

The bachelor curriculum in "Technical Chemistry" will give the graduates a comprehensive and practice oriented education in the basics of chemistry and chemical technology as well as their numerous applications. The graduates will have well founded basic knowledge in technical and natural sciences with special emphasis on chemistry and more detailed knowledge in the area of their bachelor thesis. The curriculum creates a basis for any master programme in chemistry, chemical technology or any other natural/technical science master curriculum, or allows graduates to enter the market early with their bachelor qualification.

The graduates acquire

- basic knowledge and experience in the core areas of chemistry: inorganic, organic, analytical, physical and biological chemistry
- practical skills during laboratory courses
- consciousness for the transfer of chemical processes from the laboratory to the industrial plant
- generic skills which are applicable in many other contexts.

The graduates know

- basics in chemical terminology
- subject specific methods
- basic properties of materials, how to transform them, methods to synthesize and characterize them, as well as important figures from thermodynamics and kinetics to describe reactions.

Based on their knowledge they are able to evaluate and compare different chemical processes with regard to their industrial application (e.g. from an economical, environmental, or legal point of view).

The comprehensive practical education enables the students to deal with chemicals and apparatuses in a safe and responsible manner and they can assess the risks in connection with these. They are familiar with standard operations on laboratory as well as on industrial scale. The graduates perform experiments, observe these and document the results systematically and completely. They are able to interpret the obtained data and evaluate these on a broader context.

Eventually students know modern strategies and methods to acquire, use and convey information.