Title Wastewater Treatment Systems							Code 1010102221010130575		
Field								Year / Semester	
Environmental Engineering Second-cycle Studies								1/2	
Specialty							Course		
Water Supply, Water and Soil Protection									core
Hours								Number of credits	
Lectures:	2	Classes:	-	Laboratory:	2	Projects / seminars:	2		6
								Language	
								polish	

## Lecturer:

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### Faculty:

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### Status of the course in the study program:

Wastewater Treatment Systems

#### Assumptions and objectives of the course:

Knowledge of the quantify and quality characteristic of wastewater and sludge. Basic processes for wastewater and sludge treatment and principled of their design

### Contents of the course (course description):

Definition of wastewater treatment system. Factors affecting on choice of technology and equipment of wastewater treatment. Statistical analysis of flowrates, constituent concentrations and mass loadings. Individual homeowner and small community wastewater treatment systems. Biological processes for BOD removal and nitryfication, processes for nitrogen removal and processes for phosphorus removal. Sludge liquors treatment systems. Processes for treatment and disposal of wastewater sludge. Removal of air pollutants comes from wastewater treatment plants.

### Introductory courses and the required pre-knowledge:

Environmental Chemistry, Environmental Biology and Ecology, Wastewater Technology.

# Courses form and teaching methods:

Multimedial presentation

## Form and terms of complete the course - requirements and assessment methods:

Written examination, written tests, projects.

#### **Basic Bibliography:**

## Additional Bibliography: