SUBJECT DATASHEET

ESG workshop – Energy management

BMEGT42RRR5008-00

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name
ESG workshop – Energy management

ID (subject code) BMEGT42RRR5008-00

Type of subject
contact unit

Course types and lessons

Type	*Lessons*
Lecture	0
Practice	9
Laboratory	0

Type of assessment
mid-term grade

Number of credits
3

Subject Coordinator

Name	*Position*	*Contact details*
Dr. Buzási Attila	associate professor	buzasi.attila@gtk.bme.hu

Educational organisational unit for the subject
Department of Environmental Economics and Sustainability

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

Language of the subject
magyar - HU

Curricular role of the subject, recommended number of terms
Programme: **„ESG consultant**
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: 581015/11/2025 registration number. Valid from: 2025.11.26.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The aim of the course is to introduce various aspects of energy management (green energy, renewable energy, building energy, building management systems, AI-based data analysis and predictive methods) through a thematic workshop.

Academic results

Knowledge

1. The student knows the basic concepts of energy management in an ESG context.
2. Knows the green building rating systems.
3. Knows the role of building management systems in ESG.
4. Knows the role of artificial intelligence and data analytics in ESG.

Skills

1. The student is sble to collect and interpret energy consumption data from an ESG perspective.
2. Able to identify and prioritise energy efficiency projects.
3. Able to identify AI-based data analysis options.
4. Able to calculate and benchmark energy intensity indicators.

Attitude

1. Open to innovation: actively seeking and applying new technologies (e.g. AI, IoT) to achieve sustainability goals.
2. Applies data-driven thinking to decision making.
3. Recognises the importance of life-cycle energy optimisation.

Independence and responsibility

1. Able to independently plan and implement energy efficiency project steps.
2. Takes responsibility for the implementation of all related management tasks.

Teaching methodology

Practice – full-day workshop

Materials supporting learning

- Elméleti bevezető diasorok / Ppt slideshow about principles

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

The learning objectives detailed in 2.2 will be assessed by means of a summative assessment (one Moodle test).

Performance assessment methods

Detailed description of performance evaluations during the study period: Summative assessment (Moodle test): a complex, written evaluation
of the knowledge and ability-type competence elements of the subject during or after the workshop in the form of a Moodle test. The part of the curriculum serving as the basis for the Moodle test as well as the timeframe of filling out the test will be determined by the subject instructor.

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

- **Summative assessment**: 100
- **Total**: 100

Percentage of exam elements within the rating

Conditions for obtaining a signature, validity of the signature

-

Issuing grades

Excellent	91
Very good	85-90
Good	72-84
Satisfactory	65-71
Pass	50-64
Fail	0-49

Retake and late completion

1) Pursuant to the current CoS, each summative assessment can be retaken, repeated or completed late. 2) The summative assessments can be retaken, repeated or completed late for the first time during the late completion period free of charge. In the event of a retake, the new result always overwrites the old one. 3) If the student is unable to obtain a grade other than 'Fail' even with the retake, repeat and late completion possibilities according to point 1), they may make a second attempt to successfully complete the course after paying the fee specified in the regulations.

Coursework required for the completion of the subject

Attendance	9
Processing background materials and participation in summative assessment	20
Learning individually	20
Preparing	41
Total	90

Approval and validity of subject requirements

Consulted with the Faculty Student Representative Committee, approved by the Vice Dean for Education, valid from: 10.11.2025.

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

Subject includes the topics detailed in the course syllabus to ensure learning outcomes listed under 2.2. can be achieved.

1 Energy management – practical workshop

Additional lecturers

Dr. Szalay Zsuzsa egyetemi docens/associate professor szalay.zsuzsa@emk.bme.hu

Approval and validity of subject requirements