



SUBJECT DATASHEET

Management Information Systems

BMEGT20MN56

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name

Management Information Systems

ID (subject code)

BMEGT20MN56

Type of subject

contact lessons

Course types and lessons

<i>Type</i>	<i>Lessons</i>
Lecture	2
Practice	0
Laboratory	0

Type of assessment

exam grade

Number of credits

3

Subject Coordinator

Name *Position* *Contact details*

Dr. Nemeslaki András professor nemeslaki.andras@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 - ENG

Curricular role of the subject, recommended number of terms

Programme: **MSc in Engineering Management**

Subject Role: **Compulsory elective**

Recommended semester: **2**

Direct prerequisites

Strong None

Weak None

Parallel None

Exclusion None

Validity of the Subject Description

Approved by the Faculty Board of Faculty of Economic and Social Sciences, Decree No: 580884/8/2023 registration number. Valid from: 29.11.2023.

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. 1 ISBN 9789630591898 (this is not applicable in the English programs)
- Laudon and Laudon (2019): Management Information Systems: Managing the Digital Firm, Pearson, New-York. 1 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

Assessment of the learning outcomes described under point 2.2. is based on both midterm and exam period assessments.

Performance assessment methods

Detailed description of the performance evaluations carried out during the term: Lecture participation (50%): the participation and activity of the students are evaluated by the lecturers at the end of the term. Max points attainable: 50. Volunteered home assignment (50%): 10-12 slides in a PowerPoint Presentation. Topic: discussed at the beginning of the term in the first lecture. Max points attainable: 50. With the fulfilment of the 2 criterion mentioned above, 100% exam-proportion is attainable. So, the exam is avoidable with the lecture participation and the home assignment. Detailed description of the performance evaluations carried out during the exam period: Exam: 1. Written performance assessment: The exam mainly consists of multiple choice and case study questions. Max points attainable: 100.

Percentage of performance assessments, conducted during the study period, within the rating

- Lecture participation: 50
- Home assignment: 50
- Total: 100

Percentage of exam elements within the rating

- Written performance assessment: 100
- Total: 100

Conditions for obtaining a signature, validity of the signature

No midterm requirement for the signature.

Issuing grades

Excellent	91
Very good	87,5-90
Good	75-87
Satisfactory	62-74,5
Pass	50-61,5
Fail	0-49

Retake and late completion

According to the Code of Studies

Coursework required for the completion of the subject

participation in contact lectures	42
preparing for lectures	14
preparing project work	16
learning of designated course materials and exam preparation	16
exam	2
total	90

Approval and validity of subject requirements

Consulted with the Faculty Student Representative Committee, approved by the Vice Dean for Education, valid from: 06.11.2023.

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

To achieve the learning outcomes set out in section 2.2, the course consists of the following areas and topics.

- 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. Danyi Pál egyetemi docens danyi.pal@gtk.bme.hu

Dr. Kis Gergely egyetemi adjunktus kis.gergely@gtk.bme.hu

Approval and validity of subject requirements