Course Descriptions None 2026-2027

Course Title	Analysing Unstructured Data
Course Code	EBC4223
ECTS Credits	5,0
Assessment	Whole/Half Grades

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
4	1-2-2027	25-3-2027		X			X

Level	Intermediate/Advanced
Coordinator	Niels Holtrop For more information:n.holtrop@maastrichtuniversity.nl
Language of instruction	English
Goals	After this course, students should be able to: 1.) Explain and work with the basic concepts of several structured and unstructured data types 2.) Explain and understand existing models and methods to analyse structured and unstructured data types published in the academic literature 3.) Evaluate existing models and methods published in the academic literature 4.) Identify suitable methods to analyse structured and unstructured data types 5.) Estimate a suitable model using empirical data and statistical software 6.) Interpret an estimated model, and draw managerial implications 7.) Develop their own models and provide interpretations thereof based on the learned methods and available data
Description	The digitalization of business has increased the amount of data available within organizations. Now firms and managers are faced with the task of creating insights from these new and increasing (in volume) sources of data. Challenges arise when we consider the nature of some these new forms of data. One issue we face is that data becomes increasingly unstructured (e.g., text and visual data), which requires different methods of analysis compared to classical (structured) data forms. Beyond that, thinking about how we can use such unstructured data in day-to-day business operations is also not apparent. Only when we are able to process these data and link them to business relevant outcomes can firms and managers benefit from new insights and can data create business value. In tandem, the rise of generative AI has also led to the possibillity to generate own text and visual data, besides using existing unstructured data. This is the main domain where the course Analysing Unstructured Data is situated. In this course, students will learn how to work with unstructured data forms (i.e., text and visual data), and become familiar with applications of these data types to business problems to understand how they can be used to inform managerial decision making. Weekly group assignments equip students with the R skills to perform analyses on unstructured data themselves.
Literature	A selection of articles/book chapters will be made available.
Prerequisites	Experience in R, such as gained in the course Business Analytics. Prior experience in business modelling and statistics is highly recommended (e.g. obtained in courses such as Business Analytics and/or Descriptive and Predictive Analytics)
Keywords	
Transitional Regulations	
Teaching methods	PBL / Presentation / Lecture / Assignment / Groupwork
Assessment methods	Attendance / Written Exam / Assignment
Evaluation in previous academic year	For the complete evaluation of this course please click http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM

This course belongs to the following programme / specialisation

Master Business Intelligence and Smart Services	Core Courses