

- ▶ Lecture and Exercises (2 + 2)
- ▶ Department of Statistics, Department of Computer Science, Department of Mechanical Engineering
- ▶ Course Content:
 - Introduction, data and data analysis in industrial environments (Prof. Jochen Deuse)
 - Data Management (Prof. Jens Teubner)
 - Univariate statistics, correlation and regression, feature selection (Prof. Markus Pauly)
 - Decision trees, random Forests, cluster analysis and topic modeling (Jun.-Prof. Dr. Thomas Liebig)
 - Model selection (Prof. Markus Pauly)
 - SVMs and neuronal networks (Jun.-Prof. Dr. Thomas Liebig)

Industrial Data Science

- ▶ **Suitable modules:** MS 6,7 (Spezialgebiete); MD Applications (5 ECTS points)
- ▶ **Dates:**
 - ▶ Lecture: Friday 08:15-09:45 am, EF50, HS 1
 - ▶ Exercises: Friday 10:15-11:45 am, Seminarraumgebäude 1-H001
- ▶ **Language:** English
- ▶ **Prerequisites:** Basic knowledge in math and programming
- ▶ **Registration:** Via moodle

Follow-up course: Industrial Data Science 2 in which the learned material can be practically applied to real industrial use cases. Can be credited for master of data science students as MD Applications (5 ECTS).

The prerequisites will be explained in the first INDAS 1 lecture.