

Title of Course	Energy systems in industry - project		
Semester	Spring/Summer		
Teaching Hours per Course:	Total	- Lectures:	- Project:
	15		15
ECTS Credits	1		
The content of education			
Aims of Course	Basic knowledge on energy systems in the industrial applications. Presentation of process flow diagrams, discussion of the principle of operation and mathematical descriptions of the typical systems. Characteristics of apparatus and devices used in the systems. Methods of reducing the energy consumption of the systems.		
Program	P1 - Selection of industrial thermal system and preliminary design assumptions.; P2 - Selection of system structure and type of apparatuses and devices.; P3 - Selection of operating parameters.; P3 - Mass and thermal balances.; P4 - Selection of measuring and automatic control systems.; P5 - Project credit.		
Conditions of completion	Project submission		
Teacher	Mariusz Markowski, Sc.D.		