

The laboratory practical course "Practical Course Water Technology" offers students a hands-on experience in the core areas of water technology treatment. The main focus is to deepen and consolidate the theoretically acquired knowledge through practical application in a real laboratory environment.

Students are guided through the various key processes of water treatment in structured experiments.

These include:

Flocculation: here students learn how particles in water are aggregated by adding flocculants to make them easier to remove.

Membrane filtration: The application of membrane technologies for separation and purification is practically demonstrated here.

Scaling measurement using quartz microbalance: An in-depth understanding of the formation of deposits on surfaces and their measurement is taught in this experiment. The results of water chemistry calculations for the description of aquatic systems are compared with the experimental results

Adsorption equilibrium and kinetics: Here the students deal with the mechanisms of adsorption and the laws that apply to it.

Density measurement of activated carbons: The experiment provides students with knowledge on how to determine the density and porosity of activated carbon.