



**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

<i>Type</i>	<i>Lessons</i>
Lecture	0
Practice	4
Laboratory	0

### Type of assessment

term grade

### Number of credits

4

### Subject Coordinator

<i>Name</i>	<i>Position</i>	<i>Contact details</i>
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

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

#### Skills

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

#### Attitude

1. Collaborate with the instructor and fellow students in expanding knowledge,
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. It independently goes through tasks and problems and solves them based on specific sources.
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

-

#### Issuing grades

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

#### Retake and late completion

-

#### 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