

## t.QS - Qualitätssicherung - Methoden und Instrumente

**Person responsible for the course:** Andreas Ruckstuhl, rkst

**Credits:** 4

**Valid for:** 2011/2012

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### Learning objectives:

The students are familiar with the statistical methods used in quality assurance and can assess its appropriateness for the application at hand. Furthermore, they know the basic principles of planning experimental studies (design of experiment - DoE).

### Course content:

- Acceptance sampling for inspection by attributes (including sequential sampling) and for inspection by variables
- Statistical process control (SPC) including control charts (Shewhart charts, Acceptance charts, EWMA, CUSUM), operating characteristics and continuous sampling plans (CSP-1, CSP-2)
- Overview design of experiments (DoE) including factorial design and ANOVA
- Where applicable, corresponding ISO norms are introduced.

### Previous knowledge:

WST2

### Teaching method:

Type of lesson:	Number of lessons per week:
Lecture	14 x 2L
Tutorial/Practicum	14 x 2L
Group teaching	
Block instruction	
Seminar	

### Assessment:

According to the table or as specified in writing by the lecture at the beginning of the semester!

Number	Type	Weighting
1	End of term exam	0.75
2	Exam during the semester	0.25 (two exams)
	Further assessments	

### Language of instruction:

Deutsch

### Instruction material:

Handouts

### Comments:

The tasks in the exercises can be solved using either R or Matlab.