SUBJECT DATASHEET

Environmental Management Systems

BMEGT42M108

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name
Environmental Management Systems

ID (subject code)	BMEGT42M108

Type of subject
contact lessons

Course types and lessons

Type	*Lessons*
Lecture	4
Practice	0
Laboratory	0

Type of assessment
exam grade

Number of credits
5

Subject Coordinator

Name	*Position*	*Contact details*
Dr. Csuvár Ádám	assistant professor	csuvar.adam@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; angol - ENG

Curricular role of the subject, recommended number of terms

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: 580483/15/2026 registration number. Valid from: 24.06.2026.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The course aims at providing knowledge regarding the most important issues relating to contemporary corporate environmental management, factors influencing corporate behaviour and the tools available to enterprises. Students will be able to understand the role of environmental protection in corporate operations and corporate management systems and to evaluate the environmental performance of a company, to choose the appropriate environmental management tools.

Academic results

Knowledge

1. Knows the most important factors determining the company's environmental strategy; the possible types of strategies;
2. is aware of the importance of corporate environmental risks and their impact on environmental management;
3. knows the most important environmental protection trends (methods) used by companies, their advantages and disadvantages;
4. knows and can apply the various tools of corporate environmental management (environmental marketing, environmental performance evaluation) based on practical examples;
5. knows the basic principles, operating mechanism and building blocks of environmental management systems (EMS);
6. knows the process of introducing environmental management systems (EMS), its individual steps, and the related tasks of participants;
7. knows the natural-environmental areas and trends on which the company's operations have an impact;
8. knows the stakeholders and possible actors of environmental conflicts and understands the possible causes of confrontations;
9. has basic knowledge in resolving environmental conflicts;
10. knows the logic of state environmental regulation and its possible effects on the corporate sector;
11. is aware of the environmental economics bases and tools used in environmental management.

Skills

1. Is able to assess the environmental performance of company in a complex fashion;
2. recognises the basic features of environmental strategies, the factors determining strategy choice;
3. recognises the stakeholders of corporations and tasks related to them;
4. is able to see what natural and environmental areas the company has during its operation and how it has a negative impact;
5. is able to establish the steps for implementing environmental management systems (EMS) and the human resource requirements necessary for deployment at a principle level in relation to a company;
6. is able to recognize which corporate environmental protection trend can be linked to its industrial nature and industrial activity causing environmental problems;
7. is able to interpret and apply corporate environmental protection trends as part of the corporate environmental protection strategy;
8. is able to articulate what kind of environmental regulation philosophy prevails at the policy level and what consequences this has for companies.
9. Is capable of effective work in an international, multicultural environment. (EFMD-ILO connections: ML - Skills (KKK) - K3 - ILO 4: Teamwork)

Attitude

1. Open to a deeper understanding of company operations, its environmental aspects;
2. strives to solve problems by cooperation with others;
3. is critical about the role of social groups effected by environmental and social problems;
4. strives to understand complex systems.
5. Demonstrates a cultured, ethical and objective intellectual approach to people and social issues, while taking into consideration broader social, sectoral, regional, national and European values, including social, societal, ecological and sustainability considerations. (EFMD-ILO connections: ML - Attitude (KKK) - A2 - ILO 1: Communication)
6. Demonstrates a critical approach to their own work as well as that of their subordinates, while adopting innovative and proactive behaviour towards addressing economic issues. (EFMD-ILO connections: Finance - Attitude (KKK) - A1 - ILO 2: General literacy)

Independence and responsibility

1. Is able to independently assess corporate environmental performance;
2. show responsible thinking towards environmental and social issues in a company setting;
3. accepts critique with an open mind,
4. cooperates with fellow students to solve problems if needed;
5. the student is sensitive to the environmental context of emerging company problems;
6. is independently capable of searching for corporate sustainability reports and related corporate documents and using them intelligently, with a critical approach.
7. Independently selects and applies relevant problem-solving methods in areas of strategic and managerial importance to the organisation, and independently performs economic analysis, decision-support and advisory tasks. (EFMD-ILO connections: ML - Autonomy and responsibility (KKK) - F1 - ILO 2: Process control)
8. Is capable of making well-founded decisions, assumes responsibility for the consequences of those decisions, and for their social and environmental impacts. (EFMD-ILO connections: Finance - Autonomy and responsibility (Specific competences of the educational programme) - SpecF3 - ILO 3: Ethical decision making)

Teaching methodology

Lectures and practicals. Team work during classes and outside of classes. The use of infocommunication tools, company and other materials.

Materials supporting learning

- Kósi, K., & Valkó, L. (Szerk.). (2008). Környezetmenedzsment. BME–Typotex Kiadó. ISBN 963-9664-07-3
- Csutora, M., & Kerekes, S. (2004). A környezetbarát vállalatirányítás eszközei. KJK–KERSZÖV Jogi és Üzleti Kiadó Kft. ISBN 963 224 742 6
- Schaltegger, S., Burritt, R., & Petersen, H. (2003). An introduction to corporate environmental management: Striving for sustainability. Routledge. ISBN 978-1874719656
- Dragomir, V. D. (2020). Corporate environmental strategy: Theoretical, practical, and ethical aspects. Springer.
- Sardá, R., & Pogutz, S. (2019). Corporate sustainability in the 21st century: Increasing the resilience of social-ecological systems

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

The evaluation of the learning outcomes stated in point 2.2. is carried out during the study period based on two summative assessments (mid-term exams) and one fomrative assessment (group assignment). Based on these, a signature will be received and a proposed grade can be obtained.

Performance assessment methods

EFMD ILO implementation: Assessment of written technical language accuracy and structured reasoning in essay questions. Examination
of process analysis and planning tasks, decision-making situations. Measurement of the solution of management and marketing decision-making
situations. Examination of knowledge of ethical dilemmas and legal norms. Verification of knowledge of ethical norms and sustainability
concepts. Planning of communication between team members and externally; joint documents. Written and oral communication to a real
client; report and stakeholder management. Development of joint resource planning and management strategy. Cooperation, role-taking,
conflict management and group performance assessment. Validation of ethical aspects in joint decisions. Evaluation of cooperation, role-taking, conflict management. A. Detailed description of the performance evaluation during the study period: 1. Summative assessment:
a complex, written evaluation of the knowledge and ability-type competence elements of the subject in the form of a mid-term exam. The mid-term exam focuses on the assessment of the acquired knowledge and its application, so in addition to the precise knowledge of the concepts, it focuses on problem recognition and solutions. The course material on which the evaluation is based on is determined by the lecturer of the subject. 2. Formative assessment (group assignment): a complex evaluation method for the subject's knowledge, ability, attitude, and independence and responsibility competency elements, which takes the form of a group project assignment, the content, requirements, submission deadline, and evaluation method of which are determined by the instructor. B. Detailed description of the performance evaluation during the exam period: A complex, written evaluation of the knowledge and ability-type competence elements
of the subject in the frorm of a written exam. The exam focuses on the assessment of the acquired knowledge and its application, so in addition to the precise knowledge of the concepts, it focuses on problem recognition and solutions.

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

- **1st summative assessment**: 30
- **2nd summative assessment**: 30
- **formative assessment (group assignment)**: 40
- **total**: 100

Percentage of exam elements within the rating

- **Written exam (in absence of an offered grade)**: 100
- **total**: 100

Conditions for obtaining a signature, validity of the signature

The condition for obtaining the signature is the submission of the group work and obtaining half of the points that can be collected through the closed papers. The signature is valid according to the provisions of the CoS.

Issuing grades

Excellent	90
Very good	80–89
Good	70–79
Satisfactory	60–69
Pass	50–59
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 correction,
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. 4) If the student did not obtain the proposed grade during the study period, they have to take the exam during the exam period. 5) Pursuant to the current CoS, in the case of formative assessments, if the assignment was submitted on time, it is possible to repeat or retake it before the end of the late completion period, if the original task has already been accepted by the instructor. 5) Formative assessments can be submitted late, subject to payment of the special procedure fee specified in the regulations. The latest date for late submission is the last day of the late completion period. 7) Retake, repeat and late completion of exams is possible according to paragraphs 121 and 123 of the CoS.

Coursework required for the completion of the subject

contact lessons	56
preparation for classes during the term	14
preparation for summative assessments	15
preparation of assingment	35
preparation for exam	30
total	150

Approval and validity of subject requirements

Consulted with the Faculty Student Representative Committee, approved by the Vice Dean for Education, valid from: 04.05.2026.

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

In order to achieve the learning outcomes set out at point 2.2, the subject consists of the following thematic blocks. In the syllabi of the courses announced in each semester, these topics are scheduled according to the calendar and other conditions.

1 Environmental responsibilities of organisations (companies, institutions, households)

2 The tasks of company management in environmental protection (legal environment and self-regulation). The tools and techniques of environmental protection

3 Environmental risks and strategy

4 Evaluation of corporate environmental performance

5 The objectives, principles and structure of environmental management systems

6 Environmental foundations of organisational decisions - The role of environmental aspects and impacts, their significance in corporate decision making. Tools available to the evaluation of corporate environmental performance. Practical assignment based on a case study

7 The role of environmental auditing and performance evaluation in company management. The content of environmental assessment, its role in Hungarian practice and its impact on company operations. The use of SWOT analysis in corporate environmental protection. Practical assignment based on a case study

8 The implementation of an environmental management system in the European Union. The EMAS regulation and its requirements. Standardising environmental activities. The ISO14000 family of standards

9 Environmental policy and planning in environmental management systems

10 Environmental communication and training: requirements and practice. Types and content of environmental reports. Environmental reports as management tools. Evaluation of practical examples

11 Environmental marketing; eco-labeling systems

12 Environmental conflicts and their resolution

Additional lecturers

Dr. Kósi Kálmán	címzetes egyetemi tanár / honorary professor	kosi.kalman@gtk.bme.hu
Dr. Mazhar Waqas	egyetemi adjunktus / assistant professor	mazhar.waqas@gtk.bme.hu

Approval and validity of subject requirements