

No	Course Title	Exam after semester	Total	I YEAR												II YEAR						III YEAR					
				type of classes			1 sem			2 sem			3 sem.			4 sem			5 sem			6 sem					
				lect.	tut	lab.	lect	tut	lab	ECTS	lect	tut	lab	ECTS	lect	tut	lab	ECTS	lect	tut	lab	ECTS	lect	tut	lab	ECTS	
1	Introduction to Physics with Elements of Higher Mathematics		60	15	45		1	3		6																	
2	Mathematical Analysis (I + II)	1,2	165	60	105		2	4		8	2	3	6														
3	Linear Algebra	2	60	30	30					2	2	5															
4	Mathematical Methods of Medical Physics *)	3	60	30	30								2	2	5												
5	Computational Methods of Medical Physics *)		60	30	30								2	2	6												
6	Elements of Statistics		30		30												2	2									
7	Information Technology		30		30		2	4																			
8	Introduction to Programming		30		30						2	2															
9	Laboratory of Medical Signals *)		30		30												2	2									
10	Electrophysiological Laboratory *)		15		15												1	1									
11	Principles of Physics for Medical Physics I	1	90	45	45		3	3		8																	
12	Principles of Physics for Medical Physics II	2	75	45	30					3	2	5															
13	Physical Laboratory 1 (Mechanics and Thermodynamics *)		45		45							3	3														
14	Principles of Physics for Medical Physics III *)	3	60	30	30								2	2	5												
15	Physical Laboratory 1 (Elektromagnetism and Spektroskopie *)		45		45										3	4											
16	Principles of Modern Physics - Quantum Physics *)	4	90	30	30	30									2	2	5										
17	Physical Laboratory 2 for Quantum Physics and Biophysics *)		60		60												4	4									
18	Physics of Ionising Radiation *)	5	90	30	15	45											2	1	3	8							
19	Fundamentals of Theoretical Physics for Medical Physics I	4	60	30	30										2	2	4										
20	Fundamentals of Theoretical Physics for Medical Physics II		60	30	30												2	2	5								
21	Medical Chemistry	2	30	30						2		3															
22	Psychology with Elements of Clinical Psychology		30	30							2		2														
23	The logic with Elements of Semiotics		15	15			1			1																	
24	Ethics		15	15			1			1																	
25	English	2	120		120			4		2	4	3															
26	Physical Education		30		30						2	1															
27	Protection of Intellectual Property and Copyright Law		15		15											1		1									
28	Correct Anatomy	3	35	20	15								1,3	1	4												
29	Physiology	3	20	20									1,3	3													
30	Fundamentals of Clinical Medicine and its Diagnostic Imaging	4	45	30	15										2	1	4										
31	Biothermodynamics with Elements of the Statistical Physics	5	60	30	30												2	2	4								
32	Biophysics of Biological Systems	4	60	30	30										2		2										
33	Medical Apparatus	6	60	30	30															2	2	5		2	5		
34	Fundamentals of Radiology and Quality Control in Radiology	5	60	30	30												2		2	5							
35	Fundamentals of Radiotherapy and Quality Control in Radiotherapy	6	60	30	30															2	2	5		2	5		
36	Fundamentals of Nuclear Medicine and Quality Control in Nuclear Medicine	6	30	15	15															1	1	3					
37	Radiobiology, Dosimetry, Radiological Protection	5	60	30	30												2	2	5								
38	Basics of Economics and Management in Health Care		15	15									1		1												
39	Medical Law in Radiological Protection		10	10									0,7		1												
40	Fundamentals of Research Methodology		10	10									0,7		1												
Optional lectures (totally 90 hours of lectures and 15 hours of tutorials) *)			105	90	15														3		3	3	1	5			
41	Medical Physics in Neurology		15																								
42	Medical Physics in Cardiology		15																								
43	The History of Medicine with History of Radiology		15																								
44	Radiological Informatics		15																								
45	English Radiological Terminology		15																								
46	English IT Terminology		15																								
47	Positron Emission Tomography		15																								
48	Ultrasonography		15																								
49	Spectroscopy of Biological Systems		15																								
50	Chaos Theory and its Applications in Medicine		15		15																						
51	3D Modelling of Biological Systems		15		15																						
52	Foundation Course to Practice in Health Care System Units		20	20												1,3		1									
53	Practice, 4 week																	4									
54	Bachelor's Seminar *)				30																		2		2		
55	Preparation of Diploma Work and to Bachelor's exam *)																								10		

credits are awarded based on continous assessment and final exam  
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 \*) courses with options

Total hours	2120	885	690	555	8	14	2	30	11	13	5	30	11,0	4	6	30	10	5	9	30	13	7	5	30	8	2	6	30
Total exams	22																											
hours per week								24				29				21,0				24,3				25				16
hours per semester								360				435				315				364,5				375				240
exams/assessments per semester								2	6			5	4			4	5			4	4		4	3			3	2
ex																												
ass																												

Labour safety/ergonomy, 4 hours

Total ECTS points: 180