



# **SUBJECT DATASHEET**

## **Sustainable Business Model Design**

**BMEGT42MN29**

# I. SUBJECT DESCRIPTION

## 1. SUBJECT DATA

**Subject name**

Sustainable Business Model Design

**ID (subject code)**

BMEGT42MN29

**Type of subject**

contact unit

**Course types and lessons**

| <i>Type</i> | <i>Lessons</i> |
|-------------|----------------|
| Lecture     | 2              |
| Practice    | 0              |
| Laboratory  | 0              |

**Type of assessment**

mid-term  
grade

**Number of credits**

3

**Subject Coordinator**

| <i>Name</i>       | <i>Position</i> | <i>Contact details</i>   |
|-------------------|-----------------|--------------------------|
| Dr. Szabó Mariann | senior lecturer | szabo.mariann@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; English - EN

**Curricular role of the subject, recommended number of terms**

Programme: **Engineering Manager Msc - Environmental management specialisation**  
Subject Role: **Compulsory for the specialisation**  
Recommended semester: **3**

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Programme: **Master of Science Degree Program in Engineering Management**  
Subject Role: **Compulsory for the specialisation**  
Recommended semester: **3**

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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: 580439/11/2024 registration number. Valid from: 29.05.2024.

## 2. OBJECTIVES AND LEARNING OUTCOMES

### Objectives

Upon successful completion of the course, participants will: 1. Understand the concept of business models and will be able to critically assess traditional and innovative business models, their underlying logic. 2. Will understand the factors that determine how companies – both international corporations and SMEs – form and renew their business models and what challenges have to be tackled along this process. 3. Will be able to define the most important elements of a sustainable business model for both start-up or incumbent companies.

### Academic results

#### Knowledge

1. The student understands the concept of business model, its relationship to business strategy;
2. understands the concept of Sustainable Development, its components and requirements;
3. understands the processes behind innovative business models;
4. understands the most important methods of business modeling;
5. understands the aspects determining the sustainability of business models;
6. understands the innovative business models prevailing in the economy;
7. understands the features of the sharing economy;
8. understands the relations of corporate social responsibility (CSR) and sustainable business models;
9. understands innovative business models on the financial markets.

#### Skills

1. The student is able to recognise the most important features of the business model of corporations;
2. is able to prepare a sustainability assessment of a business model;
3. is able to draw up a sustainable business model for a start-up or an incumbent organisation.

#### Attitude

1. The student is sensitive to social and environmental issues;
2. collects information regarding novel business solutions and is able to critically assess them;
3. is open to the use of information technology tools;
4. strives to take environmental and social aspects into account when making decisions.

#### Independence and responsibility

1. The student perceives the environmental and social responsibility of business leaders;
2. recognises those technological and organisational solutions, which provide economic, environmental and social benefits at the same time; is able to assess the limitations of different solutions;
3. is able to distinguish between private and social aspects and can harmonise them.

### Teaching methodology

Interactive lectures, case studies, business modeling practice, invited guest speakers

### Materials supporting learning

- Tankönyvek, jegyzetek, letölthető anyagok
- Zilahy Gy. Innovatív üzleti modellek és a társadalmi együttműködés új formái, in: Kisvárosok reneszánsza – a kőszegi példa, iASK, 2016
- Alexander Osterwalder - Yves Pigneur: Üzletimodell-építés kézikönyve, 2012, Cser Könyvkiadó és Ker. Kft., ISBN 9789632782201
- Hart, S.L. & Milstein, M.B., 2003. Creating sustainable value. Academy of Management Executive, 17(2), pp.56–67.
- Boons, F. & Lüdeke-Freund, F., 2013. Business models for sustainable innovation : state-of-the-art and steps towards a research agenda. Journal of Cleaner Production, 45, pp.9–19.
- Chesbrough, H., 2010. Business model innovation: Opportunities and barriers. Long Range Planning, 43(2-3), pp.354–363

## II. SUBJECT REQUIREMENTS

### TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

#### General Rules

The learning outcomes defined under point 2.2 are evaluated based on a presentation (formative assessment) and a homework assignment (formative assessment), the later completed based on the presentation and feedback from the lecturer.

#### Performance assessment methods

1. Formative assessment: presentation on a topic determined during the semester. 2. Formative assessment: preparation of a homework assignment based on the presentation and the feedback received, in order to evaluate knowledge and ability-type competence elements in a complex manner.

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

- Formative assessment (presentation): 30
- Formative assessment (homework assignment): 70
- Total: 100

#### Percentage of exam elements within the rating

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

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#### Issuing grades

|              |       |
|--------------|-------|
| Excellent    | 90    |
| Very good    | 80-89 |
| Good         | 70-79 |
| Satisfactory | 60-69 |
| Pass         | 50-59 |
| Fail         | 0-49  |

#### Retake and late completion

The presentation (formative assessment) can be replaced/retaken during the study period after prior consultation with the instructor, while the homework assignment (formative assessment) can be replaced/retaken or corrected during the late completion period - for the first time - free of charge. In case of improvement, out of the previous and the new result the more favourable result will be taken into account.

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

|                                       |    |
|---------------------------------------|----|
| participation                         | 28 |
| preparation for contact lessons       | 14 |
| preparation for formative assessments | 16 |
| autonomous learning                   | 32 |
| Total                                 | 90 |

#### Approval and validity of subject requirements

Consulted with the Faculty Student Representative Committee, approved by the Vice Dean for Education, valid from: 06.05.2024.

# III. COURSE CURRICULUM

## THEMATIC UNITS AND FURTHER DETAILS

### Topics covered during the term

In order to achieve the learning outcomes set out under 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 The concept and role of the business model in company operation
- 2 Typical types of traditional business models
- 3 Innovative business models and factors forcing their development
- 4 Environmental and social aspects of sustainable development as factors affecting business models
- 5 Business models aimed at protecting the environment
- 6 Business models focusing on social problems
- 7 Factors determining the market success of sustainable business models
- 8 Innovative management tools to implement sustainable business models
- 9 New technical solutions that establish sustainable business models
- 10 The limits of sustainable business models

### Additional lecturers

Bozsoki Fruzsina tudományos segédmunkatárs / junior research fellow bozsoki.fruzsina@gtk.bme.hu

### Approval and validity of subject requirements