

Level: Master				
Course title: Green remediation				
Status: elective				
ECTS: 5				
Requirements: none				
Learning objectives Critical application of knowledge in remediation technologies to developing "green" concepts for remediation strategy, involving processes, products and activities that have little or negligible effect on the environment.				
Learning outcomes After successfully mastering the course, the student can explain in detail "green remediation" techniques - remediation with minimal negative effects on the environment, and can calculate the mass and energy balance of basic green remediation processes.				
Syllabus <i>Theoretical instruction</i> The importance of green remediation in environmental protection. Environmental sustainability in remediation of contaminated sites (the life cycle of environmental impacts during remediation, improvement of existing methods in order to achieve remediation methods that can be called or methods belonging to green remediation). Development of methods for efficiency analysis of green remediation. Economic aspects of green remediation. Renewable energy (integration and optimization of renewable energy, low intensity energy). Selection and design of green remediation processes. Innovative technologies used to achieve green remediation (reactive barriers, phytoremediation, nano-technology). Methodology for the development of new technologies in order to achieve efficiency in green remediation. <i>Practical instruction</i> Practical teaching follows theoretical lessons.				
Weekly teaching load				Other:
Lectures: 2	Exercises:2	Other forms of teaching:	Student research:	