

MANAGEMENT INFORMATION SYSTEMS (MIS)

(37C00100, 6 ECTS)

SYLLABUS

Version 2 (02.03.2023)

Instructor's contact information	Course information
Johanna Bragge, PhD, Principal Univ. Lecturer johanna.bragge@aalto.fi Aalto BIZ, Ekonominaukio 1 Office Hours via Zoom (to be agreed via email) https://people.aalto.fi/johanna_bragge Teaching Assistant: Ly Nguyen (ly.h.nguyen@aalto.fi) <i>Address general course inquiries to Bragge</i>	BSc level core course in Information and Service Management (ISM) programme 2023, Period IV Lectures in Hall U8 (NO compulsory attendance required, lectures will be recorded if possible) Language of Instruction: English https://mycourses.aalto.fi/course/view.php?id=37001

1. OVERVIEW

Information technology and data have changed how businesses operate and succeed in today's global economy. Organizations can now use IT and data to transform themselves and achieve a tremendous competitive advantage. On the other hand, those organizations that are not mastering these assets might not exist in the near future. This course highlights how new technologies and data are changing the current business environment and what effect it has on today's students. The course addresses the major principles of Management Information Systems (MIS) in order to prepare managers to understand the strategic role of information technology and data in the digital economy. This course aims to give students what they need to succeed in the current digital economy. Contents of the course:

1. Information Systems and the Role of General and Functional Managers
2. Information Systems Defined
3. Organizational Information Systems and Their Impact
4. Digital Disruption and the Competitive Environment
5. Digital Transformation, Innovation, and Entrepreneurship
6. Strategic Information Systems Planning
7. Value Creation and Strategic Information Systems
8. Digital Value Creation
9. Digital Value Capture
10. Managing Information Systems
11. Creating Information Systems in the Digital Age
12. Information Systems Trends
13. Cybersecurity, Privacy, and Ethics

2. PREREQUISITES

No prerequisites.

3. LEARNING OUTCOMES

The course addresses the major principles of Management Information Systems (MIS) in order to prepare managers to understand the role of information technology and data in the digital economy. This course aims to give students the starters what they need to succeed in the current digital economy.

4. ASSESSMENT, GRADING AND EXAM FEEDBACK

1. Lectures at campus (some might be shifted to zoom if need arises), or recorded lectures 24+4 h
2. Assignments integrated to the lectures (60% of the grade, at least 30/60 points must be earned)
3. Exam (40% of the grade, at least 20/40 points must be earned). Feedback from the exam will be given via MyCourses and course news (generally) and via personal appointments to be agreed as needed.

5. **SCHEDULE** – Small changes are still possible! Note that two lectures are extra for interested, and arranged jointly with our Business Intelligence course, as we utilize Tableau Online tool in both

#	Date	Topic	Assignment DL's
1	28.2. Tue	Introduction to the MIS course & Chapters 1-2 (IS and the role of general and function managers; IS defined) / Bragge	3.3.2023
2	2.3. Thu	Collaborative IS and groupware technologies / Bragge	<i>other weekly</i>
3	7.3 Tue	Organizational change in the digitalization era–how to bring myth to life? / Business Design Lead Milja Nohynek, Zure Ltd. & Modern Work Lead Karoliina Kettukari, Meltlake (part of Futurice)	<i>deadlines are listed in MyCourses</i>
4	9.3. Thu	Knowledge work and knowledge management / PhD Antti Salovaara, Senior University Lecturer, Aalto ARTS, Department of Design	
5	14.3. Tue	The role of data in the modern business / Iiris Lahti, AI Roots, Founder	
6	16.3. Thu	Service design and human-centred design methods in healthcare Assistant Prof. Johanna Viitanen, Post-doc Kaisa Savolainen and Doctoral Researcher Paula Valkonen, Aalto SCI or Aalto ARTS	
7	21.3. Tue	Data, text and web-mining, data visualization / Bragge	
8	23.3. Thu	Beyond ERP–digital innovation driving sustainability transformation / Glen Koskela, Portfolio Strategy & Alliance, Uvance CX, Fujitsu NOTE: Watch Koskela's previous lecture recording (ERP & business applications) BEFORE attending or watching this new lecture! Log in to Panopto, don't use Safari: https://aalto.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=0952eabc-07b1-4fdb-bacf-ab5a00b33cc2	
9	28.3. Tue	Experiences from global e-Commerce and use of Business Intelligence at Reima / Heikki Lempinen, PhD, Head of Europe, Reima	
10	30.3. Thu	IT Security and Privacy / Mikko Karikytö, Chief Product Security Officer, and Dario Casella, Head of Product Privacy Office, Ericsson Finland.	
Ext ra	3.4. Mon at 10-12, BI course	Why Tableau? demo / Janne Lind, Lead Solutions Engineer, Tableau, a Salesforce company, <i>Joint lecture with our Business Intelligence course.</i>	Ekonominaukio 1, Hall V001-2
11	4.4. Tue	Challenges with big data analytics / Doctoral researcher Sampsa Suvivuo, ISM, Aalto BIZ	
Ext ra	5.4. Wed at 10-12 BI course	State of Business Analytics / Juha Teljo, Vice President of Solution Engineering in EMEA, Tableau, a Salesforce company.	Ekonominaukio 1, Hall V001-2
		EASTER BREAK 6.4. - 12.4.	
12	13.4. Thu	Course wrap-up and hints for the exam / Bragge	
	20.4. Thu	EXAM at 9-12 o'clock (online in MyCourses)	

#	Date	Topic	Assignment DL's
	8.6. Thu	RETAKE EXAM at 9-12 o'clock (online in MyCourses)	

6. ASSIGNMENTS

The assignments are done independently by the students according to assignment instructions. Discussion with peers is allowed and encouraged, but the submissions are individual. The assignments consist of a variety of tasks: article reviews, easy coding and database querying exercises, chatbot building, data literacy essentials, data exploration & visualization, research profiling study using library's literature databases and analyzing the results with text-mining. Students earn several badges by completing the assignments.

Small changes are possible!

Nr.	Assignment	Deadlines	Max points
1	Business technology trend reports 2023	Fri 3.3.	6
2	Python programming starters	Fri 10.3.	10
3	SQL data management language for querying databases	Fri 17.3.	6
4	Building your own chatbot (IBM Watson assistant)	Fri 24.3.	10
5	Data Literacy for All (resource by Tableau)	Tue 28.3.	6
6	Exploring and visualizing data with Tableau Online	Fri 31.3.	10
7	Research profiling with Scopus and Text-mining with Leximancer (or an alternative tool)	Fri 14.4.	10
Diary	Course diary in MyCourses (short reflections on the tools and assignments)	Fri 14.4.	2
Extra	Answering to Aalto's course feedback survey	wks 15-17	2
	Above assignments, diary and feedback survey in total		62
Bonus	Points from being present at guest lectures at campus, (or in zoom in case the live lecture is shifted to zoom. 1 bonus point / guest lecture	Thu 7.4.	10

7. COURSE BOOK

Piccoli, G. and Pigni, F. (2021): Information Systems for Managers **Without Cases**, Edition 5.0
ISBN: 978-1-943153-85-5 (e-textbook) or 978-1-943153-86-2 (paperback)

<https://www.prospectpressvt.com/textbooks/piccoli-information-systems-for-managers-5-0>

OR Edition 4.0 from 2019

<https://www.prospectpressvt.com/textbooks/piccoli-information-systems-for-managers-4-0>

Paperback: [Availability](#) in Aalto Learning Centre

8. COURSE WORKLOAD

Classroom hours and/or recorded lectures	24+4h
Class/video lecture preparation	10h
Assignments	92h
Preparing for exam	30h
Total	160h (6 op)

9. ETHICAL RULES

Aalto University Code of Academic Integrity and Handling Violations Thereof

See <https://into.aalto.fi/display/ensaannot/Aalto+University+Code+of+Academic+Integrity+and+Handling+Violations+Thereof>

10. OTHER ISSUES

- Registration to course and to re-exam: Via Sisu
- Course policies: Due to the large amount of students and assignments in the course, the assignment deadlines are strict – however, you may submit your assignment 2 days late but there is a sanction involved (-1 point). Turnitin plagiarism software will be used for text-based assignments.