

## Course Descriptions Exchange 2022-2023

Course Title Management Information Systems  
 Course Code BENC2007  
 ECTS Credits 5,0  
 Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
2	31-10-2022	16-12-2022		X		X	L

Level no level

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Language of instruction English

Goals After completing this course, students should be able to:  
 \* Explain what the major current and emerging technologies are that are revolutionising business information systems, and their significances  
 \* Identify potential pitfalls and trade-offs in the application of emerging IT technologies to business information systems and business intelligence  
 \* Critically evaluate uses of cutting-edge IT infrastructures in existing businesses  
 \* Assess the current state of design of a business IT infrastructure and recommend strategies for improving it to help businesses achieve their objectives  
 \* Fully explain the rationale for solutions suggested to improve business operations through the use of emerging technologies

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.

The emphasis of this course will be on introducing students to cutting-edge IT infrastructures and enterprise architectures that are leveraged globally by businesses of all sizes. Components of these infrastructures that will be studied include: High Performance Computing (HPC), cloud computing (e.g. Amazon Web Services and Microsoft Azure), edge computing, big data management, data streams, data lakes, data warehouses, blockchain and distributed computing, multiparty computation, Internet of Things (IOT), Industry 4.0, and sensors. We will also examine how the design choices in these infrastructures affect business intelligence, i.e., strategies for applying these technologies to achieve commercial objectives. The course will also cover considerations important for IT managers and Chief Information Officers (CIOs) such as cross-company data collaboration, process management, strategic decision making, data governance and the FAIR (findable, accessible, interoperable and reusable) principles.

Literature \* Essentials of MIS, 14th Edition, Pearson global, Kenneth C Laudon, Jane Laudon, 2020, ISBN-13: 9781292342733, e-Book  
 \* Ahead in the Cloud: Best Practices for Navigating the Future of Enterprise IT, Author: Stephen Orban, Publisher: CreateSpace Independent Publishing Platform, Publication Date: March 27, 2018, Number of Pages: 334 pages, Language: English, Binding: Paperback, ISBN-10: 1981924310, ISBN-13: 9781981924318  
 \* Data governance : how to design, deploy and sustain an effective data governance program, 2nd edition, 2019, John Ladley, ISBN: 9780128158326  
 \* Whitepapers, scientific articles, other reading materials and handouts

Prerequisites

Keywords

Teaching methods

PBL / Lecture

Assessment methods

Written Exam / Assignment

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 Business Engineering	Year 2 Elective Course(s)
SBE Exchange Bachelor	Bachelor Exchange Courses
SBE Exchange Master	Bachelor Exchange Courses