

BIOMEDICAL ENGINEERING DIRECTION, level II (master)
Specialization: Information Systems in Medicine

				Hours						I								II								III									
	General courses		Type	Sum	L	E	L	P	S	L	E	L	P	S	E	ECTS	L	E	L	P	S	E	ECTS	L	E	L	P	S	E	ECTS					
W1	Information Systems in Medicine	IbioAIB>MS1ISM21O	g	30	15	0	15	0	0	15		15				2																			
W2	Telematics in Medicine	IbioAIB>MS1TM21O	g	30	15	0	15	0	0	15		15				2																			
W3	Biomaterials and Tissues Testing Methods	IbioAIB>MS1BTTM21O	g	30	15	0	15	0	0	15		15				2																			
W4	Tissue and genetic engineering	IbioAIB>MS3TGE21O	g	30	15	0	0	15	0															15			15			2					
W5	Modeling of Biological Structures and Processes	IbioAIB>MS1MBS21O	g	30	15	0	0	15	0	15				15		2																			
W6	Motor rehabilitation engineering	IbioAIB>MS1LRE21O	g	30	15	0	15	0	0	15			15			2																			
W7	Foreign language	IbioAIB>MS1-2FL21O	e	60	0	60	0	0	0		30					2		30					2												
W8	HES type elective course 1	IbioAIB>MS3HES121O	e	30	15	0	0	15	0															15			15			2					
W9	HES type elective course 2	IbioAIB>MS3HES221O	e	30	15	0	15	0	0															15		15				2					
W10	HES type elective course 3	IbioAIB>MS3HES321O	e	15	15	0	0	0	0															15						1					
	Specialization courses			315	135	60	75	45	0	75	30	60	15	0	0	12	0	30	0	0	0	0	2	60	0	15	30	0	0	7					
S1	Higher mathematics in science and engineering	IbioAIB>MS1HMSE21S	e	60	30	0	30	0	0	30		30				4																			
S2	Biometrics	IbioAIB>MS1B21S	e	90	30	0	30	30	0	30		30		30		6																			
S3	Programming engineering	IbioAIB>MS1PE21S	e	60	30	0	15	15	0	30		15	15			4																			
S4	Fuzzy logic	IbioAIB>MS2FL21S	e	45	15	0	15	15	0								15		15	15			2												
S5	Bioinformatics	IbioAIB>MS2BI21S	e	45	30	0	15	0	0								30		15			E	3												
S6	Computer aided minimally invasive therapy	IbioAIB>MS3CAMIT21S	e	45	15	0	30	0	0															15		30				1					
S7	Advanced diagnostic and therapeutic techniques	IbioAIB>MS3ADTT21S	e	30	15	0	15	0	0															15		15				1					
S8	Computer aided medical diagnostics	IbioAIB>MS2-3CAMD21S	e	45	0	0	30	0	15										30		15	E	3				15			1					
S9	Medical Information Systems	IbioAIB>MS2MIS21S	e	60	30	0	30	0	0								30		30			E	4												
S10	Image navigation in medicine	IbioAIB>MS2-3INM21S	e	45	15	0	15	15	0								15		15				2				15			1					
S11	Data exploration	IbioAIB>MS1-2DE21S	e	60	15	0	30	15	0	15		30				4				15			1												
S12	Speech analysis and synthesis	IbioAIB>MS2SAS21S	e	60	30	0	30	0	0								30		30				3												
S13	Medical Image processing in Object-Oriented Languages	IbioAIB>MS2MIPOOL21S	e	45	15	0	15	15	0								15		15	15			2												
	Other courses			690	270	0	300	105	15	105	0	105	45	0	2	18	135	0	150	45	15	3	20	30	0	45	30	0	0	4					
1	Elective Courses	IbioAIB>MS2-3EC21O	e	75	45	0	0	30	0								15			15			2	30			15			1					
2	Interim project	IbioAIB>MS2IP21M	e	45	0	0	0	45	0											45			3												
3	MS seminar	IbioAIB>MS23MSS21M	e	30	0	0	0	0	30																		30			1					
4	MS thesis	IbioAIB>MS3MST21M	e	0	0	0	0	0	0																					20					
				150	45	0	0	75	30	0	0	0	0	0	0	0	15	0	0	60	0	0	5	30	0	0	15	30	0	22					
	Sum			1155	450	60	375	225	45	180	30	165	60	0	2	30	150	30	150	105	15	3	27	120	0	60	75	30	0	33					
					Hours per week														29									30							19

Type g – basic course

Type e – elective course

HES type 1 elective subject in the field of intellectual property protection

HES type 2 elective subject in the field of establishing and running a business

HES type 3 elective subject in the field of Healthcare Economics / Negotiation / Bioethics