

Chemistry syllabus.

Entry qualification to the study Programme Bachelor of Engineering in Biotechnology.

Applicants should be aware that it is advisable that they are be able to demonstrate knowledge of and be able to do the following:

- Write up chemical formulas and reaction schemes.
- Understand the structure of the atom and periodic table.
- Perform quantity calculations in relation to reaction schemes and solutions.
- Naming inorganic and organic molecules and salts.
- Knowledge of the structure of inorganic and organic substances, properties, functional groups, isomerism, types of reaction.
- Knowledge of macromolecules.
- Chemical equilibria and respond to change.
- Acid-base chemistry, including calculation of pH of aqueous solutions of acids and bases.
- Precipitation and redox reactions, including balancing with oxidation numbers.
- Reaction speed on a qualitative basis, including catalysis.
- Use qualitative and quantitative experimental methods, including separation, simple synthesis, various types of titrations, weighing analysis, spectrophotometry and chromatography.