

Course Descriptions Exchange 2022-2023

Course Title Business Intelligence Case Studies
 Course Code EBC4107
 ECTS Credits 6,5
 Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
5	17-4-2023	9-6-2023	X			X	

Level Advanced

Coordinator Roberto Cerina For more information: r.cerina@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 PLEASE NOTE THAT THE INFORMATION ABOUT THE TEACHING AND ASSESSMENT METHOD(S) USED IN THIS COURSE IS WITH RESERVATION. A RE-EMERGENCE OF THE CORONAVIRUS AND NEW COUNTERMEASURES BY THE DUTCH GOVERNMENT MIGHT FORCE COORDINATORS TO CHANGE THE TEACHING AND ASSESSMENT METHODS USED. THE MOST UP-TO-DATE INFORMATION ABOUT THE TEACHING/ASSESSMENT METHOD(S) WILL BE AVAILABLE IN THE COURSE SYLLABUS.

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

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	Year 1 Disc - IB Inf Mgmt Bus Int
Master Business Research - Operations Research	Year 1 Elective Course(s)
Master Business Research - Operations Research	Year 2 Elective Course(s)
Master Digital Business and Economics	Elective Course(s)
Master Human Decision Science	Elective Course(s)
Master International Business - Accounting and Business Information Technology	Elective Course(s)
Master International Business - Entrepreneurship and Business Development	Elective Course(s)
Master International Business - Managerial Decision-Making and Control	Elective Course(s)
Master International Business - Information Management and Business Intelligence	Compulsory Course(s)
Master International Business - Marketing-Finance	Elective Course(s)
Master International Business - Organisation: Management, Change and Consultancy	Elective Course(s)
Master International Business - Strategic Corporate Finance	Elective Course(s)
Master International Business - Strategic Marketing	Elective Course(s)
Master International Business - Strategy and Innovation	Elective Course(s)
Master International Business - Supply Chain Management	Elective Course(s)
Master International Business - Sustainable Finance	Elective Course(s)
SBE Exchange Master	Master Exchange Courses
SBE Non Degree Courses	Master Courses