

Level: bachelor				
Course title: Industrial processes				
Status: obligatory				
ECTS: 8				
Requirements: none				
Learning objectives Introduce students to the most prominent industrial processes responsible for environmental pollution.				
Learning outcomes Master the necessary knowledge of industrial processes in order to more comprehensively control environmental pollution and qualitatively perform environmental impact analysis for the proper operation of a plant.				
Syllabus <i>Theoretical instruction</i> Defining the term "best available techniques". Studying access selection techniques that are considered in determining the best available techniques to minimize the environmental impact of industrial processes within the plant / company. Study of separation (sedimentation, filtration, flotation and membrane processes), chemical (neutralization, chemical sedimentation, oxidation, coagulation and flocculation) and biological (aerobic and anaerobic) processes. Chemical and biological reactors. Technological processes of inorganic products such as bases, acids, salt and fertilizer. The process of extracting and processing minerals and metallurgy. Fundamentals of petroleum and petrochemical production. Synthesis of organic dyes. Plastics and chemical fibers. Industrial processes in leather production. Food production. Pulp and paper production. Production of chemical pesticides. <i>Practical instruction</i> Practical instructions are in compliance with the theoretical ones.				
Weekly teaching load				Other: /
Lectures: 3(45)	Exercises: 2(30)	Other forms of teaching: 2(30)	Student research: /	