

1	1.1 Module name (German / English) Marketing Conception & Data Mining	1.2 Short name (optional) MCDM	1.3 Module-Code (HIS-POS)
2	2.1 Frequency of Offer: Offer in <input type="checkbox"/> each SoSe, <input checked="" type="checkbox"/> each WiSe,	2.2 Duration: <input checked="" type="checkbox"/> 1 Semester <input type="checkbox"/> 2 Semester	
3	3.1 Offer for the following study programmes	3.2 Mandatory, Elective	3.3 Recommended semester
	Master International Marketing and Sales	Man	1/2

4 Workload				Workload total	
	Lectures/ Form	Contact time	hours per semester per form of instruction/standard form	Workload	Credits
contact time (e.g. lecture, exercise, internship, seminar lessons, project/ group work, case study, business game, credited tutorial) (further lines possible)	Seminar lessons	4	60	180	6
Amounts	Amounts contact time	Amounts contact time in hours			
self-study (e.g. tutorial, preparation / follow-up, Exam preparation, preparation of homework, Search)	Self-study		120		
	Amounts		Amounts self-study in hour		

55.1 Learning outcomes

Goal of the Module "Marketing Conception & Data Mining" is to convey to the students the integral considerations of marketing and qualitative as well as quantitative marketing methods. Here the students recognize that market orientation is an essential component of the whole value creation process and draws a continuous bow from the goals via the strategies to the marketing mix.

General Method Expertise

- Alumni have the ability to apply the acquired subject-specific insights to praxis problems.
- Alumni are able to reflect critically for which problems and under which conditions, which subject specific methods and systems can be used.
- Alumni are able to present their solutions in an accurate and structured form.

Professional Expertise Marketing Conception

- Alumni are able to portray the process-oriented analysis of a marketing conception.
- Alumni are able to situation-adequately create a marketing conception in domestic and international environments, consisting of marketing objectives, strategies and measures and to link the individual marketing levels with each other in a coordinated overall process.
- Alumni are able to reflect critically on the fact that short-termed measures are not purposeful and that these measures should always be evaluated against the background of the company objectives and strategies.
- Alumni are able to choose specialized marketing instruments for the solution of strategic problems in the marketing sector taking into account sectorial characteristics and to analyze them critically with regard to their effectiveness.

Professional Expertise Data Mining

- Alumni are able to assess empirical research methods, formulate survey questions and structure data-mining projects, extract database based (mass) data, transform and explore with methods of data mining especially Multivariate Statistics and Machine Learning using Standard Software for the solution of optimization problems under restrictions in the marketing sector
- Alumni are able to work independently on data-mining case studies based on software-tools and to assess the results and the approach critically.
- Alumni are able to translate the results of an analytical investigation into actionable strategic and tactical business decisions. They are able to summarize a data mining project and its outcomes and implications in written form.

Contents

Marketing Conception

- Introduction
- Conception Level Marketing Target
 - Target Programs
 - Target Deriving and Target Relationship
 - Target System
- Conception Level Marketing Strategies
 - Definition of strategic Target Markets
 - Analysis Instrument
 - Marketing Strategies
- Conception Level Marketing-Mix
 - Product Policy
 - Price Policy
 - Communication Policy
 - Distribution Policy
 - Marketing-Mix
- Design of a Marketing Conception

Data Mining

In the lecture "Data Mining" a praxis relevant course program will be offered that addresses the operational analysis of (mass) data from data processing to modeling and interpretation. While doing so concepts of computer science will be combined with Multivariate Statistics and will be used in context of operational decision support.

1. Basics of Data Mining
 - a. Inquiry Issues and Procedure Modell
 - b. Data Processing and Exploration
 - c. Case Study/ Exercises with Knime or R
2. Prediction using Regression Analysis
 - a. Multiple Regression, Regression Trees, Random Forests, Gradient Boosting, Neural Networks
 - b. Case Study/ Exercises with Knime or R
3. Prediction using Classification Analysis
 - a. Classification with Logistic Regression, Decision Trees, Random Forests, Gradient Boosting, Neural Networks
 - b. Case Study/ Exercises with Knime or R
4. Segmentation with Cluster Algorithms
 - a. Hierarchical cluster analysis, k-means



- b. Case Study/ Exercises with Knime or R
- 5. Dimensionality reduction
 - a. Dimensionality reduction with Principal Component Analysis, Factor Analysis, Multidimensional Scaling
 - b. Case Study/ Exercises with Knime or R

6 Participation Requirement
none

7 7.1 Requirements for the award of credit points
Passed module exam, passed partial performance

7.2 Examination Form
(e.g. exam, oral examination, essay/paper, presentation, portfolio; length of examination in minutes)

25% Presentation (Marketing Conception) / 25% Exam (Marketing Conception) / 50 % Project

7.3 Requirements for admission to the examination

7.4 Importance of the mark for total mark

5% (6 CP of 120 CP)

*Die Prüfungsordnungen der Studiengänge finden Sie in den Amtlichen Bekanntmachungen der FH Münster unter dem folgenden Link
https://www.fh-muenster.de/hochschule/aktuelles/amtliche_bekanntmachungen/index.php?p=2.7.

8 8.1 Lecture Language
 German English Another, namely:

8.2 Module Supervisor:

Prof. Dr. Ralf Schengber

8.3 Lecturer

Prof. Dr. Ralf Schengber, Prof. Dr. Bert Kiel

Prof. Dr. Michael Bücken

8.4 Maximum number of participants

8.5 Supplementary information (optional)

Marketing Conception will be given in English and German. (in separate courses)

Recommended reading:

Jochen Becker; Marketingkonzeption, 2018
P. Kotler, K. Keller; Marketing Management, 2016
R.W. Palmatier, S.Sridhar; Marketing Strategy, 2017
T. Hastie, R. Tibshirani, J. Friedmann; The Elements of Statistical Learning, 2017
G. James, D. Witten, T. Hastie, R. Tibshirani; An Introduction to Statistical Learning, 2017
H. Wickham, G. Grolemund; R for Data Science, 2017
M. Bramer; Principles of Data Mining; 2016
M. Kuhn, K. Johnson; Applied Predictive Modeling, 2016
F. Provost, T. Fawcett; Data Science for Business, 2013