



SUBJECT DATASHEET

DIGITAL TRANSFORMATION PROJECT

BMEGT20ML82

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name

DIGITAL TRANSFORMATION PROJECT

ID (subject code) BMEGT20ML82

Type of subject

contact lessons

Course types and lessons

<i>Type</i>	<i>Lessons</i>	<u>Type of assessment</u>	<u>Number of credits</u>
Lecture	1	term grade	
Practice	0		
Laboratory	0		3

Subject Coordinator

<i>Name</i>	<i>Position</i>	<i>Contact details</i>
Dr. Szádeczky Tamás	associate professor	szadeczky.tamas@gtk.bme.hu

Educational organisational unit for the subject

Department of Management and Business Economics

Subject website

<https://edu.gtk.bme.hu>

Language of the subject

magyar - HU

Curricular role of the subject, recommended number of terms

Programme: **MBA Master's Programme - Production and Service Analytics specialisation**

Subject Role: **Elective for the specialisation**

Recommended semester: **4**

Programme: **MBA Master's Programme - Business Development and Innovation specialisation**

Subject Role: **Elective for the specialisation**

Recommended semester: **4**

Programme: **MBA Master's Programme - Business Development and Innovation specialisation from 2021**

Subject Role: **Elective for the specialisation**

Recommended semester: **4**

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: 581046/15/2021. Valid from: 24.11.2021.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The aim of this course is to present the basic questions of the digitalizations and the network economics, challenges, opportunities. The students will get acquainted how the classical business processes can be transformed because of the ICT. At first we summarize the macroeconomic effects of the ICT-s, especially focusing on the productivity, economic growth and employment. In connection with this we will see the microeconomical characteristics of the digital or informational products, especially those business models that are important to companies. We will discuss in detail the pay-off of the ICT investments, the economical issues of the widespread platforms (app-s), and many aspects of the data economics. After dealing with the horizontal fields, we will discuss some vertical economic areas, like e-commerce, financial services, industrial development (Industry 4.0), and some typical effects on the public sector. Later we discuss some forward-looking areas of virtual new industrial opportunities, like e-sport or services regarding augmented reality. Beside the thorough discussion of micro- and macroeconomic concepts, we emphasize that the subject is managerial approached and no pre-requisites are needed.

Academic results

Knowledge

1. Know the economical and especially the financial models of the digital and network economics.
2. Know the basics of the business model creation, especially in modern digital ecosystem.
3. Know the analysing methods of the ICT investments and the creation of the related models for decision making.
4. Have an overview of the concept of the economical transformation of e-commerce, industrial development, public sector- and the managerial tasks related.
5. Understand the basics of the managerial and strategic way of thinking related ICT, and how ICT increase competi-tiveness in micro and macro level.

Skills

1. Are able to create and communicate digital business models.
2. Are able to calculate the pay-off of ICT investments, analyse simple ICT investments.
3. Are able to start consulting and creating concepts on the governmental and the organizational level of the analysis of digital transformation.

Attitude

1. Behave innovatively in developing organizations.
2. Are able to facilitate and seek consensus in multidisciplinary strategic environment (computer scientist, economist, financial expert, marketer, product developer, administration organizer)
3. Accept the dynamics of ICT economy and adapts to its economical effects.
4. Become conscious about valuing and sensing the “weak signs” of robotization, artificial intelligence, algorithmic economy.
5. Are receptive about accepting the state involvement, and able to cooperate on this.

Independence and responsibility

1. Are able to perform managerial decisions on certain areas of digital economy.
2. Able to responsibly take sides on the social effects of ICT.
3. Are independent, constructive and assertive in the fields of business development.

Teaching methodology

Lectures, individual tasks, groupwork

Materials supporting learning

- Nemeslaki A. (2020): Digitális transzformáció projekt, oktatási segédanyag, BME GTK, Budapest Tárgyfelelős által készített jegyzet és letölthető formában a tanuláshoz felhasználható az előadásokon bemutatott diasorozat és cikkek. A tárgyhoz kapcsolódó jegyzet és a bemutatott diasorozat a tantárgy Moodle oldaláról letölthető.

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

A 2.2. pontban megfogalmazott tanulási eredmények értékelése beadandó projektfeladat értékelése alapján történik.

Performance assessment methods

Projektfeladat csoportos és egyéni elemekkel 50-50%-ban. Ezek pontos követelménye létszám-függő. Az adott félévi követelményeket, a dolgozatok beadási határidejét az oktató az első kontaktórán kihirdeti és a félév elején a tantárgy honlapján közzéteszi. Teljes egészében szorgalmi időszak alapján történő teljesítés.

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

Percentage of exam elements within the rating

Conditions for obtaining a signature, validity of the signature

A tárgy teljesítése nem kötött aláíráshoz.

Issuing grades

Excellent	91-100
Very good	85-90
Good	70-84
Satisfactory	55-69
Pass	40-54
Fail	0-39

Retake and late completion

A TVSZ megfelelő paragrafusa szerint.

Coursework required for the completion of the subject

részvétel a kontakt tanórákon	6×2=12
félévközi készülés az órákra	12
projekt feladat elkészítése	42
kijelölt írásos tananyag önálló elsajátítása	24
összesen	90

Approval and validity of subject requirements

0

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

A 2.2. pontban megfogalmazott tanulási eredmények eléréséhez a tantárgy a következő tematikai blokkokból áll.

- 1 Bevezetés a digitális gazdaság és információgazdaság fogalmkörébe és jelentőségébe
- 2 A digitális termékek gazdaságtana
- 3 Platform gazdaságtan – kétoldalú piacok elmélete
- 4 Vállalati internet stratégia – e-business és digitális transzformáció
- 5 Az iparfejlesztés digitális gazdaságtana
- 6 Digitális iparágak működése

Additional lecturers

Dr. Danyi Pál	egyetemi docens	danyi.pal@gtk.bme.hu
Dr. Nemeslaki András	egyetemi tanár	nemeslaki.andras@gtk.bme.hu
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Approval and validity of subject requirements

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