

# Course Descriptions Exchange 2015-2016

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
2	26-10-2015	18-12-2015	X			X	
5	11-4-2016	3-6-2016	X			X	

Level Advanced

Coordinator Marianne Peeters For more information: [m.peeters@maastrichtuniversity.nl](mailto:m.peeters@maastrichtuniversity.nl)

Language of instruction English

Goals This skill aims at getting hands-on experience in analysing managerial decision processes, using available data, and using quantitative techniques for decision making.

Description This course treats the theory and practice of Business Intelligence. Tools for the analysis of data are discussed, as well as methods for discovering knowledge from information and using this knowledge for intelligent decision making.  
 The first part consists of applying up-to-date data mining techniques. These techniques will be implemented and used with Excel based software. We study how (and how not) to extract information from large data bases with techniques such as clustering, neural networks, and decision trees. Cases are selected from the literature and our own research experience; a financial institution develops a tool for mortgage acceptance .  
 The second part of the theory consists of Business Performance Management, including Quality Management, and business analytics. We create dash-boards on which management can base its strategic decisions. Cases are taken from Health care management, and hotel quality management. One case from practice is how yield maximization at Ryanair is performed; another one uses simulation to analyse the profitability of investments in a building for office rental. A third case analyses and optimizes the product portfolio of a telecom operator.  
 Note: a selection of four or five cases is made from the set mentioned here, and newly developed cases based on current topical developments.

Literature Text book for the first part: Data mining for business intelligence, by Shmueli et al. Articles available through ELEUM.

Prerequisites Basic mathematics, statistics and finance.

Teaching methods PBL / Presentation / Lecture / Assignment / Groupwork

Assessment methods Final Paper / Participation

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	IB Electives
Master Business Research Track OR	IB Electives
Master Human Decision Science	Electives
Master International Business Track Accountancy	Electives
Master International Business Track Controlling	Electives
Master International Business Track Entrepreneurship	Electives
Master International Business Track Finance	Electives
Master International Business Track Information Management and Business Intelligence	Information Management & Business Intelligence
Master International Business Track Organisation	Electives
Master International Business Track Strategy and Innovation	Electives
Master International Business Track Sustainable Finance	Electives
Master Information and Network Economics	Business Electives
SBE Exchange Master	Master Exchange Courses
SBE Non Degree Courses	Master Courses