Department of Applied Natural Sciences

Qualification Profile of the Study Programme in Analytical Chemistry and Quality Assurance

The study programme imparts methodological competences in instrumental analysis with emphasis on chemistry and biology under regulated conditions. These courses are complemented by classes in business management, law, and quality assurance. The study programme extends over 2 years, including an integrated master thesis and consists of modules that are weighted and marked according to the European Credit Transfer System (ECTS). Classes are taught in English as well as in German. During the first semester the curriculum comprises special fields in analysis, with such courses as quality assurance, pharmacology and toxicology, fundamentals of biology, and advanced analytical methods. Based on these courses, the 2nd and 3rd semesters comprise advanced modules in analytical quality assurance, advanced analytical methods, law, and business management in order to increase analytical, decision making, and social skills. The last major step of the study programme is the integrated master thesis carried out at an external institution. Alumni of the programme have acquired professional and interpersonal competences which enable them to organise complex projects in teams and to show leadership skills in the context of analytical quality assurance at a production plant. Due to its high practical relevance and the broad analytical focus in quality assurance systems the study programme enables the graduate to work for a broad range of companies doing analysis in chemistry in biology in regulated areas.