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 Pourpounehnajafabadi 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	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. These techniques will be implemented with the R open-source software. Cases are selected from the literature and our own research experience.
Literature	* Kruschke, J. (2014). Doing Bayesian data analysis: A tutorial with R, JAGS, and Stan. * https://mc-stan.org/users/documentation/ * Gelman, A., Carlin, J. B., Stern, H. S., Dunson, D. B., Vehtari, A., & Rubin, D. B. (2013). Bayesian Data Analysis. CRC Press. * Other materials will be made available through Student Portal.
Prerequisites	* Basic Statistics * Regression * Basic R
Transitional Regulations	<ul class="trcohorts"> - Master Business Research - No specialisation [2023-2024 and earlier] - Master Business Research - Operations Research [2023-2024 and earlier] - In 2024-2025 and 2025-2026 education and exam/resit opportunities are offered. - In 2026-2027 exam/resit opportunities are offered. - From 2027-2028 onwards, the course is cancelled. <table><col style="width: 200px;"><col style="width: 120px;"><col style="width: 120px;"><col><thead><tr><th>Academic Year</th><th>Education</th><th>Exam/Resit</th><th>Replacement(s)</th></tr></thead><tbody><tr><td>2024-2025 - 2025-2026</td><td>X</td><td>X</td><td> </td></tr><tr><td>2026-2027</td><td> </td><td>X</td><td> </td></tr><tr><td>2027-2028 onwards</td><td> </td><td> </td><td> </td></tr></tbody></table> <ul class="trcohorts"> - Master Digital Business and Economics [2023-2024 and earlier] - In 2024-2025, the course is cancelled. <table><col style="width: 200px;"><col style="width: 120px;"><col style="width: 120px;"><col><thead><tr><th>Academic Year</th><th>Education</th><th>Exam/Resit</th><th>Replacement(s)</th></tr></thead><tbody><tr><td>2024-2025</td><td> </td><td> </td><td> </td></tr></tbody></table>
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 http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM

This course belongs to the following programme / specialisation

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