

Title Heat and Gas Engineering	Code 1010134281010130424
Field Environmental Engineering Extramural First-cycle studies	Year / Semester 4 / 8
Specialty -	Course core
Hours Lectures: 2 Classes: - Laboratory: - Projects / seminars: 8	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:

-Knowledge of theoretical and practical problems with the projection and the exploitation local (communal and industrial) heat supply systems and gas supply systems.

Contents of the course (course description):

-Characteristic of energy sources. Heat supply systems of cities; heat balances; heat sources. Heat -generating plant: technology, heat and mass balances, protections, regulation. Cogeneration. Heat distribution network: configuration, pressure lines, structure, elongation compensation, heat insulation. Water heat distribution plant: configuration, heat and mass balances, regulation. The projection of the local heat systems. Gas grids low- and mean-pressure. Reducing valve stations. The projection of the communal gas grids

Introductory courses and the required pre-knowledge:

-Physics, Fluid Mechanics I, Heat Engineering

Courses form and teaching methods:

-Lectures, Project

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

-The credit of the project, Colloquium

Basic Bibliography:

Additional Bibliography: