



SUBJECT DATASHEET

BASICS OF QUALITY MANAGEMENT

BMEGT20A015

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name

BASICS OF QUALITY MANAGEMENT

ID (subject code)

BMEGT20A015

Type of subject

contact lessons

Course types and lessons

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

Type of assessment

term grade

Number of credits

5

Subject Coordinator

<i>Name</i>	<i>Position</i>	<i>Contact details</i>
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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; angol - ENG

Curricular role of the subject, recommended number of terms

Programme: **Business administration and management Bachelor's Programme from 2021/22/Term 1**

Subject Role: **Compulsory**

Recommended semester: **3**

Programme: **Engineering Management Bachelor's Programme from 2015/16/Term 1**

Subject Role: **Compulsory**

Recommended semester: **5**

Programme: **Engineering Management Bachelor's Programme from 2017/18/Term 1**

Subject Role: **Compulsory**

Recommended semester: **5**

Programme: **Engineering Management Bachelor's Programme 2010**

Subject Role: **Compulsory**

Recommended semester: **5**

Programme: **International Management Bachelor's Programme from 2018/19/Term 1**

Subject Role: **Compulsory**

Recommended semester: **3**

Programme: **International Management Bachelor's Programme from 2020/21/Term 1**

Subject Role: **Compulsory**

Recommended semester: **3**

Programme: **Business Administration and Management Bachelor's Programme from 2018/19/Term 1**

Subject Role: **Compulsory**

Recommended semester: **3**

Direct prerequisites

Strong Vállalatgazdaságtan I. (BMEGT20A006) - Business Economics I. (BMEGT20A006)

Weak None

Parallel None

Exclusion Minőségmenedzsment (BMEVEKFAL15) - Quality Management (BMEVEKFAL15) Minőségmenedzsment (BMEGT20ML11) - Quality Management (BMEGT20ML11) Minőségmenedzsment (BMEGT20ML32) - Quality Management (BMEGT20ML32) Minőségmenedzsment (BMEGT20ML49) - Quality Management (BMEGT20ML49) Minőségmenedzsment (BMEGT20MN03) - Quality Management (BMEGT20MN03)

Validity of the Subject Description

Approved by the Faculty Board of Faculty of Economic and Social Sciences, Decree No: 580427/8/2022. Valid from: 29.06.2022.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The Basics of Quality Management is a compulsory subject that introduces students to current issues of quality management, the fundamentals of Total Quality Management's management philosophy, and the most important quality techniques and methods used in developing and effective operation of quality systems. Tanulási eredmények – Learning outcomes

Academic results

Knowledge

1. Know the basic, comprehensive concepts, theories, facts, economic contexts of quality management concerning the relevant economic actors, functions and processes.
2. Know the concept of quality, its interpretation, its role in competitiveness,
3. Are familiar with quality management systems, the structure and operation of ISO 9001,
4. Know the principles of TQM, self-assessment models,
5. Are familiar with process development models, methods,
6. Know the basic concepts of reliability theory, the characteristics of error-free,
7. Know the logic and tools of process control.

Skills

1. Are capable of using the learned theories and methods, exploring, systematizing and analyzing facts and basic connections, formulating independent conclusions, critical remarks, making decision-making proposals, and making decisions in routine and partly unknown - domestic and international - environments.
2. Are able to analyze the company's technical/technological/administrative processes and systems from multiple aspects, to identify the problems, to explore the theoretical and practical background necessary for their solution, to formulate solutions (with learned practical application) to develop the processes.
3. Are to develop and operate the company's quality management systems efficiently.
4. Participate in projects, group work; after gaining practical knowledge and experience, lead, organize, evaluate and control the activity as a leader.
5. Present the formulated proposal and position orally and in writing, in Hungarian and foreign languages, according to professional communication rules.

Attitude

1. Collaborate with the instructor and fellow students in expanding the knowledge,
2. Are open to the use of information technology tools,
3. Have a comprehensive systems approach.
4. Demonstrate problem-sensitive, proactive behavior for quality work; are constructive, cooperative, proactive in projects and group work
5. Are receptive to new information, new professional knowledge and methodologies, open to new, independent and co-operative tasks and responsibilities; strive to develop their knowledge and work relationships, and work with their colleagues.

Independence and responsibility

1. Under professional supervision, independently carry out quality management tasks and problems, interpret and solve them based on given resources.
2. Are able to take responsibility for analysis, conclusions and decisions.
3. As part of a team, collaborate with their fellow students to solve tasks.
4. Use a systematic approach in their thinking.

Teaching methodology

Lectures, practical tasks, written and oral communication, IT tools and techniques, optional independent and group work, work organization techniques.

Materials supporting learning

- Kövesi J- Topár J.(szerk.): A minőségmenedzsment alapjai Typotex Budapest 2012.
- Tenner, A.R. - DeToro, I.J.: Teljes körű minőségmenedzsment TQM, Műszaki Könyvkiadó, Budapest, 2001, 2004.
- ISO 9001:2015 Minőségirányítási Rendszerek - Követelmények (ISO 9000 Standard)
- Kiran, D.R.: Total Quality Management key concepts and case studies, Elsevier, 2017.
- Ross, J.E.: Total Quality Management, St. Lucie Press, Delray Beach, 1993.
- Sower, V.E.: Essential of Quality with cases and experiential exercises, Wiley, 2011.
- Tenner, A.R. - DeToro, I.J.: Total Quality Management, Addison Wesley, 1993.
- Topár, J.: A minőségmenedzsment rendszerek fejlődésének néhány jellemzője a hazai vállalkozások-nál, Harvard Business Manager 4/2001 pp.50-57
- Topár J. 2015. A minőségmenedzsment rendszerek szerepe a szervezetek működésében (lehetőségek és gondok). Minőség és megbízhatóság, XLIX. 3-4., pp.159-168.

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

The assessment of the learning outcomes set out in point 2.2 takes the form of two mid-term written performance measurements (summative academic performance assessment) and a partial performance assessment (active participation and group work). The requirements of the course consist of two parts (I and II).

Performance assessment methods

I. During the semester, collecting minimum 27 points (45%) from the two written midterm tests (30-30 points). At least 6 points must be achieved on the midterms separately. II. Group assignments, participation in at least 50% of the practices. A total of $10 * 6 = 60$ points can be obtained in 10 practices, of which a maximum of 40 points will be taken into account. The preparation of the tasks must be done on one set task per team; the deadline for submission is the end of the practice. The teams' composition is voluntary, may vary from week to week, and there will be different requirements for its size from practice to practice. Participation in the practices is checked, minimum 50% participation is required. (This means 5 out of 10 practices. The condition for obtaining practical points is participation in the practices.)

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

- summative performance assessment: 30
- summative performance assessment: 30
- partial performance evaluation (active participation and group tasks): 40
- total: 100

Percentage of exam elements within the rating

Conditions for obtaining a signature, validity of the signature

Issuing grades

Excellent	93
Very good	88–92
Good	75–87
Satisfactory	62–74
Pass	50–61
Fail	50

Retake and late completion

1) For each mid-term performance evaluation, a minimum of 20% of the points must be achieved individually and 45% of the points out of the two midterms together. Both tests can be retaken. Midterms can be retaken at the time announced during the replacement week. In the case of retakes, the result achieved at the retake test are included in the final result. 2) Due to its nature, active participation cannot be in any ways replaced or retaken.

Coursework required for the completion of the subject

részvétel a kontakt tanórákon	56
félévközi készülés a gyakorlatokra	28
felkészülés a teljesítményértékelésekre	26
kijelölt írásos tananyag önálló elsajátítása	40
összesen	150

Approval and validity of subject requirements

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

To achieve the learning outcomes set out in section 2.2, the course consists of the following areas and topics. In the syllabuses of the courses announced in each semester, these topic elements are scheduled according to the calendar and other features.

- 1 The concept of quality, basics of quality management, the evolution of quality managementTotal Quality Management, total commitment and empowerment, differences between leader and managerCustomer focus, differences between products and services from a quality aspect, QFDProcess improvement models (DMAIC, PDCA, six-step process improvement)Process improvement methods and toolsBasics of Six Sigma and Lean managementReliability theoryQuality management systems, formalized QMS, ISOOrganizational self-assessment, self-assessment aspects, EFQM, quality awardsStatistical Process Control

Additional lecturers

Dr. Benedek Petra egyetemi adjunktus benedek.petra@gtk.bme.hu

Gerse-Krizsa Terez PhD hallgató krizsa.terez@gtk.bme.hu

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