

Applied Chemistry: Instrumental Analysis and Laboratory Management (M. Sc.)

At the beginning of the Master's programme, the students' knowledge in mathematics, physical chemistry, inorganic chemistry, organic chemistry and chemical analysis is clearly enhanced and extended in relation to the Bachelor's programme.

The following programme concentrates mainly on instrumental analysis, environmental analysis and its appropriate areas. Scientific work is integrated into the programme by introducing seminars (e.g. selected chapters of instrumental analysis I and II) and a senior seminar.

The students are introduced both theoretically and experimentally to the current research topics in the major field of study. In addition to the major field of study, some of the following compulsory optional modules and practical courses must also be completed: data processing, environmental technology, biochemistry, toxicology, computer science.

Incorporating the Master's programme into the faculty's main research area "Environmental Analysis and Environmental Protection Technology" enables students to apply the available knowledge.

The laboratory management and communication technology courses deliver the knowledge required for the qualified leadership of a laboratory using modern management methods. These key qualifications contribute substantially to the professional competence of new graduates.

The fourth semester is dedicated to the Master's thesis and viva voce.

The Master's thesis is usually an investigation based on real-life problems with a detailed description and explanation of the results. It aims to demonstrate that the student is competent to solve an ambitious problem both in scientific and specialised multidisciplinary methods within the fixed period.