Siatka godzin dla kierunku *Inżynieria Środowiska*

Załącznik nr 2 do uchwały RW nr …./2019 z 19.03.2019

Specjalność Environmental Engineering

Studia stacjonarne I stopnia (inżynierskie)

obowiązuje od roku **2019/2020**

Nazwa bloku	Lp	Wykaz przedmiotów	Liczba godzin						Liczba godzin w semestrze							
			W	C	L	K	P	Pkt.	I	II	III	IV	V	VI	VII	VIII
przedmioty kształcenia ogólnego	1	Physical Education (Sport)		90				0	30	30	30					
	2	Foreign Language		180				12			60	60	60			
	3	HES (Work Environment Protection)	15					2	15							
	4	HES (Basis of Law and Economy)	30					2			30					
	5	HES (Economics and Law in Environmental Eng.)	30	15				3				45				
	6	Information Technology	15			30		3		45						
przedmioty podstawowe	7	Mathematics - Algebra with Geometry	30	30				6	60							
	8	Mathematics - Calculus I	30	30				6	60							
	9	Mathematics - Calculus II	30	30				6		60						
	10	Mathematics - Calculus III	15	15				3			30					
	11	Statistics in Environmental Sciences	15	15				3			30					
	12	Physics I	30	30				6	60							
	13	Physics II	15		30			5		45						
	14	Chemistry	30	15	30			6		75						
	15	Biology and Ecology	30					3		30						
	16	Biology and Ecology (lab)			30			3			30					
	17	Environment Protection	30					3	30							
	18	Descriptive Geometry	15				15	3	30							
	19	Technical Drawing					15	2	15							
	20	Surveying	15	15				2	30							
	21	Informatics I - AutoCAD	15			30		3			45					
	22	Informatics II - MATLAB				30		3				30				
	23	Thermodynamics	30	15				4			45					
	24	Fluid Mechanics	30	15				4			45					
	25	Fluid Mechanics (lab)			30			2				30				
	26	Material Engineering	15				30	3		45						
	27	Strength of Materials and Mechanics of Constructions	30	15	15			4		60						
	28	Civil Engineering and Constructions	30				15	4			45					
Przedmioty kierunkowe i specjalizacyjne	29	Hydrology	30				15	5				45				
	30	Meteorology	30				15	5				45				
	31	Soil Protection	15		30			5				45				
	32	GIS	15			30		3				45				
	33	Fundamentals of Air Pollution	30				15	4					45			
	34	Meteorological Measurements and Remote Sensing	15		15			3						30		
	35	Energy Systems and Environment	30				15	4					45			
	36	Engineering Hydrology and Hydrogeology	30				15	4					45			
	37	Integrated Water Resources Management	15				30	5						45		
	38	Water Resources Protection	30	15			15	5						60		
	39	Environmental Chemistry	15		30			4					45			
	40	Environmental Biology	15		30			4					45			
	41	Municipal and Industrial Wastewater Treatment	15		30			4						45		
	42	Ventilation and air-conditioning systems	30				15	3					45			
	43	Building Heating Systems	30				15	4						45		
	44	Solid Waste Management	30				15	3					45			
	45	Air Pollution Dispersion Modelling	15			30		4							45	
	46	Renewable Energy Systems	30				15	4							45	
	47	Environmental Impact Assessment	30				15	4							45	
	48	Spatial Planning and Sustainable Development	15					2							15	
	49	Technical Documentation		15				2							15	
	50	Elective Courses	45				90	9						135		
	51	Elective Courses	45				90	9							135	
	52	Diploma Seminar		15				1								15
	53	BSc Eng Diploma						15								X
	54	Internship (before 7th semester)	4 tygodnie					5							X	
	55	Professional internship	8 tygodni					14								X
2505		Sumaryczna liczba godzin zajęć dydaktycznych	1080	555	270	150	450		330	390	390	345	375	360	300	15
24		Liczba godzin zajęć dydaktycznych w tygodniu							22	26	26	23	25	24	20	1
		Liczba punktów w semestrze						240	30	30	30	30	30	30	30	30
		Semestralna liczba egzaminów							3	4	3	3	3	2	2	0
przedmioty obieralne	1	Biotechnology	15		30			3						45		
	1a	Ecotoxicology	15		30			3							45	
	2	Hydrology of Urban Areas	15				30	3						45		
	2a	Hydrology of Small Drainage Basins	15				30	3							45	
	3	Environmental Protection Management in Urban Areas	15				30	3						45		
	3a	Remote Sensing Imagery Processing	15			30		3							45	
	4	Energy Audit of Buildings and Industry	15	30				3						45		
	4a	Rationalization of Heat and Energy Use	15	30				3							45	
	5	CAD of Heating,Cooling and Water Supply Systems	15			30		3						45		
	5a	Building Heating Systems II	15				30	3							45	
	6	Indoor Environment Engineering I	15				30	3						45		
	6a	Indoor Environment Engineering II	15				30	3							45	
	7	Natural Gas Engineering	15			30		3						45		
	7a	Modelling and Simulation of Gas Networks	15			30		3							45	
	8	Waste Treatment Engineering	15				30	3						45		
	8a	Waste Recycling and Reuse Technology	15				30	3							45	
		3 bloki po 2 przedmioty do wyboru na semestrze VI i VII														