

Title Atmosphere Protection Engineering	Code 1010101271010130373
Field Environmental Engineering First-cycle Studies	Year / Semester 4 / 7
Specialty -	Course core
Hours Lectures: 2 Classes: - Laboratory: 1 Projects / seminars: 1	Number of credits 5
	Language polish

Lecturer:

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Faculty:

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Status of the course in the study program:

Core course.

Assumptions and objectives of the course:

The understanding of specificity of the problems of atmospheric protection. Knowledge of processes and technology of the air pollutant emissions control; knowledge of the mechanism of pollutant dispersion in atmosphere.

Contents of the course (course description):

Model of the air pollution system. Sources of air pollution. Gaseous and particles pollutants: characteristic, measurement. Prevention of pollution; control technology and collector application. Characteristics of stack plumes. Pollutant dispersion and reactions in atmospheres, influence of meteorology and effects of topography. Air quality monitoring.

Introductory courses and the required pre-knowledge:

Environmental Protection, Physics, Environmental Chemistry, Fluid Mechanics I, Heat Engineering.

Courses form and teaching methods:

Lectures, Laboratories.

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

Exam, laboratories reports.

Basic Bibliography:

1. Bagieński Z.: System ochrony powietrza, zagadnienia wybrane, cz.I; PFP; 2003
2. Konieczyński J.: Oczyszczanie gazów odlotowych; Wyd. Politechniki Śląskiej, Gliwice 1993
3. Warych Jerzy.: Oczyszczanie przemysłowych gazów odlotowych, WNT, Warszawa 2000
4. Kabsch P.: Odpylanie i odpylacze; WNT, Warszawa 1992
5. Markiewicz M.T.: Podstawy modelowania rozprzestrzeniania się zanieczyszczeń w powietrzu atmosferycznym; Wyd. Politechniki Warszawskiej, Warszawa 2005
6. Cheremisinoff P.,N. (Editor): Encyclopedia of Environmental Control Technology, Vol 2, Air Pollution Control; Gulf Publishing Company; 1998
7. Alloway B.J., D.C. Ayres: Chemiczne podstawy zanieczyszczenia środowiska; PWN Warszawa 1999

Additional Bibliography:

