

Course Descriptions None 2019-2020

Course Title	Smart Decision Support Systems																
Course Code	EBC4223																
ECTS Credits	5,0																
Assessment	Whole/Half Grades																
Period	<table><thead><tr><th>Period</th><th>Start</th><th>End</th><th>Mon</th><th>Tue</th><th>Wed</th><th>Thu</th><th>Fri</th></tr></thead><tbody><tr><td>5</td><td>14-4-2020</td><td>5-6-2020</td><td></td><td>X</td><td></td><td></td><td>X</td></tr></tbody></table>	Period	Start	End	Mon	Tue	Wed	Thu	Fri	5	14-4-2020	5-6-2020		X			X
Period	Start	End	Mon	Tue	Wed	Thu	Fri										
5	14-4-2020	5-6-2020		X			X										
Level	Advanced																
Coordinator	Niels Holtrop For more information:n.holtrop@maastrichtuniversity.nl																
Language of instruction	English																
Goals	<p>After this course, students should be able to:</p> <ol style="list-style-type: none">1.Explain and work with the basic concepts of several structured and unstructured data types2.Explain and understand existing models and methods to analyse structured and unstructured data types published in the academic literature3.Evaluate existing models and methods published in the academic literature4.Identify suitable methods to analyse structured and unstructured data types5.Estimate a suitable model using empirical data and statistical software6.Interpret an estimated model, and draw managerial implications7.Develop their own models and provide interpretations thereof based on the learned methods and available data																
Description	<p>With the increasing amount of data available within organizations, firms and managers are faced with the task of creating insights from these new and expansive sources of data. To make these insights accessible to end-users, firms have developed and used decision support systems (DSS) that aim to unlock data-driven insights for the use in day-to-day decision making. In general, DSS are software solutions that seek to combine data with analytical models in order to analyse these data and guide managerial decision making. This way, they create value for the firm. In this course we focus on developing the models underlying a DSS by combining data available to modern firms) with analytical techniques to analyse these data. The focus of the course is on unstructured data types such as text and image data, which can provide valuable insights for managerial decision making, but are hard to interpret without proper analysis. The focus of the course will therefore lie on developing models appropriate for the data at hand, and interpreting the results from these analyses in order to base decisions on.</p>																
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																	
Teaching methods	PBL / Presentation / Lecture																
Assessment methods	Attendance / Participation / Take home exam																
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 Course(s)																