SUBJECT DATASHEET

Management information systems (MIS)

BMEGT20MN68

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name
Management information systems (MIS)

ID (subject code)   BMEGT20MN68

Type of subject
contact lessons

Course types and lessons

Type	Lessons
Lecture	2
Practice	0
Laboratory	0

Type of assessment
term grade

Number of credits
3

Subject Coordinator

Name	Position	Contact details
Dr. Kis Gergely	assistant professor	kis.gergely@gtk.bme.hu

Educational organisational unit for the subject
Department of Management and Business Economics

Subject website
https://edu.gtk.bme.hu/

Language of the subject
magyar - HU, angol - EN

Curricular role of the subject, recommended number of terms
Programme: **Master of Science Program in Finance**
Subject Role:
Recommended semester: **3**

Programme: **MSc in Management and Leadership**
Subject Role:
Recommended semester: **3**

Programme: **Master of Science Program in Finance**
Subject Role:
Recommended semester: **4**

Programme: **Master's programme in Management and Leadership from 2019/20/Term 1 (Autumn term start)**
Subject Role:
Recommended semester: **4**

Direct prerequisites

Strong	Nincs/There isn't
Weak	Nincs/There isn't
Parallel	Nincs/There isn't
Exclusion	Nincs/There isn't

Validity of the Subject Description
Approved by the Faculty Board of Faculty of Economic and Social Sciences, Decree No: 580387/26/2025 registration number. Valid from: 2025.05.28.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

Generally, information and communication technologies (ICT) are approached as „black boxes" inside of which is not really accessible for other business areas. This is the reason why the main objective of this course is to familiarize students with what is happening inside the "black box" and show how ICT is managed in businesses. We put a strong emphasis on demonstrating how companies increase their competitiveness with ICT solutions and how they can improve efficiency in their business functions. We introduce contemporary technology innovations and those mechanisms which drive new business models, organizational change, and the transformation of managerial decisions. During the course, on the one hand, the conceptual foundations of information management are discussed. On the other several cases, examples and illustrations are presented how digital transformation works in practice. Students are enabled by several assignments to indulge in their own concrete cases, both to study digital transformation and to design new business models or strategies.

Academic results

Knowledge

1. Can use of terminologies and concepts of management information systems.
2. Understand of information system development and management methods.
3. Get familiar with the contemporary ICTs and how they support business processes.
4. Understand digital transformation.
5. Get familiar with data driven management, and its relevance in achieving effectiveness and efficiency.

Skills

1. Are able to use the concepts to analyze, renew, and critically assess information systems.
2. Are able to create practical suggestions for ICT strategies.
3. Are equipped with skills to develop arguments and high level plans for digital transformation..
4. Can work together with ICT experts, developers in projects.

Attitude

1. Will be receptive to the use of new IT tools.
2. Understand the application possibilities of 21st century technological innovations.

Independence and responsibility

1. Are able to work independently under general supervision, and continue learning new skills in the field of MIS.
2. Can actively participate in the sessions and projects.
3. Are able to take responsibility for their own actions, deliverables and decisions.

Teaching methodology

Lectures, oral and written communication, application of IT tools and techniques during the lectures and individual exercises.

Materials supporting learning

- Nemeslaki András (2012): Vállalati Internetstratégia, Akadémiai Kiadó, Budapest. ISBN 9789630591898 (this is not applicable in the English programs)
- Laudon and Laudon (2019): Management Information Systems: Managing the Digital Firm, Pearson, New-York. ISBN-13: 978-0135191798
- Digitális transzformációról szóló HBR tanulmányok, valamint HBS esettanulmányok (case studies). (HBR papers and HBS case studies along with study notes and handouts by the instructors.)

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules
The learning outcomes stated in point 2.2 are assessed based on the completion of a midterm and an optional extra task.

Performance assessment methods
Detailed description of the performance evaluations carried out during the term: The subject is assessed through a midterm. The midterm
is written online and can be completed for a maximum of 100 points. In addition to the 100 points, 25 extra points can be collected during the semester, which will be added after reaching a minimum of 50% from the midterm. The extra points can be collected during lectures through class activity or as a result of an assignment to be submitted (the requirements of which are announced by the instructor at the beginning of the semester).

Percentage of performance assessments, conducted during the study period, within the rating
- **Midterm**: 100
- **Bonus tasks**: 25
- **Total**: 100

Percentage of exam elements within the rating

Conditions for obtaining a signature, validity of the signature
There is no obligation to obtain a signature.

Issuing grades

Excellent	91
Very good	88-90
Good	75-87
Satisfactory	62-74
Pass	50-61
Fail	0-49

Retake and late completion
The midtermcan be replaced (retaken) twice during the retake period, the second time with the payment of an additional fee. Due to the nature of the optional assessment (points earned with extra tasks), it cannot be replaced, retaken.

Coursework required for the completion of the subject

Attendance at classes	42
Preparing for classes	16
Preparing a project assignment	16
Independent study of selected written material and exam preparation	16
Total	90

Approval and validity of subject requirements
Consulted with the Faculty Student Representative Committee, approved by the Vice Dean for Education, valid from: 05.05.2024.

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term
To achieve the stated learning outcomes, the course consists of the following thematic blocks.

1 Information Systems in Global Business.

2 Information Systems: Organizations and Strategy.

3 Technology and Society: the constructivist approach to IT management.

4 IT Infrastructure and Emerging Technologies.

5 Foundations of Business Intelligence: from Data to Information and Decision.

6 Networks, wireless and ubiquitous technologies.

7 Security and privacy – privacy paradox.

8 Management Systems: Operational Excellence.

9 Management Systems: Customer Intimacy.

10 Management Systems: Digital Markets and Digital Goods.

11 Management Systems: Knowledge Management and Decision Support.

12 Building Information Systems, IT project management.

13 Leadership of IT and to role of IT in leadership.

14 Summary.

Additional lecturers

Dr. Nemeslaki András   egyetemi tanár / university professor   nemeslaki@mvt.bme.hu

Kulcsár Imre Gábor   Ph.D. hallgató   imre.kulcsar@outlook.com

Approval and validity of subject requirements