

## Course Descriptions None 2026-2027

Course Title	Business Intelligence Case Studies																																										
Course Code	EBC4107																																										
ECTS Credits	6,5																																										
Assessment	Whole/Half Grades																																										
Period	Period	Start	End	Mon	Tue	Wed	Thu	Fri																																			
	5	12-4-2027	4-6-2027	X			X																																				
Level	Advanced																																										
Coordinator	Mohsen Pourpounehnafabadi For more information:m.pourpouneh@maastrichtuniversity.nl																																										
Language of instruction	English																																										
Goals	This course aims at providing students with tools and experience to analyse real-life data for a real-time, sensitive business intelligence case-study.																																										
Description	<p>This course is highly technical, and treats the practical aspects of producing real-life Business Intelligence, as well as covering the computational tools to implement this. Tools for the analysis of data are discussed, focusing on tools which emphasise the importance of uncertainty in intelligent decision-making. We study how (and how not) to build predictive models to frequently extract information from dynamic data, and how to interpret these methods and summaries intuitively and efficiently develop new services for the organisations that provide the data.</p> <p>These techniques will be implemented with the R open-source software. Cases are selected from the literature and our own research experience.</p>																																										
Literature	<p>* Kruschke, J. (2014). Doing Bayesian data analysis: A tutorial with R, JAGS, and Stan.          * <a href="https://mc-stan.org/users/documentation/">https://mc-stan.org/users/documentation/</a>          * Gelman, A., Carlin, J. B., Stern, H. S., Dunson, D. B., Vehtari, A., &amp; Rubin, D. B. (2013). Bayesian Data Analysis. CRC Press.          * Other materials will be made available through Student Portal.</p>																																										
Prerequisites	<p>* Basic Statistics          * Regression          * Basic R</p>																																										
Transitional Regulations	<p>&lt;div class="trreg"&gt;&lt;ul class="trcohorts"&gt;&lt;li&gt;Master Business Research - No specialisation&lt;/li&gt;&lt;li&gt;Master Business Research - Operations Research&lt;/li&gt;&lt;/ul&gt;&lt;ol&gt;&lt;li&gt;In 2024-2025 and 2025-2026 education and exam/resit opportunities are offered.&lt;/li&gt;&lt;li&gt;In 2026-2027 exam/resit opportunities are offered.&lt;/li&gt;&lt;li&gt;From 2027-2028 onwards, the course is cancelled.&lt;/li&gt;&lt;/ol&gt;&lt;table&gt;&lt;col style="width: 200px;"&gt;&lt;col style="width: 120px;"&gt;&lt;col style="width: 120px;"&gt;&lt;thead&gt;&lt;tr&gt;&lt;th&gt;Academic Year&lt;/th&gt;&lt;th&gt;Education&lt;/th&gt;&lt;th&gt;Exam/Resit&lt;/th&gt;&lt;th&gt;Replacement(s)&lt;/th&gt;&lt;/tr&gt;&lt;/thead&gt;&lt;tbody&gt;&lt;tr&gt;&lt;td&gt;2024-2025 - 2025-2026&lt;/td&gt;&lt;td&gt;X&lt;/td&gt;&lt;td&gt;X&lt;/td&gt;&lt;td&gt;&amp;nbsp;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;2026-2027&lt;/td&gt;&lt;td&gt;&amp;nbsp;&lt;/td&gt;&lt;td&gt;X&lt;/td&gt;&lt;td&gt;&amp;nbsp;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;2027-2028 onwards&lt;/td&gt;&lt;td&gt;&amp;nbsp;&lt;/td&gt;&lt;td&gt;&amp;nbsp;&lt;/td&gt;&lt;td&gt;&amp;nbsp;&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;&lt;/div&gt;&lt;div class="trreg"&gt;&lt;ul class="trcohorts"&gt;&lt;li&gt;Master Digital Business and Economics [2023-2024 and earlier]&lt;/li&gt;&lt;/ul&gt;&lt;ol&gt;&lt;li&gt;In 2024-2025, the course is cancelled.&lt;/li&gt;&lt;/ol&gt;&lt;table&gt;&lt;col style="width: 200px;"&gt;&lt;col style="width: 120px;"&gt;&lt;col style="width: 120px;"&gt;&lt;thead&gt;&lt;tr&gt;&lt;th&gt;Academic Year&lt;/th&gt;&lt;th&gt;Education&lt;/th&gt;&lt;th&gt;Exam/Resit&lt;/th&gt;&lt;th&gt;Replacement(s)&lt;/th&gt;&lt;/tr&gt;&lt;/thead&gt;&lt;tbody&gt;&lt;tr&gt;&lt;td&gt;2024-2025&lt;/td&gt;&lt;td&gt;&amp;nbsp;&lt;/td&gt;&lt;td&gt;&amp;nbsp;&lt;/td&gt;&lt;td&gt;&amp;nbsp;&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;&lt;/div&gt;</p>																																										
Teaching methods	PBL / Presentation / Lecture / Assignment / Groupwork																																										
Assessment methods	Final Paper / Participation / Presentation																																										
Evaluation in previous academic year	For the complete evaluation of this course please click <a href="http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM">http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM</a>																																										
This course belongs to the following programme / specialisation	<table border="1"> <tr> <td>Master Business Research - No specialisation</td> <td>In transition - Year 1 Disc IB Inf Mgmt Bus Int</td> </tr> <tr> <td>Master Business Research - Operations Research</td> <td>In transition - Year 1+2 Elective Courses</td> </tr> <tr> <td>Master Digital Business and Economics</td> <td>Cancelled - Elective Courses</td> </tr> <tr> <td>Master Economic and Financial Research - Econometrics and Operations Research</td> <td>Elective Courses</td> </tr> <tr> <td>Master Human Decision Science</td> <td>Elective Courses</td> </tr> <tr> <td>Master International Business - Accounting and Financial Analysis</td> <td>Elective Courses</td> </tr> <tr> <td>Master International Business - Entrepreneurship and Business Development</td> <td>Elective Courses</td> </tr> <tr> <td>Master International Business - Managerial Decision-Making and Control</td> <td>Elective Courses</td> </tr> <tr> <td>Master International Business - Information Management and Business Intelligence</td> <td>Compulsory Courses</td> </tr> <tr> <td>Master International Business - Marketing-Finance</td> <td>Elective Courses</td> </tr> <tr> <td>Master International Business - Organisation: Management, Change and Consultancy</td> <td>Elective Courses</td> </tr> <tr> <td>Master International Business - Strategic Corporate Finance</td> <td>Elective Courses</td> </tr> <tr> <td>Master International Business - Strategic Marketing</td> <td>Elective Courses</td> </tr> <tr> <td>Master International Business - Strategy and Innovation</td> <td>Elective Courses</td> </tr> <tr> <td>Master International Business - Supply Chain Management</td> <td>Elective Courses</td> </tr> <tr> <td>Master International Business - Sustainable Finance</td> <td>Elective Courses</td> </tr> <tr> <td>SBE Exchange Master</td> <td>Master Exchange Courses</td> </tr> <tr> <td>SBE Non Degree Courses</td> <td>Master Courses</td> </tr> </table>							Master Business Research - No specialisation	In transition - Year 1 Disc IB Inf Mgmt Bus Int	Master Business Research - Operations Research	In transition - Year 1+2 Elective Courses	Master Digital Business and Economics	Cancelled - Elective Courses	Master Economic and Financial Research - Econometrics and Operations Research	Elective Courses	Master Human Decision Science	Elective Courses	Master International Business - Accounting and Financial Analysis	Elective Courses	Master International Business - Entrepreneurship and Business Development	Elective Courses	Master International Business - Managerial Decision-Making and Control	Elective Courses	Master International Business - Information Management and Business Intelligence	Compulsory Courses	Master International Business - Marketing-Finance	Elective Courses	Master International Business - Organisation: Management, Change and Consultancy	Elective Courses	Master International Business - Strategic Corporate Finance	Elective Courses	Master International Business - Strategic Marketing	Elective Courses	Master International Business - Strategy and Innovation	Elective Courses	Master International Business - Supply Chain Management	Elective Courses	Master International Business - Sustainable Finance	Elective Courses	SBE Exchange Master	Master Exchange Courses	SBE Non Degree Courses	Master Courses
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