Level: PhD
Course title: Selected topics in environmental protection
Status: elective
ECTS: 15
Requirements: none
Learning objectives Training students for independent management and control of processes in environmental protection, quality control of nature and waste water, waste gas and solid waste. Preparing students for independent decision-making and management of wastewater treatment processes.
Learning outcomes Complete understanding of the most important pollutants and sources of pollution. Independent selection and application of chemical processes in order to protect and improve the environment.
Syllabus *Theoretical instruction* Studying material balance and the main quality indicators of certain segments of the environment. Studying the processes that lead to pollution of the environment and the processes that affect the fate of pollutants in the environment. Emergence of waste streams (solid, liquid and gas), waste issues as global problems, potential for the reuse of various materials such as raw materials or energy sources. Reduction of emissions of pollutants into the environment: waste minimization, recycling and reuse, municipal and industrial wastewater treatment, control of particulate matter and gaseous pollutants emissions, reduction of emissions from motor vehicles. Control of waste treatment operations, wastewater treatment and control of particulate matter and gaseous pollutants emissions. Process control in closed landfills. Economic and legal basis for regulating environmental protection. *Practical instruction* follows the program of theoretical instruction.

Weekly teaching load				Other: **-**
Lectures: 5(75)	Exercises: -	Other forms of teaching: -	Student research: 5(75)	