Level: bachelor
Course title: Fundamentals of Chemical Technology

Status: obligatory

ECTS: 8

Requirements: none Learning objectives

Acquiring balanced and systematic knowledge of the fundamental principles of chemical technology and different technology operations. Learning the basic phenomena of transport and understanding ways of reasoning and terminology in this field.

Learning outcomes

Students should know how to use the terminology and explain the fundamental physical and chemical principles and processes; define the basic principles in the field of transport phenomena of momentum, heat and mass transfer; describe furnaces and explain chemical reactors.

Syllabus

Theoretical instruction

The study of the chemical - technological processes (HTP), rate and balance. Technological scheme, basic design, setting material and energy balance. Fluid flow, hydrodynamic basis. Transport of solids, gases and liquids. Heterogeneous fluid systems. Fluidization, filtration, sedimentation, classification, thickening, centrifugation.

Practical instruction

Practical instruction follows the theoretical instruction.

Weekly teaching load				Other:
Lectures:	Exercises:	Other forms of	Student research:	
3	3	teaching:		