

Course Descriptions Exchange 2023-2024

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 | 30-10-2023 | 15-12-2023 | | X | | X | L |

Level no level
 Coordinator Rick Kaenen, Anant Joshi For more information: r.kaenen@maastrichtuniversity.nl; a.joshi@maastrichtuniversity.nl

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 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

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|-------------------------------|---------------------------|
| Bachelor Business Engineering | Year 2+3 Elective Courses |
| SBE Exchange Bachelor | Bachelor Exchange Courses |
| SBE Exchange Master | Bachelor Exchange Courses |