



SUBJECT DATASHEET

PRODUCTION AND OPERATIONS MANAGEMENT

BMEGT20ML56

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name

PRODUCTION AND OPERATIONS MANAGEMENT

ID (subject code)

BMEGT20ML56

Type of subject

contact lessons

Course types and lessons

<i>Type</i>	<i>Lessons</i>
Lecture	3
Practice	0
Laboratory	0

Type of assessment

exam grade

Number of credits

5

Subject Coordinator

Name *Position* *Contact details*

Dr. Koltai Tamás professor koltai.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

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: 580884/8/2023 registration number. Valid from: 29.11.2023.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The aim of the course is to present the basic characteristics of production and service processes, as well as the basic methods necessary for the planning of production and service tasks and their efficient implementation. The course examines the regularities of both production and service systems. When discussing the curriculum, an overview of the theoretical foundations is aided by examples and case studies taken from practical application.

Academic results

Knowledge

1. Know the modern, theoretically demanding mathematical-statistical and modeling methods of problem recognition, formulation and solution, information collection and processing, as well as their limitations.
2. Know the planning and management rules of the enterprise, economic organization.

Skills

1. Are able to formulate independent new conclusions, original ideas and solutions, is able to apply demanding analysis and modeling methods, to develop strategies for solving complex problems, to make decisions.
2. Are able to identify special professional problems with a multifaceted, interdisciplinary approach, as well as to explore and formulate the detailed theoretical and practical background needed to solve them.
3. Develop an individual position based on their own analysis and defend it in a debate and are able to develop strategies for solving complex problems, to plan the solution, to make decisions.

Attitude

1. Are critical of their own work and the work of their subordinates, innovative and proactive in dealing with economic problems. Are open and inclusive to new achievements in economics and practice.
2. Strive to develop its knowledge and working relationships, and encourage, help and support their employees and subordinates.

Independence and responsibility

1. Independently select and apply the relevant problem-solving methods in areas of organizational policy, strategy and management.
2. Perform economic analysis, decision preparation and consulting tasks independently.

Teaching methodology

Lectures, computational exercises, optional independent and group assignments.

Materials supporting learning

- Kalló N. és Koltai T. (szerk.): Termelés- és szolgáltatásmenedzsment, oktatási segédlet, 2017
- Egyéb, az oktatók által kiadott oktatási segédletek (<https://edu.gtk.bme.hu>)
- Koltai T.: Termelésmenedzsment, Typotex, 2006
- MVT szerzői munkaközösség: Marketing – Fókuszban a termék, Typotex, 2017
- Kalló N. and Koltai T. (ed.): Production and service management, educational aid, 2017
- Other teaching aids issued by instructors (<https://edu.gtk.bme.hu>)
- Koltai T.: Production Management, Typotex, 2006
- MVT author work community: Marketing - Focus on the product, Typotex, 2017

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

A 2.2. pontban megfogalmazott tanulási eredmények értékelése a vizsgaidőszakban írásbeli vizsgával történik.

Performance assessment methods

A. Szorgalmi időszakban végzett teljesítményértékelések részletes leírása: - B. Vizsgaidőszakban végzett teljesítményértékelés (vizsga) A vizsga elemei: 1. írásbeli teljesítményértékelés: a félév során érintett témakörök elméleti háttérének és gyakorlati alkalmazásának ellenőrzése. A vizsgán elérhető 100 pont nagyobb részt a számítási példák megoldásával (85%), kisebb arányban az elméleti kérdésekre adott válaszokkal (15%) szerezhető meg.

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

Percentage of exam elements within the rating

- írásbeli vizsga: 100
- összesen: 100

Conditions for obtaining a signature, validity of the signature

Az aláírás megszerzésének nincs feltétele.

Issuing grades

Excellent	96
Very good	90–95
Good	75–89
Satisfactory	60–74
Pass	45–59
Fail	0–44

Retake and late completion

A TVSZ szabályainak megfelelően.

Coursework required for the completion of the subject

participation at contact lectures	28
individual learning of written materials	60
preparation for the exam	62
total	150

Approval and validity of subject requirements

Consulted with the Faculty Student Representative Committee, approved by the Vice Dean for Education, valid from: 06.11.2023.

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 A termelés- és szolgáltatásmenedzsment alapjai, története, specifikumai
- 2 A vevői igény előrejelzésének alapjai, projektív módszerei, értékelése
- 3 A kapacitás fogalma, főbb kapacitásmutatók. A rövidtávú kapacitások tervezése, a tanulási hatás figyelembe vétele. A hosszú távú kapacitások tervezésének problémái.
- 4 A készletgazdálkodás alapjai. Egyszerű EOQ modell. Beszállítási rátás EOQ modell. Mennyiségi árkedvezmények figyelembe vétele. Sztochasztikus EOQ modell.

Additional lecturers

Dr. Kalló Noémi egyetemi docens kallo.noemi@gtk.bme.hu

Approval and validity of subject requirements