

Advanced Data Analytics

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4	<p>Contents</p> <p>The aim of this course is to give students a basic understanding of advanced data analytics so that they are able to translate business problems into analytical solutions. They know several of the most important uni-, bi-, and multivariate methods and are able to apply them on data from different sources (e.g. data generated with questionnaires or data already stored in a database) with IBM SPSS Statistics or IBM SPSS Modeler. After this course they are able to understand and discuss up-to-date topics such as Big Data and Smart Data.</p> <p>General topics:</p> <ul style="list-style-type: none"> • Importance of advanced data analytics • Difference between market research, big data, smart data, data mining, etc. • Key issues in questionnaire design • Important use cases in practice <p>Methods in focus:</p> <ul style="list-style-type: none"> • Measures of Location, Measures of Shape, Measures of Variation • Cross tabs, Chi², Pearson and Spearman correlations • Parametric and Non Parametric tests • Linear Regression • Variance analysis • Cluster analysis • Factor Analysis
5	<p>Participation Requirements</p> <p>recommended: Basics in Statistics and Maths, Interest in Data Analytics, Data Mining and quantitative Market Research</p>
6	<p>Examination Forms and Prerequisites for Awarding ECTS Points</p> <p>Written Examination of 90 Minutes and Presentation non graded</p>
7	<p>Further use of Module</p>
8	<p>Module Manager and Full-Time Lecturer</p> <p>Prof. Dr. Dorothee Brauner</p>
9	<p>Literature</p> <ul style="list-style-type: none"> • Hair, J.: Multivariate Data Analysis, 7th Edition, Pearson, 2010 • Bühl, A.: SPSS 22: Einführung in die moderne Datenanalyse (Pearson Studium - Scientific Tools) Gebundene Ausgabe – 1. Januar 2014 • Wendler, T. & Gröttrup S.: Data Mining with SPSS Modeler. Theory, Exercises and Solutions, Springer International Publishing, 2016 • Lecture Notes
10	<p>Last Updated</p> <p>04.03.2020</p>