SUBJECT DATASHEET

Fundamentals of value methodology

BMEGT20MN61

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name
Fundamentals of value methodology

ID (subject code)	BMEGT20MN61

Type of subject
contact lessons

Course types and lessons

Type	*Lessons*
Lecture	1
Practice	1
Laboratory	0

Type of assessment
term grade

Number of credits
3

Subject Coordinator

Name	*Position*	*Contact details*
Dr. Bíró-Szigeti Szilvia	associate professor	szigeti.szilvia@gtk.bme.hu

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

Subject website
edu.gtk.bme.hu

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: **0**

Direct prerequisites

Strong	None
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 the course is to acquaint the students with the foundations and practical application of value methodology (recorded in an international standard). During the completion of the subject, students have the opportunity to obtain the Student Certification of the international organization of Value for Europe.

Academic results

Knowledge

1. Students get to know the main relationships of knowledge in the technical, economic and management fields.
2. Students get to know the operating principles of organizations as purposeful systems.
3. Students learn about technical, economic and management activities in organizations and their connections.
4. Student learn the basics of value management.

Skills

1. Students will be able to apply and make practical use of the acquired knowledge and use problem-solving techniques.
2. Students will be able to perform technical and economic decision preparation tasks and make decisions.
3. Students will be able to develop and implement innovation plans.
4. Students will be able to perform the tasks of value analysis.
5. Students will be able to improve the quality and efficiency indicators of organizational operation, technical implementation, and management.

Attitude

1. Students become characterized by creativity and flexibility.
2. Students become characterized by good communication, reasoning and cooperation skills.
3. Students become characterized by problem recognition and problem-solving skills.
4. Students become characterized by advanced analyzing and synthesizing ability.

Independence and responsibility

1. Students are expected to be intuitive and methodical.
2. Students are expected to have the positive attitude necessary for professional further education.
3. Students are expected to take the initiative, take personal responsibility, and make decisions.
4. Students are expected to be able to cooperate and participate in group work.

Teaching methodology

Lectures, exercises, and project work.

Materials supporting learning

- Poór J. (2016): Menedzsment-tanácsadási kézikönyv. Akadémiai Kiadó.
- Hoffer I. (2020) Funkcióstruktúrák az értékmódszertanban. Budapesti Corvinus Egyetem.
- SAVE International (2020): VM Guide: A Guide to the Value Methodology Body of Knowledge. SAVE International Paperback.
- SAVE International (2016): Function Analysis Guide.SAVE International Paperback.
- Lawrence D Miles Foundation (2008): Value Methodology: A Pocket Guide to Reduce Cost and Improve Value Through Function Analysis. GOAL/QPC, Inc.

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

Performance in the subject is based on mid-semester performance evaluations (project work, presentation).

Performance assessment methods

Project work: value and function analysis of a product/service, it has to be submitted until deadline to complete the subject.
Presentation:
oral presentation of the project work on the last week, participation is needed to pass the course.

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

- **Project work**: 75
- **Project work presentation**: 25
- **Total**: 100

Percentage of exam elements within the rating

Conditions for obtaining a signature, validity of the signature

Issuing grades

Excellent	95
Very good	90-94
Good	75-89
Satisfactory	60-74
Pass	50-59
Fail	0-49

Retake and late completion

The project can be (re)submitted until the replacement deadline (as retake or make-up). There is not retake for the retake. Due to its type, the project presentation cannot be replaced or improved.

Coursework required for the completion of the subject

Class work and its preparation time	40
Project work	35
Preparation for presentation	15
Total	90

Approval and validity of subject requirements

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III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

During the semester, students get to know the basics, purpose, tools, and application possibilities of the value method while they themselves use it in their own work.

1 Concept of value and function, value methodology, value analysis, value planning, value management.

2 Methods, approaches, standards, principles, driving forces used in value management.

3 Stakeholder theory, concepts of demand, goals and performance, hierarchy of objectives, preliminary risk analysis.

4 Creating a work group, the importance of multidisciplinary teamwork, team vs. group, team development.

5 Needs and functions, needs-function relationship matrix, classification and arrangement of functions, function models, model validation.

6 Individual and group methods of idea generation, grouping and development of ideas, concepts of idea and proposal.

7 Profitability calculations, life cycle cost calculation, decision methods, process development, risk management.

8 Presentation techniques, introduction and follow-up plan preparation, change management considerations, value culture in organizations.

Additional lecturers

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Approval and validity of subject requirements