

ENV204 Environmental Chemistry

Department of Environmental Science and Engineering - Compulsory Course

Credit: 3 ECTS:6



Course Description: The "Environmental Chemistry" course explores the chemical processes and interactions that shape the environment. Students will comprehensively understand the chemical aspects influencing environmental quality by covering topics such as dissolved oxygen, biological and chemical oxygen demand, nitrogen and phosphorus cycles, sulfate, oil and grease, surfactants, gas analysis, and wastewater treatment. Participants will learn to address environmental challenges using chemical principles through lectures, discussions, and practical applications.

Course Outcomes:

- Understand the chemical dynamics of key environmental parameters, such as dissolved oxygen levels, oxygen demand, and pollutant concentrations.
- Analyze and evaluate the impact of pollutants like nitrogen, phosphorus, sulfate, oil, and grease on environmental systems.
- Apply knowledge of surfactants and gas analysis in the context of environmental chemistry.
- Evaluate wastewater treatment methods and their effectiveness in removing contaminants.
- Develop an awareness of the chemical processes influencing soil quality and composition.