



# **SUBJECT DATASHEET**

## **Thesis 1**

### **BMEGT20MN64**

# I. SUBJECT DESCRIPTION

## 1. SUBJECT DATA

### **Subject name**

Thesis 1

### **ID (subject code)**

BMEGT20MN64

### **Type of subject**

a study unit without contact hours

### **Course types and lessons**

<i>Type</i>	<i>Lessons</i>
Lecture	0
Practice	12
Laboratory	0

### **Type of assessment**

term grade

### **Number of credits**

15

### **Subject Coordinator**

<i>Name</i>	<i>Position</i>	<i>Contact details</i>
Dr. Surman Vivien	associate professor	surman.vivien@gtk.bme.hu

### **Educational organisational unit for the subject**

Department of Management and Business Economics

### **Subject website**

[edu.gtk.bme.hu](http://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: **3**

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### **Direct prerequisites**

**Strong** specializációra besorolás/enrolled to specialisation

**Weak** nincs/none

**Parallel** nincs/none

**Exclusion** nincs/none

### **Validity of the Subject Description**

Approved by the Faculty Board of Faculty of Economic and Social Sciences, Decree No: 5881478/13/2024 registration number. Valid from: 11.12.2024.

## 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 engineering and/or 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 basic concepts, knowledge, and main relationships of the technical, economic, and management fields.
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

#### 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 attitude.
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 student is expected to have the ability to search and process information independently.
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, consultations, individual research, thesis writing, and presentation.

### Materials supporting learning

- A dolgozatíráásra vonatkozó szabályok, útmutatók a [gtk.bme.hu](http://gtk.bme.hu), illetve az [edu.gtk.bme.hu](http://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](http://gtk.bme.hu) and [edu.gtk.bme.hu](http://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 the consultations, individual research, 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 content (management and/or engineering) 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 can be made up during the retake period. There is no correction options after submission.

#### Coursework required for the completion of the subject

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

#### Approval and validity of subject requirements

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

# **III. COURSE CURRICULUM**

## **THEMATIC UNITS AND FURTHER DETAILS**

### **Topics covered during the term**

A study unit without contact hours.

### **Additional lecturers**

### **Approval and validity of subject requirements**