods in data science** for analysing **business data**, and in particular **big** business data.
 - The lectures focus on introducing the various topics conceptually.
 - The tutorials focus on applying the methods in the computer.
- We make extensive use of the **R programming language** in the course.

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 - We aim to equip you with **state-of-the-art machine learning methods** to work with **real-world data**.
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Topics

- 1 Basic programming in R.
- 2 Data analysis and visualisation.
- 3 Principal Components Analysis (PCA).
- 4 Linear regression.
- 5 LASSO and ridge regressions.
- 6 Network analysis.
- 7 Classification.

For further details, consult the [course catalogue](#) (click [here](#)).

Basic Information

- 10 ECTS course in Fall 2020.
- Language of instruction: English.
- Course structure: 4 lectures + 1 tutorial per week for 11 weeks.
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Exam Details

- Oral exam:
 - 20 minutes (with no preparation). This includes assessment, change of student, and giving the grade → effective exam time: Approximately **15 minutes**.
 - You will draw a (broad) topic from the curriculum to discuss.
- To qualify for the oral exam you must complete a **take-home compulsory assignment** at the end of the course.
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