



## SUBJECT DATASHEET

<b>Semester:</b>	2010/11/2
<b>Subject:</b>	Quality Assurance
<b>Code:</b>	VEMKKVM412M
<b>Responsible department:</b>	Department of Environmental Engineering
<b>Responsible department code:</b>	MKKV
<b>Responsible lecturer:</b>	Zsófia Kovács

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### Educational objectives:

Introduction to the basics of quality issues. Methods. Legal aspects of quality assurance; quality management.

### Detailed content of the subject:

1. The environment as the subject of quality assurance, adapting the notions of quality assurance to the elements and systems of the environment and to the environment as a whole.
2. Description of independent factors (noise, vibration, radiation, chemical and biological threats of wastes).
3. Improvement of human life quality and its relation with the state of the environment.
4. Achieving the goals by management systems.
5. Applying statistical methods for quality control (MSZ EN ISO 10017): Descriptive statistics, design of experiments, hypothesis testing, measurement analysis, process capability analysis, regression analysis, reliability analysis, sampling, simulation, statistical process control (SPC) charts, statistical tolerance, time series analysis
6. Quality and environmental management systems auditing (MSZ EN ISO 19011).
7. The contribution of the CEN standardization to preserving the quality of the environment.

### Requirements:

Attending the lectures, preparing an essay, passing the written examination. Examination in the end-of-semester term. The grade can be also attained by writing a successful essay (50%) and written examination (50%).

### Required and suggested references:

- Kun-Szabó T. (szerk.): A környezetvédelem minőségszabályozása. Műszaki Könyvkiadó, Budapest, 1999.  
Hubbard, N., R.: Statistical Quality Control for the Food Industry (3d ed.). Kluwer Academic/Plenum Publishers), New York, Boston, Dordrecht, London, Moscow, 2003  
Tenner-DeToro: Teljes körű minőségmenedzsment, TQM (2. kiadás) Műszaki Könyvkiadó, Budapest, 1999  
Kuhlmann, A.: Amit a vállalkozónak a környezetvédelemről tudni kell. IKA, Budapest, 1993  
MSZ EN ISO 19011. MSZT, Budapest, 2003.  
MSZ EN ISO 10017. MSZT, Budapest, 2004.