PLAN STUDIÓW STACJONARNYCH I-EGO STOPNIA NA KIERUNKU MAKROKIERUNEK

Courses for all specializations

Numer	NAZWA PRZEDMIOTU	GODZINY						Sem.1					ECTS	Sem.2					ECTS	Sem.3					ECTS	Sem.4					ECTS	Sem.5					ECTS	Sem.6					ECTS	Sem.7						ECTS
		∑	W	Ć	L	P	S	W	Ć	L	P			W	Ć	L	P			W	Ć	L	P			W	Ć	L	P			W	Ć	L	P			W	Ć	L	P			W	Ć	L	P	S	D	
1	Physical education	60	0	60	0	0	0		2						2																																			
2	Foreign language	120	0	120	0	0	0		2				2		2				2		2				2		2			E	2																		
3	Algebra and analytic geometry	75	45	30	0	0	0	2	1			E	5	1	1			E	5																															
4	Calculus and differential equations	120	60	60	0	0	0	2	2			E	6	2	2			E	5																															
5	Introduction to electric and electronic circuits	120	60	45	15	0	0	2	2				5	2	1	1		E	6																															
6	Fundamentals of computer programming	60	30	0	30	0	0	2		2			5																																					
7	Theory of logic circuits	90	30	30	30	0	0	2	2				5			2			3																															
8	Social sciences 1	30	15	0	0	15	0	1			1	E	2																																					
9	Physics	120	60	30	30	0	0							2	1				3	2	1	2		E	6																									
10	Computer programming	90	45	0	45	0	0							1		1			3	2		2			4																									
11	Discrete mathematics	30	15	15	0	0	0							1	1				3																															
12	Optimization and decision making	60	30	0	30	0	0													2		2			5																									
13	Probability and statistics	60	30	0	30	0	0													2		2			5																									
14	Electronic devices and circuits	120	60	30	30	0	0													3					3	1	2	2		E	6																			
15	Introduction to system dynamics	45	30	15	0	0	0													2	1			E	5																									
16	Numerical methods	60	30	0	30	0	0																			2		2			4																			
17	Digital circuits	60	30	15	15	0	0																			2	1	1			5																			
18	Measurement systems	60	30	0	30	0	0																			2		2		E	6																			
19	Theory of computer science	90	30	30	30	0	0																			2	2				4			2			3													
20	Social sciences 2	30	15	0	0	15	0																			1			1		3																			
21	Artificial intelligence	60	30	0	30	0	0																									2		2			4													
22	Control fundamentals	105	45	30	30	0	0																									3	2			E	6			2			2							
23	Computer networks	60	30	0	30	0	0																									2		2		E	6													
24	Analog and digital signal processing	60	30	0	30	0	0																									2		2			5													
25	Microprocessor systems	60	15	0	30	15	0																									1		2	1		4													
26	Project management	30	15	0	0	15	0																									1			1		2													
27	Computer graphics	60	30	0	30	0	0																															2		2			3							
28	Embedded systems	60	30	0	30	0	0																															2		2			3							
29	Databases	60	30	0	30	0	0																															2		2		E	4							
30	Operating systems	60	30	0	30	0	0																															2		2		E	4							
31	Specialization module	0	0	0	0	0	0																																				10							9
32	Optional course 1	30	15	0	15	0	0																																					*1*		*1*				2
33	Optional course 2	30	15	0	15	0	0																																					*1*		*1*				2
34	Optional course 3	30	15	0	15	0	1																																					*1*		*1*				2
35	Industrial training	0	0	0	0	0	0																																				4							
36	Final project	30	0	0	0	30	0																																								2		E	13
37	Final project seminar	15	0	0	0	0	15																																									1		2
		2250	975	510	660	90	15	11	11	2	1		30	9	10	4	0		30	13	4	8	0		30	10	7	7	1		30	11	2	10	2		30	8	0	10	0		30	3	0	3	2	1		30
		Liczba godzin tygodniowo						25						23						25						25						25						18						23						
		Liczba egzaminów						1						3						2						3						2						2						1						
		Liczba zaliczeń						7						6						5						4						6						7						6						

Przedmiot wybieralny:

Variant teaching techniques: classical vs interactive and problem based

Optional courses

Powyższy plan studiów obowiązuje studentów rozpoczynających naukę w roku akademickim 2019/2020 i w latach następnych.