

BIOMEDICAL ENGINEERING, 2nd CYCLE (MASTER)
Specialty: BIOMECHATRONICS AND MEDICAL EQUIPMENT

		Hours					I					ECTS	II					ECTS	III					ECTS
		Suma	W	C	L	P	W	C	L	P	E		W	C	L	P	E		W	C	L	P	E	
	Common courses																							
1	Foreign language	60		60					30			2						2						
2	HES 1	30	15			15	15			15		2		30										
3	HES 2 (Edukacja i nauka w systemie gospodarczym)	45	15			30							15			30		3						
4	Modeling of biological structures and process	30	15			15	15			15	E	2												
	Mathematics in information processing	30	15	15			15	15			E	2												
5	Certification of medical devices	45	15			30	15			30		3												
6	Current methods and devices supporting the diagnosis of musculoskeletal system	45	15		30		15		30			3												
7	UBZO	30	30																30					2
	Specialty: BIOMECHATRONICS AND MEDICAL EQUIPMENT	315	120	75	30	90	75	45	30	60		14	15	30		30		5	30					2
1	Biomechatronics	60	30			30	30			30		4												
2	Modeling and computer simulations in biomechatronics	60	30		30		30		30			3												
3	Design and manufacturing of medical equipment	105	45			60	30		30			3	15			30	E	4						
4	Movement rehabilitation engineering	45	15		30								15		30			3						
5	Control systems	45	15		30								15					3						
6	Bioprostheses and robotic devices in medicine	45	15			30							15			30		3						
7	Ergonomics in the aspect of medical equipment design	45	15			30										30			15			30	E	3
8	Personalized medicine systems	30	15		15								15		15			2						
9	Engineering support for sports training	60	30		30								30		30			4						
10	Methods for identifying loads on the human musculoskeletal system	60	30		30								30		30		E	3						
11	Engineering functional support for people with special needs	60	30		30														30		30			3
12	Experimental studies of medical devices	45	15		30														15		30		E	2
13	Virtual Reality Technologies in Medical Applications	45	15		30								15		30			3						
14	PBL	75				75				75		6												
15		30				30																30		20
	Total	810	300		255	255	90		30	135		16	150		165	60		25	60		60	60		28
		1125	420	75	285	345	165	45	60	195		30	165	30	165	90		30	90		60	60		30
	Total/Hours per week						465					31	450					30	210					14

Programme valid from the academic year: 2024/2025