

**Interdisciplinary studies: Control, Electronic and Information Engineering (BSc. Eng.) Study Program**  
**Courses for all specializations**

#	COURSE	Σ	HOURS					Sem.1					Sem.2					Sem.3					Sem.4					Sem.5					Sem.6					Sem.7				
			Σ	Lec	T	Lab	P	S	Lec	T	Lab	P	TS	Lec	T	Lab	P	TS	Lec	T	Lab	P	TS	Lec	T	Lab	P	TS	Lec	T	Lab	P	TS	Lec	T	Lab	P	S	D	TS		
1	Physical education	60	0	60	0	0	0	2						2																												
2	Foreign language	120	0	120	0	0	0	2					2				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																										
8	Social sciences 1	30	15	0	0	15	0	1			1	E	2																													
9	Physics	120	60	30	30	0	0							2	1								2	1	2		E	6														
10	Computer programming	90	45	0	45	0	0							1		1							2		2			4														
11	Discrete mathematics	30	15	15	0	0	0							1	1																											
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												
22	Control fundamentals	105	45	30	30	0	0																					3	2		E	6			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												
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																																			
28	Embedded systems	60	30	0	30	0	0																																			
29	Databases	60	30	0	30	0	0																																			
30	Operating systems	60	30	0	30	0	0																																			
31	Specialization module	0	0	0	0	0	0																																10			
32	Optional course 1	30	15	0	15	0	0																																1			
33	Optional course 2	30	15	0	15	0	0																																1			
34	Optional course 3	30	15	0	15	0	1																															1				
35	Industrial training	0	0	0	0	0	0																															4				
36	Final project	30	0	0	0	30	0																																2			
37	Final project seminar	15	0	0	0	0	15																															1				
		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			
	Liczba godzin tygodniowo																																									
	Liczba egzaminów																																									
	Liczba zaliczeń																																									

Variant teaching techniques: classical vs interactive and problem based

Optional courses

Lec – Lecture, T – Tutorial Exercises, Lab – laboratory classes, P- Project, S – Seminar