SUBJECT DATASHEET

Ethics for Engineers (part-time)

BMEGT41MSM8000-00

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name
Ethics for Engineers (part-time)

ID (subject code) BMEGT41MSM8000-00

Type of subject
contact lessons

Course types and lessons

Type	*Lessons*
Lecture	2
Practice	0
Laboratory	0

Type of assessment
seminar grade

Number of credits
2

Subject Coordinator

Name	*Position*	*Contact details*
Dr. Héder Mihály	associate professor	heder.mihaly@gtk.bme.hu

Educational organisational unit for the subject
Department of Philosophy and History of Science

Subject website
https://www.filozofia.bme.hu

Language of the subject
magyar - HU

Curricular role of the subject, recommended number of terms
Programme: **MSc in Infrastructural Engineering**
Subject Role:
Recommended semester: **3**

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: 580515/8/2024 registration number. Valid from: 26.06.2024.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The aim of the course is to prepare participants for the ethical issues arising from engineering work and the different roles of engineers, conflicts and to deal with them responsibly and effectively. The course introduces aspects of ethical decision-making. It presents ethical theories applicable to decision-making and discusses methods of rational decision-making. It provides knowledge that the ability to deal with moral, technical and economic issues together.

Academic results

Knowledge

1. Knowledge of the general and specific characteristics of the field, its boundaries, the main ethical issues and its links with related ethical issues.
2. Detailed knowledge of the ethical contexts, theories and the terminology that underpin them.
3. Knowledge of the specific ethical methods (knowledge acquisition and problem-solving) of the field, ways of developing the practical implications of theoretical issues.
4. A good knowledge of the ethical vocabulary of the field, the specific features of written and spoken communication: the most important forms, methods and techniques in the mother tongue and in at least one foreign language.
5. Possesses the range of ethical knowledge required for entry to doctoral studies in the field and in other fields of study.
6. Detailed knowledge of legal regulations and ethical norms in the field of the doctoral programme.

Skills

1. Carry out a detailed analysis of the different ethical concepts that make up the knowledge base of the field, synthesising and synthesising the broad and specific contexts and making an appropriate evaluation.
2. Identify specific professional ethical problems through a multifaceted, interdisciplinary approach, and explore and formulate the detailed theoretical and practical background necessary to solve them.
3. Applies ethical theories and related terminology in an innovative way to solve problems.

Attitude

1. Assumes the overarching and specific relationships, the professional identity, which constitute the specific character of its field, its personal and community role.
2. He/she takes decisions in new, complex and strategic decision-making situations, including unexpected life situations, in full respect of legal and ethical standards.
3. A well-developed professional identity and sense of vocation, which is shared with the professional and wider social community.
4. He/she has a good understanding of and represents the active citizenship and literacy elements that define the key issues in his/her field.
5. He/she embraces the principle that continuous professional socialisation and personal learning are at the service of the common good.

Independence and responsibility

1. In unexpected decision situations, he/she independently thinks through and develops comprehensive, substantiating professional questions on the basis of given sources.
2. Under professional guidance, thinks through and develops broad and specific professional issues on the basis of given sources.
3. Independently performs work with critical evaluation and continuous correction of work.
4. Participates responsibly in the development and justification of professional views
5. Assumes responsibility for the views that underpin the discipline.

Teaching methodology

Lectures

Materials supporting learning

- PPT-k a tárgy Moodle oldalán. / Slides availabe on Moodle.
- Harry J Gensler: Ethics A Contemporary Introduction. Routledge, 2018.

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

A tanulási eredmények értékelése egy évközi írásbeli teljesítménymérés alapján történik.

Performance assessment methods

Összegző tanulmányi teljesítményértékelés: a tantárgy és tudás, képesség típusú kompetenciaelemeinek komplex, írásos értékelési módja zárthelyi dolgozat formájában.

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

- **Összegző tanulmányi teljesítményértékelés**: 100
- **Összesen**: 100

Percentage of exam elements within the rating

Conditions for obtaining a signature, validity of the signature

Issuing grades

Excellent	90
Very good	85-90
Good	75-84
Satisfactory	65-74
Pass	50-64
Fail	0-49

Retake and late completion

A javítás és pótlás rendjét a hatályos TVSz. szabályozza.

Coursework required for the completion of the subject

részvétel a kontakt tanórákon	10
otthoni felkészülés az ismeretanyagból	25
felkészülés a teljesítményértékelésekre	25
összesen	60

Approval and validity of subject requirements

Consulted with the Faculty Student Representative Committee, approved by the Vice Dean for Education, valid from: 03.06.2024.

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

Az előadás célja az etikai keretrendszerek és azok jelentőségének bemutatása a mérnöki hivatásban, továbbá az etikai és kritikus gondolkodásmód és annak mérnöki döntéshozatali folyamatokban való alkalmazásának alapvető megértésének megalapozása

Additional lecturers

Sebestyén Marcell tudományos segédmunkatárs sebestyen.marcell@gtk.bme.hu

Approval and validity of subject requirements