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
obtaining signature

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: 580387/26/2025 registration number. Valid from: 2025.05.28.

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 active participation in the workshop.

Performance assessment methods

Checking active participation in the workshop by means of an attendance sheet.

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

Percentage of exam elements within the rating

Conditions for obtaining a signature, validity of the signature

Active participation in the workshop. Signing the attendance sheet.

Issuing grades

Excellent	100
Very good	100
Good	100
Satisfactory	100
Pass	100
Fail	0

Retake and late completion

As the condition for obtaining a signature is active participation in the workshop, repeat, retake, and late completion are not po

Coursework required for the completion of the subject

Attendance	9
Processing background materials	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: 05.05.2024.

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