

## Courses in English Course Description

**Department** 10 Business Administration

Course title Big Data and Data Analytics

Hours per week (SWS) 4

Number of ECTS credits 5

Course objective This course is about extracting useful knowledge from (big) data. It covers the fundamental principles

or concepts that underlie data science with a main focus on the selection and application of techniques

and the interpretation of results.

We will study data analytics in a business context, i.e., we will mostly work with examples, case studies and data that are relevant for business. Upon completion of the class, students should be able to recognize the necessity of big data analysis, understand prerequisites and potential challenges as well

as select and apply adequate data analysis methods and tools.

Prerequisites none

Recommended reading Provost, F. and Fawcett, T. (2013), Data Science for Business: What You Need to Know About Data

Mining and DataAnalytic Thinking, O'Reilly, Sebastopol.

Teaching methods Seminar-teaching

Project work Group work

Assessment methods Project work

Language of instruction English

Name of lecturer Prof. Dr. Eva Anderl

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Link

Course content Importance of data analysis in the field of digital business

Basic concepts and techniques of applied data science

o Correlation and supervised segmentation

o Fitting models to data o Avoiding overfitting o Similarity and clustering o Analysis of model performance

Data-analytic thinking

Remarks