Level: PhD

Course title: Chemometrics (advanced course) (DSH-612)

Status: Elective

ECTS: 15
Requirements: None

Learning objectives

To provide broad and balanced knowledge in chemometrics. To provide students with in-depth knowledge on how to apply mathematical and statistical methods for the collection of high-quality experimental data and for their processing.

Learning outcomes

Mastered necessary knowledge that will enable the student to provide reliable data and their proper treatment in order to obtain reliable information.

Syllabus

Theoretical instructions

Statistics of repeated measurements. Significance tests. The quality of analytical measurements. Calibrations methods. Sampling theory. Experimental design and optimization. Signal processing. Multivariate analysis. Artificial intelligence. Expert systems.

Other forms of teaching

Project preparation.

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