

**HARMONOGRAM REALIZACJI PROGRAMU STUDIÓW DLA ZAKRESU:
Intelligent Energy For Environmental Protection**

Field of study: Environmental Engineering								
Education in the area: INTELLIGENT ENERGY FOR ENVIRONMENTAL PROTECTION								
Full-time studies, Second-cycle studies, Education profile: general academic								
Semester 1		Exam	ECTS	L	T	Lab	P	S
1	Training on Safe and Hygienic Conditions of Education		0	4				
2	Computer Modelling of Environmental Processes		4				60	
3	Creativity and Innovative Thinking		2		30			
4	Instrumental Methods in Environment		4	30		30		
5	Intelligent Heating, Ventilation and Air Conditioning	E	4	30			30	
6	Renewable Energy Sources	E	4	30	30			
7	Intelligent Technologies in Environmental Engineering		4	30	30			
	Social Acceptance of RES							
8	New Technologies in Water and Wastewater Treatment		4	30	30			
	Biomass Harvesting and Utilization							
9	Waste For Material and Energy Recovery		4	30		30		
	Waste Management in Power Industry							
Sum		2	30	184	120	60	120	-
454*								
Semester 2		Exam	ECTS	L	T	Lab	P	S
1	Atmosphere Protection and Flue Gas Cleaning	E	3	15		30		
2	Business and Innovation in Environmental Protection		2	15			15	
3	Carbon Management in the Environmental Processes		4	30			30	
4	Energy Conversion Technologies	E	4	30	30			
5	History of Inventions		2	15	15			
6	Industrial Wastewater Technologies		4	30		30		
	Wastewater Treatment Processing Design – Project							
7	Management of Energy Conversion Byproducts and Energy Efficiency		4	30			30	
	Waste Heat Management and Energy Efficiency							
8	Phytoremediation by Energetic Plants		4	30	30			
	Protection of Soil from Environmental Impact							
9	Strategies for the International Protection of the Environment		3	30	15			
	Circular Economy in Environment							
Total		2	30	225	90	90	135	-
450*								
Semester 3		Exam	ECTS	L	T	Lab	P	S
1	Biochar for Advanced Polygeneration		4	30		30		
2	Diploma Project		20					
3	Diploma Seminar		2					30
4	Interpersonal Communication		1	15				
5	Smart Cities		3	30			15	
Total		0	30	75	-	30	15	30
150								

* - Sumy godzin zajęć w semestrze, uwzględniające obieralność przedmiotów

Legend:

L – Lecture T – Tutorials
 Lab – Laboratory P – Project
 S – Seminar E – Exam