

## Quality and Technical Management

Code: MK3MINMM04XX17-EN

ECTS Credit Points: 4

Evaluation: exam

Year, Semester: 3<sup>rd</sup> year, 1<sup>st</sup> semester

Its prerequisite(s): Microeconomics and Economical Processes of Enterprises for Engineers

Further courses are built on it: Yes/No

Number of teaching hours/week (lecture + practice): 2+2

### Topics:

The aim of the course is to provide students with a comprehensive picture of the organization's operations and the associated management and organizational roles and tasks. The aim of the course is to give students the opportunity to share with the company's quality management techniques, the application of which in the European Union, as well as in Hungary, is an essential element of market competitiveness.

### Literature:

*Compulsory:*

- Nick Milton, Patrick Lambe: The Knowledge Manager's Handbook, Kogen Page, London, 2016
- Ranulfo P. Payos, Ernesto G. Espinosa, Orlando S. Zorilla: Organization and Management, K12, 2016
- Ramani S: Improving Business Performance: A Project Portfolio Management Approach, CRC Press, 2016

### Schedule

<b>1<sup>st</sup> week Registration week</b>	
<b>2<sup>nd</sup> week:</b> <b>Lecture:</b> Basics of Quality management <b>Practice:</b> Analyze examples	<b>3<sup>rd</sup> week:</b> <b>Lecture:</b> The role of quality management in the industry <b>Practice:</b> PDCA project
<b>4<sup>th</sup> week:</b> <b>Lecture:</b> Process Management <b>Practice:</b> Create a flowchart	<b>5<sup>th</sup> week:</b> <b>Lecture:</b> Quality Planning <b>Practice:</b> Developing a Quality Plan
<b>6<sup>th</sup> week:</b> <b>Lecture:</b> Quality Management Methods I <b>Practice:</b> Ishikawa, Pareto Analysis, 5W	<b>7<sup>th</sup> week:</b> <b>Lecture:</b> Quality Management Methods II <b>Practice:</b> QFD, Kano model, 5s, 8D report
<b>8<sup>th</sup> week: 1<sup>st</sup> drawing week</b>	
<b>9<sup>th</sup> week:</b> <b>Lecture:</b> Engineering management <b>Practice:</b> Case study	<b>10<sup>th</sup> week:</b> <b>Lecture:</b> Company and its surroundings <b>Practice:</b> SWOT, Pestle analyzes
<b>11<sup>th</sup> week:</b> <b>Lecture:</b> Management functions, manager roles, tasks <b>Practice:</b> Situational tasks	<b>12<sup>th</sup> week:</b> <b>Lecture:</b> Organization Theory <b>Practice:</b> Process Development, Project Management
<b>13<sup>th</sup> week:</b>	<b>14<sup>th</sup> week:</b>

**Lecture:** Human Resource Management  
**Practice:** Recruitment, selection, work planning

**Lecture:** Innovation Management  
**Practice:** Business Plan

15<sup>th</sup> week: 2<sup>nd</sup> drawing week

## Requirements

### A, for a signature:

Participation at lectures is compulsory. Students must attend lectures and may not miss more than three of them during the semester. In case a student does so, the subject will not be signed and the student must repeat the course. Attendance at lectures will be recorded by the lecturer. Being late is equivalent with an absence. In case of further absences, a medical certification needs to be presented. Missed lectures must be made up for at a later date, being discussed with the tutor.

Students have to write two midterm tests during the semester. The first (40 points max) in the 8th, the second (40 points max) in the 14th week. At the end of the semester everybody will get a seminar grade on the basis of the following (score/grade): 0-39 = fail; 40-50 = pass (2); 51-60 = satisfactory (3); 61-70 = good (4); 71-80 = excellent (5).

If somebody fails then he has to write both tests in the 1st week of the exam period again. If the result is 40 points (50%) or better, then he can take an exam. If somebody has to repeat his midterm tests then his seminar grade can't be better than (2).

There will be homework from week to week. Only students who have handed in all their homework at the time of the midterm test will be allowed to write it. The problems in the midterm tests will be selected from the homework assignments.

### B, for a grade:

Everybody will get an exam grade for their exam. The final grade will be the average of the seminar and exam grade. If it is for example (3.5) then the lecturer decides if it is (3) or (4).