Course Descriptions None 2026-2027

Course Title	Decision Support Systems and Business Modelling
Course Code	EBC2088
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	Intermediate/Advanced
Coordinator	Andre Berger For more information:a.berger@maastrichtuniversity.nl
Language of instruction	English
Goals	Understanding the role and operation of decision support systems. Independent development of a decision support system. Master programming in Excel and the design of user interfaces in VBA for Excel.
Description	A decision support system (DSS) is a model-based or knowledge-based system intended to support managerial decision making in semi-structured or unstructured situations. A DSS is not meant to replace a decision maker, but to extend his/her decision making capabilities. It uses data, provides a clear user interface, and can incorporate the decision maker's own insights. During the course, you get acquainted with decision support systems, their use and their most important components. You learn how to design and develop a decision support system that facilitates decision making - in the context of a company or service provider - through specific selection criteria and constraints. This will require precise communication and efficient and harmonious cooperation between you and your teammate. Very importantly, you learn how to code in the programming language Excel VBA, in order to build a decision support system. This will help you develop and improve your skills in algorithmic thinking. In particular, you learn how create userforms, and how to use tools provided by the toolbox. You learn essential programming techniques and constructs such as loops, subs, functions and macros. All this knowledge will be very useful basically in any programming environment. In addition, you learn how to describe and present such a decision support system in the form of a report.
Literature	We will provide a reader with all necessary information. Other resources include, but are not limited to: * Albright, S. C. (2006). VBA for Modelers: Developing Decision Support Systems Using Microsoft Excel (2nd ed.). Duxbury Press. * Holsapple, C. W. and A. B. Whinston (1996). Decision Support Systems; a knowledge-based approach. West Publishing Company. * Mallach, E. G. (2000). Decision Support and Data Warehouse Systems. McGraw-Hill. * Sauter, V. (1997). Decision Support Systems. John Wiley & Sons inc. * Seref, M. M., R. K. Ahuja, and W. L. Winston (2007). Developing Spreadsheet-Based Decision Support Systems. Belmont, USA: Dynamic Ideas. * Turban, E. and J. E. Aronson (2007). Decision Support Systems and Intelligent Systems (8th ed.). Prentice Hall Business Publishing.
Prerequisites	* Basic mastery of Excel, or an alternative spreadsheet application: cell referencing, building formulas, use of logical functions. * This does not include mastery of VBA for Excel: training in VBA programming is part of the course. * An advanced level of English.
Transitional Regulations	<ul class="trcohorts"> - Bachelor Economics and Business Economics - Economics and Management of Information [2024-2025 or earlier] - Bachelor Economics and Business Economics - International Business Economics [2024-2025 or earlier] - From 2025-2026 onwards, education and exam/resit opportunities are offered. Alternative options may be available. See the Bachelor EER 2025-2026 Appendix I Article 16 for more information. <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>2025-2026 onwards</td><td>X</td><td>X</td><td>See the Bachelor EER 2025-2026 Appendix I Article 16 for more information</td></tr></tbody></table>
Teaching methods	Lecture / Groupwork / Coaching
Assessment methods	Final Paper / Assignment / 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

Bachelor Economics and Business Economics - Economics	Year 3 Quantitative Economics Electives
Bachelor Economics and Business Economics - Emerging Markets	Year 3 Elective Courses
Bachelor Economics and Business Economics - Economics and Management of Information	In transition - Year 2+3 QE Electives
Bachelor Economics and Business Economics - Economics and Management of Information	Year 3 Quantitative Economics Elective
Bachelor Economics and Business Economics - International Business Economics	In transition - Maj Accounting - QE Elec
Bachelor Economics and Business Economics - International Business Economics	In transition - Maj Finance - QE Elec
Bachelor Economics and Business Economics - International Business Economics	In transition - Maj Inf Mgmt - QE Elec
Bachelor Economics and Business Economics - International Business Economics	In transition - Maj Marketing - QE Elec
Bachelor Economics and Business Economics - International Business Economics	In transition - Maj Org - QE Elec
Bachelor Economics and Business Economics - International Business Economics	In transition - Maj SCM - QE Elec
Bachelor Economics and Business Economics - International Business Economics	In transition - Maj Strategy - QE Elec
Bachelor Economics and Business Economics - International Business Economics	Year 3 Quantitative Economics Elective
Bachelor International Business - Emerging Markets	Year 3 Elective Courses
Bachelor International Business	Year 3 QE Elecs - Maj Accounting
Bachelor International Business	Year 3 QE Elecs - Maj Finance
Bachelor International Business	Year 3 QE Elecs - Maj Inf Mgmt
Bachelor International Business	Year 3 QE Elecs - Maj Marketing
Bachelor International Business	Year 3 QE Elecs - Maj Org
Bachelor International Business	Year 3 QE Elecs - Maj SCM
Bachelor International Business	Year 3 QE Elecs - Maj Strategy
SBE Exchange Bachelor	Bachelor Exchange Courses
SBE Exchange Master	Bachelor Exchange Courses
SBE Non Degree Courses	Bachelor Courses