Óbuda University **Donát Bánki Faculty of Mechanical and Safety Engineering**	Institute of Mechanical Engineering and Technology Department of Manufacturing Technology

Course title and code: Quality assurance BGXMBY6BNE, BGXMBE7BNE, BAGMB1ENND, BAGMB1KTNC **Credits: 2**

Full-time, **2024/2025** academic year. 1. Semester

Faculties in which the subject is taught: *Donát Bánki Faculty of Mechanical and Safety Engineering*

Lecturer instructor	**Gabriella Farkas, PhD**	Instructor	**Gabriella Farkas, PhD** **Georgina Nóra Tóth**

Prerequisites conditions (code)	-

Hours per week:	**Lecture: 1**	**Practice: -**	**Laboratory: 1**	**Consultation: -**

Semester closing way: (required)	**é – practice mark**

Curriculum

The objective of the course: This course gives an overview of the interpretation of the content and factors influencing quality and quality management.

Schedule

Educational weeks	Lecture	Exercise
week 1	Introducing the basics of quality. Quality management history, models of quality management.	Quality level assessment.
week 2	Tools and methods in the quality management I.	Quality level assessment.
week 3	Tools and methods in the quality management II.	Quality control tools 1.
week 4	Tools and methods in the quality management III.	Quality control tools 1.
week 5	ISO 9000 family. Quality audit.	Quality control tools 2.
week 6	Quality management systems (OH&S, Safety, Energy, Information).	Quality control tools 2.
week 7	Risk management and technics.	Risk assessment tools.
week 8	TQM, self-evaluation.	Risk assessment tools.
week 9	Statistical process control, capability and stability examinations I.	Statistical process control in practice.
week 10	Statistical process control, capability and stability examinations II.	Statistical process control in practice.
week 11	Automotive supplier standards, quality costs.	Special quality methods in practice.
week 12	Lean technology.	Special quality methods in practice.
week 13	Test	Replacement.
week 14	Replacement of test.	Replacement.

Conditions of getting practice mark:

- Compulsory on the 70 % of the exercise classes. Failure of this means no signature for the fulfilment of the semester. No opportunity to retry.
- Successful test (min 50 points, max 100 points).

Calculation practice mark: based on the result of test. Test contains the topics of the lectures and exercises. The test will be organized in time and place of the lecture.
Results: 0-49: 1 (fail); 50-62: (pass); 63-75: 3 (satisfactory); 76-88: 4 (good); 89-100: 5 (excellent)

Bibliography:

Course book:

1. László Berényi: Fundamentals of quality management, Lambert Academic Publishing, 2013
2. Thomas Pyzdek and Paul Keller: The Handbook for Quality Management, Second Edition; A Complete Guide to Operational Excellence; 2013
3. John Beckford: Quality: A Critical Introduction, Third Edition; Routledge; 3rd edition (October 29, 2009)
4. Juran, De Feo: Juran's Quality Handbook (6th Edition)
5. Special documents on the Moodle

Budapest, 04 June 2024

Gabriella Farkas, PhD
Lecturer instructor