



**SUBJECT DATASHEET**

**BECOMING AN ENGINEER**

**BMEGT52A400**

# I. SUBJECT DESCRIPTION

## 1. SUBJECT DATA

### **Subject name**

BECOMING AN ENGINEER

### **ID (subject code)**

BMEGT52A400

### **Type of subject**

contact lessons

### **Course types and lessons**

<i>Type</i>	<i>Lessons</i>
Lecture	1
Practice	0
Laboratory	0

### **Type of assessment**

mid-term  
grade

### **Number of credits**

2

### **Subject Coordinator**

<i>Name</i>	<i>Position</i>	<i>Contact details</i>
Dr. Hercegfı Károly	associate professor	hercegfı.karoly@gtk.bme.hu

### **Educational organisational unit for the subject**

Department of Ergonomics and Psychology

### **Subject website**

<https://edu.gtk.bme.hu/course/view.php?id=1148>

### **Language of the subject**

magyar - HU

### **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 Education Committee of Faculty of Economic and Social Sciences (Valid from: 08.11.2021.)

## 2. OBJECTIVES AND LEARNING OUTCOMES

### Objectives

The subject aims to help the integration of first-year students of the Faculty of Electrical Engineering and Informatics and to develop the student culture. Facilitating the process of student socialization, adapting to university requirements. Content and form development of learning- and performance-related behaviours and knowledge presentation.

### Academic results

#### Knowledge

1. They know the history and current organizational structure of the Budapest University of Technology and Economics (BME) and the Faculty of Electrical Engineering (VIK). They have a picture of where BME is compared to universities around the world.
2. They know the basic concepts of the Bologna education system. They know the structure of their programme and its connection with MSc programmes.
3. They know the most important rules for their academic progress.
4. They know student rights and responsibilities.
5. They know who to turn to for legal and psychological advice.
6. They know some of the characteristics of the engineering profession. They know that there are basically different career paths ahead of them.
7. They know some guidelines for presentation techniques.
8. They know the concept of learning styles and is aware that different learning methods can lead to success due to differences between students. They get a picture of their own learning styles.
9. They know some concepts and some tools of atypical and informal learning.
10. They know some applications that support teamwork.
11. They know some basic concepts of psychology of teamwork. They know the roles of teamwork according to Belbin and get ideas of their own such abilities.

#### Skills

1. They are able to make simple and convincing presentations for their oral presentations.
2. Recognizing differences in learning styles can be used to help their own learning progress.
3. They recognize the differences in the roles of teamwork and the differences in these skills to work effectively in different learning and professional teams.
4. They are able to view their current activities in the light of the consequences they may have for later stages of their career.

#### Attitude

1. They are proud of their university and profession.
2. They behave ethically in their studies and working as an engineer.
3. They are sensitive to copyright issues.
4. With an interdisciplinary approach, they are open to the reception of human knowledge that will facilitate their successful studies and subsequent work as an engineer.
5. They are also demanding in their presentations.
6. They are sensitive to human differences. They need self-knowledge so that they can provide the best academic and professional work by knowing their own abilities.
7. They are success oriented.
8. They have career goals and know that they need to keep these under review.
9. They strive to build a personal brand.
10. They know that they should seek legal or psychological counselling if necessary.

#### Independence and responsibility

1. They assess their own skills independently and responsibly place them at the service of the workgroup and the wider profession.
2. In the cases of group work, they initiate the division of roles resulting in more efficient work, and accordingly take on the role themselves.

### Teaching methodology

Lectures, including guest lectures, independent homework with tests and assignments

### Materials supporting learning

- Benedek András (szerk.): Digitális pedagógia – Tanulás IKT környezetben. Typotex Kiadó, Budapest, 2008.
- Benedek András (szerk.): Digitális pedagógia 2.0, Typotex Kiadó, Budapest, 2013.  
[http://www.tankonyvtar.hu/hu/tartalom/tamop412A/2011-0023\\_DP/adatok.html](http://www.tankonyvtar.hu/hu/tartalom/tamop412A/2011-0023_DP/adatok.html)

# II. SUBJECT REQUIREMENTS

## TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

### General Rules

The assessment of the learning outcomes set out in point 2.2 is based on two assignments and completing psycho-logical tests at ho

### Performance assessment methods

Detailed description of assessments performed during the semester: summative assessment of learning performance: an assignment to prac-tice making a presentation; an assignment in the form of one or more microcontents on the history and/or present of the university, and completion of compulsory and optional psychological tests

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

- 1st assignment: 40%
- 2nd assignment: 40%
- Psychological tests: 20%
- total: 100%

### Percentage of exam elements within the rating

### Conditions for obtaining a signature, validity of the signature

#### Issuing grades

Excellent	>90
Very good	80-89
Good	70-79
Satisfactory	60-69
Pass	40-59
Fail	<40

#### Retake and late completion

Psychological tests can be replenished until the end of the replacement period by deducting 1 point per test. Assign-ments can be completed by the end of the replacement period with a deduction of 2-2 points per week (max. 20%) per task.

#### Coursework required for the completion of the subject

14  
46  
60

#### Approval and validity of subject requirements

# III. COURSE CURRICULUM

## THEMATIC UNITS AND FURTHER DETAILS

### Topics covered during the term

To achieve the learning outcomes specified in section, 2.2, the subject consists of the following thematic blocks. The syllabus of the specific course announced in each semester shall schedule these elements of topics according to the calendar and other circumstances.

- 1 Introduction. BME VIK. Issues of high school – university transition. System of higher education, education levels, curriculum mesh.
- 2 History of the university. Presence of the university.
- 3 Presentation techniques.
- 4 Learning methodology.
- 5 Collaboration, teamwork.
- 6 Rights and obligations as a student. Use of source works, citation, plagiarism. Copyright issues.
- 7 Success orientation. Time management. Counselling.
- 8 Career planning.
- 9 Guest lectures on engineering carriers.

### Additional lecturers

Molnár György	egyetemi docens	molnar.gyorgy@gtk.bme.hu
Sujbert László	egyetemi docens	sujbert@mit.bme.hu
Szabó Bálint	tanársegéd	szabo.balint@gtk.bme.hu
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### Approval and validity of subject requirements