SUBJECT DATASHEET

COMMUNICATION FOR ENGINEERING

BMEGT51A556

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name
COMMUNICATION FOR ENGINEERING

ID (subject code) BMEGT51A556

Type of subject
contact hours

Course types and lessons

Type	*Lessons*
Lecture	0
Practice	4
Laboratory	0

Type of assessment
term grade

Number of credits
4

Subject Coordinator

Name	*Position*	*Contact details*
dr. Tóth Péter	associated professor	toth.peter@gtk.bme.hu

Educational organisational unit for the subject
Department of Technical Education

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

Language of the subject
magyar-HU

Curricular role of the subject, recommended number of terms
Programme: **Vocational instructor BSc - Technical instructor specialisation (from 2021/22/Term 1)**
Subject Role: **Compulsory**
Recommended semester: **1**

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: 580251/13/2023 registration number. Valid from: 29.03.2023.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The aim of the course is to learn the basics of communication theory and figurative geometry, to develop appropriate drawing and drawing reading skills, to learn about standardization systems, the most important technical representation rules of various specialties and the use of a computer-aided drawing editing system. In parallel with learning the rules of representation, students also acquire the basic technical knowledge related to each product group.

Academic results

Knowledge

1. 1. Know the theoretical foundations of technical communication.
2. 2. Know the rules for making technical drawings. 3. You know the rules of symbolic representation.
3. 3. You know the rules of symbolic representation.

Skills

1. 1. Ability to read and interpret technical drawings.
2. 2. Ability to imagine the object in space based on a 2D figure.
3. 3. Able to create 2D figures with free hand, editing, using computer.
4. 4. Able to model simpler bodies in 3D.

Attitude

1. 1. Collaborate with the instructor and fellow students in expanding knowledge,
2. 2. In the case of group tasks, learning and working, he is determined, constructive, cooperative, proactive as both a leader and an executive.

Independence and responsibility

1. 1. It independently goes through tasks and problems and solves them based on specific sources.
2. 2. In group work, in order to achieve the goal, he mobilizes his theoretical and practical knowledge and abilities autonomously, in cooperation with (and sometimes directing) other members of the group.

Teaching methodology

Lectures, communication in writing and orally, use of IT tools and techniques, optional tasks prepared independently and in group work.

Materials supporting learning

- Tankönyvek, jegyzetek, letölthető anyagok
- Lovas László (szerk.) (2010): Műszaki ábrázolás I. BME KMK jegyzet, Budapest.
- Kovács Miklós (2013): Műszaki ábrázolás. SZE, Győr, elektronikus tananyag.
- Házkötő István (2006): Műszaki 2D-s ábrázolás. Műegyetemi Kiadó, Budapest.

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

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Performance assessment methods

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

- **1. részteljesítmény értékelés (1. házi feladat)**: 50
- **2. részteljesítmény értékelés (2. házi feladat)**: 50

Percentage of exam elements within the rating

Conditions for obtaining a signature, validity of the signature

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Issuing grades

Excellent	96
Very good	88-95
Good	75-87
Satisfactory	63-74
Pass	51-62
Fail	50%

Retake and late completion

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Coursework required for the completion of the subject

részvétel a kontakt tanórákon	56
Házi feladatra felkészülés	60
Egyéb felkészülés	4
Összesen	120

Approval and validity of subject requirements

Consulted with the Faculty Student Representative Committee, approved by the Vice Dean for Education, valid from: 13.03.2023.

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

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1 Kommunikáció fogalma, tárgya, ismeretelméleti, technikai és hatékonysági problémái. A műszaki kommunikáció célja, formái. Perspektivikus-, axonometrikus-, Monge-féle ábrázolás. Szakgrafika. Szabványosítási alapismeretek. Műszaki ábrázolási lehetőségek.Nézetek, metszetek szelvények, ábrázolási egyszerűsítések, méretmegadás.Jelképes ábrázolás, ISO tűrés-illesztési rendszer, a felületminőség paraméterei. Különböző rajzfajták. CAD alapismeretek

Additional lecturers

Approval and validity of subject requirements