Level: Specialist academic studies of chemistry

Course title: Quality Assurance of Analytical Measurements

Status: elective

**ECTS**: 15

## Requirements: none

## Learning objectives

To acquire necessary information on the principles of quality control and legal regulations, with particular attention to accreditation and certification processes.

## Learning outcomes

Student should be able to design and perform a quality-controlled experiment, with taking into account all necessary analytical considerations. Also, the student should be familiar with the legal aspects in quality control by application of adequate standards and other elements of legal regulations.

## Syllabus

Theoretical instruction

Quality management and control. TQM. Statistical analysis of results. Planning of experiments. Expert systems. Calibration of measuring instruments. Choice of optimal method of analysis. Estimation of quality of analytical procedure. Standardization and methods of quality control. Certification. Legal regulations. Accreditation of analytical laboratories.

Practical instruction

Project on quality control.

Weekly teaching load				Other:
Lectures: 5	Exercises:	Other forms of teaching:	Student research: 5	