



## SUBJECT DATASHEET

<b>Semester:</b>	2009/10/1
<b>Subject:</b>	Quality Management in the Chemical Industry
<b>Code:</b>	VEMKTE3242M
<b>Responsible department:</b>	Department of Hydrocarbon and Coal Processing
<b>Responsible department code:</b>	MKOL
<b>Responsible lecturer:</b>	Dr. László Bartha

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### Educational objectives:

To get knowledges and limited experiences in field of quality management of the chemical industry and engineering.

### Detailed content of the subject:

1. The characteristics in the quality management in chemical industry. Quality properties of chemicals, and related products. 2. Specialty of the quality standards in the chemical industry. 3. Quality assurance in the research, product- and process development, and production processes. Quality improvement. 4. Quality systems. TQM methods of product and process design. 5. Quality tools in the practice. Basic statistical methods. 6. FMEA in process design. Statistical process control. Analysis of experiments. 7. Quality costs. 8. Product identification and labelling. Implementation of TQM systems. 9. TQM documentation. 10. Quality in the manufacturing. 11. Quality in the complex chemical plants with variable product structure. 12. Quality in the continuous chemical process industry. 13. Application of TQM methods in the service sectors. 14. Special quality systems. 15. Final examination paper (practical examples in the field of TQM).

### Requirements:

Types of Practical Exercises (Assignments) for Students: Solving of some typical problems related to the quality control or management of a given product or process of the Chemical Industry (team work). Examination Requirements and Questions: Examination paper is based on theoretical questions and practical examples. The marking are based in points and for the pass level minimum 50% of the total points are required.

### Required and suggested references:

1. J.M. Juran, F.M. Gryna: Juran's Quality Control Handbook. McGraw-Hill. Book Co. London, 1998. 2. R.L. Chase: Total Quality Management. IFS Publ./Springer-Verlag, 1990. 3. Horváth G.: Minőségbiztosítás a vegyiparban. Phare TDQM No. Hu-9305-4330/B1.