SUBJECT DATASHEET

Thesis 2

BMEGT20MN59

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name
Thesis 2

ID (subject code)	BMEGT20MN59

Type of subject
consultation lessons

Course types and lessons

Type	*Lessons*
Lecture	0
Practice	12
Laboratory	0

Type of assessment
term grade

Number of credits
15

Subject Coordinator

Name	*Position*	*Contact details*
Dr. Surman Vivien	associate professor	surman.vivien@gtk.bme.hu

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

Subject website
https://edu.gtk.bme.hu, https://edu.gtk.bme.hu/mod/gtkthesis

Language of the subject
magyar - HU, English - EN

Curricular role of the subject, recommended number of terms
Programme: **MSc in Engineering Management**
Subject Role: **Compulsory elective**
Recommended semester: **4**

Direct prerequisites

Strong	BMEGT20MN58
Weak	None
Parallel	None
Exclusion	None

Validity of the Subject Description
Consulted with the Faculty Student Representative Committee, approved by the Vice Dean for Education, valid from: 04.11.2024.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The purpose of preparing a thesis is to prove that the student has mastered the knowledge offered by the program, is able to think according to the concepts and structures learned and can apply the learned methods. In the thesis, the students demonstrate the critical application of the knowledge acquired in the engeneering and management fields, as well as their ability to identify and solve problems. According to the thesis topic (which must be related to some subjects of the program), a general or specific company problem must be worked out so that the student can develop a sufficiently well-founded solution proposal at the end of the thesis.

Academic results

Knowledge

1. The student knows the technical, economic, and management fields' basic concepts, knowledge, and main relationships.
2. The student knows the theory and methodology necessary to manage the operations of production and service systems.
3. The student knows the widely applicable problem-solving techniques necessary for research or scientific work.

Skills

1. The student is able to apply and make practical use of the acquired knowledge, and use problem-solving techniques.
2. The student is able to perform technical-economic decision preparation tasks and make decisions.
3. The student is able to formulate an appropriate criticism or opinion, make decisions, and draw conclusions.
4. The student is able to apply integrated knowledge from technical fields, technological processes, and management sciences.
5. The student is able to apply procedures, models, and information technologies used in the planning, organization, and operation of organizations.
6. The student is able to improve the quality and efficiency indicators of organizational operation, technical implementation, and management.

Attitude

1. The student is characterized by the desire for self-cultivation, self-development, and raising one's own knowledge to a higher level.
2. The student is characterized by intuition and methodical.
3. The student is characterized by advanced analyzing and synthesizing abilities.
4. The student is characterized by a success-oriented attitude combined with a sense of quality.
5. The student is characterized by a strong ethical attitude and a balance of critical and self-criticism during decision-making.

Independence and responsibility

1. The student is expected to have good communication and reasoning skills.
2. The student is expected to have problem-recognition and problem-solving skills.
3. The ability to search and process information independently is expected of the student.
4. The student is expected to be sensitive to the environment.
5. The student is expected to take the initiative, take personal responsibility, and make decisions.

Teaching methodology

The academic work consists of an assignment, individual research, consultations, thesis writing, and presentation.

Materials supporting learning

- A dolgozatírásra vonatkozó szabályok, útmutatók a gtk.bme.hu, illetve az edu.gtk.bme.hu oldalon kerülnek közzétételre. A kutatómunkához szükséges szakirodalmi és további ismeretszerzési lehetőségek kijelölése és összegyűjtése a konzultációk és önálló munka keretében történik.
- The rules and guidelines for thesis writing are published on gtk.bme.hu and edu.gtk.bme.hu. The selection and collection of literature and additional knowledge acquisition opportunities necessary for the research takes place in the framework of consultations and independent work.

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

The performance in the subject is evaluated based on the entire semester's work (preparedness for consultations, individual work, activeness
during the semester, presentation) and its output (thesis).

Performance assessment methods

The student receives continuous feedback from the supervisor about the presented work and its partial results during the consultations and presentation. If the student participated in the required number of consultations and duly documented them, as well as fulfilled the oral reporting obligation, the result of the semester's work is decided by the supervisor as detailed in point 3.3.

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

- **Preparedness for consultations and activeness during the semester**: 5
- **Performance and preparation for the presentation**: 15
- **Compliance of the submitted thesis with the published regulations**: 10
- **Professional (both management and engineering) content and quality of submitted thesis**: 70
- **Total**: 100

Percentage of exam elements within the rating

Conditions for obtaining a signature, validity of the signature

Issuing grades

Excellent	95
Very good	88-94
Good	75-87
Satisfactory	62-74
Pass	50-61
Fail	0-49

Retake and late completion

The thesis submission cannot be retaken. There are no correction options after submission.

Coursework required for the completion of the subject

Consultation	30
Individual research	300
Participation in the presentation, preparation for it	20
Thesis writing	100
Total	450

Approval and validity of subject requirements

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III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

Subject without contact classes.

Additional lecturers

Approval and validity of subject requirements