

## **Course: Data Science for Management (B. Sc.)**

Summer Term 24

## **Course details:**

- Module codes: 02-BWL/VWL:MSc-B11-1
- Lecturer: Prof. Dr. Nicolas Pröllochs (BWL XI)
- Course format: Lecture & exercise (6 CP)
- Term: Summer semester 24
- Language: German
- Grading: Final exam

## **Course description:**

Prior to the start of the Information Age, companies were forced to collect data from non-automated sources manually. As a result, company decisions were frequently based on gut feeling and intuition. With the emergence of ubiquitous computing technology, company decisions nowadays rely strongly on data science methods and machine learning.

The course "Data Science for Management" provides an overview of the multi-disciplinary field of data science for management students. Topics include (but are not limited to) data collection, integration, management, modeling, analysis, visualization, prediction and data-driven decision making. The course includes practical sessions focusing on data analysis and programming in R.

The main objectives of this course are as follows:

- 1) Understand the basic concepts and business relevance of data science and data-driven decision making
- 2) Gain an overview of different **methods, algorithms** and **software tools** for data science applications
- 3) Understand the pitfalls and myths of data science

## Schedule (tentative)

The course includes both lectures and exercise sessions. The sessions will be held **Mondays 2pm –4pm** and **Thursdays 4pm – 6pm.** The exact schedule will be announced in due course.

Exam date (main exam): 31.07.2024