Minor Data Driven Decision Making in Business (MDD)

MDDF - Introduction to Data Mining

Part of Minor Data Driven Decision Making in Business

1. ***General information***	
Name of study unit	*Foundation*
Code for study unit	DATDRD05 / DATDRD06
Degree programme and target group	*Minor*
Teaching period	*P1*/P3
ECTS credits and Study load	**Study load:** *2.5* | ***Number of hours on the clock:*** *Scheduled contact time (X hrs per week)* | 15.75 *Time for self-study* | 54.25 ***Total study load (hours)*** | 70
Entry requirements for study unit	

2. **Content and organisation**	
Professional task	Describing and demonstrating the data science challenges and workflow for data driven decision making.
Exit qualifications / Programme Learning Outcomes (PLO)	WT1 – Use the process of thoughtful evaluation to deliberately formulate a reasonable conclusion. WT2 – Create innovative ideas in a changing business environment in a systematic fashion. WW4 Communicate (business) messages effectively and persuasively using advanced English to an (un)informed audience. TWM24 – Analyse a complex business problem in an international business setting with use of adequate research design, resulting in an evidence-based, feasible solution.
General description	Introduction to specific data science algorithms (quality of data and the logic of using a specific model are assumed). Students learn about the intuitive appeal of the various algorithms, and gain a better understanding of when, why, and how to use these techniques. The focus will be on models for classification and prediction (supervised learning).
Cohesion	This module provides relevant knowledge and skills in Data Science. The knowledge and skills are necessary for the execution of the project in this minor.
Mandatory participation	N/A
Maximum number of participants	30
Compensation options	N/A
Activities and/or instructional formats	*Lecturers, Self-study, workshops, team assignment(s)* .

Required literature / description of learning material	Provost, F., & Fawcett, T. (2013). Data Science for Business: What you need to know about data mining and data-analytic thinking. O'Reilly Media, Inc. "All material, except for the book stated above (Provost, F., & Fawcett), will be open source or freely available via the LMS (OnderwijsOnline)"
Required software / required materials	Python or other relevant software.
Extra contributions (TER 2.7)	N/A

3. ***Examination***	
Name (modular) exam	Introduction to Data Mining
Code (modular) exam	DATDRD05 / DATDRD06 [TOETS-06]
Assessment Criteria	The student is able to: - prepare data for a given non-linear model. - train and test a non-linear model. - evaluate the quality of a trained model
Exam and modular exam format(s) (type of exam)	Report.
Individual / group	Individual and group
Number of examiners	2
Exam period	P1 / P3
Resit period	P1/P3
Duration exam	N/A
Permitted resources / aids	N/A
Minimum result	5.5
Weight factor of modular exam	100%
Method of enrolment for exam / enrolment period	Participation is equal to enrolment.
Discussion and review	Yes. Contact the responsible lecturers once the grades are communicated.

Lecture/ contact hours										
	Period									
Lecture week	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
		3	3	3	3	3	3	3		

Changes compared to last year	several changes in most parts of the Study Unit.
Date from which the SU will no longer be offered	*N/A*