

## Courses in English Course Description

<b>Department</b>	10 Business Administration
<b>Course title</b>	<b>Big Data and Artificial Intelligence</b>
<b>Hours per week (SWS)</b>	4
<b>Number of ECTS credits</b>	5
<b>Course objective</b>	This course is about extracting useful knowledge from (big) data. It covers the fundamental principles or concepts that underlie data science & artificial intelligence 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 methods and tools.
<b>Prerequisites</b>	None
<b>Recommended reading</b>	Provost, F. and Fawcett, T. (2013), Data Science for Business: What You Need to Know About Data Mining and DataAnalytic Thinking, O'Reilly, Sebastopol.
<b>Teaching methods</b>	Seminar-teaching Project work Group work
<b>Assessment methods</b>	Project work
<b>Language of instruction</b>	English
<b>Name of lecturer</b>	Prof. Dr. Eva Anderl
<b>Email</b>	<a href="mailto:eva.anderl@hm.edu">eva.anderl@hm.edu</a>
<b>Link</b>	
<b>Course content</b>	Importance of data analysis in the field of digital business Basic concepts and techniques of applied data science o Supervised and unsupervised learning o Classification o Regression / Prediction o Similarity and clustering o Time Series o Neural Networks o Overfitting and model evaluation
<b>Remarks</b>	