

**Master's degree program in Medical Engineering
as of 2020/2021 academic year**

CURRICULUM

ECTS subject code T MD S№													
• T – type of course: B for BEng, M for MEng;													
• MD – “ Medical Engineering ”;													
• S№ – subsequent number of the subject;													
Lectures (L), tutorials (Tut), labs (Lab), Auditorium Total (AT), Self-Study (SS);													
Exam (E), continuous assessment (CA), semester project (SP), semester assignment (course work) (SA).													

№	Subject	Semester load						Assessment				ECTS code	ECTS credits
		L	Tut	Lab	AT	SS	Total	E	C A	SP	SA		

SEMESTER I

1	Physics of Medical Equipment	45	15	15	75	75	150	1				MMD01	5
2	Medical Informatics	30	0	15	45	75	120	1				MMD02	4
3	Materials for Medical Technology	30	0	15	45	75	120	1				MMD03	4
4	Medical Instrumentation	45	0	30	75	75	150	1				MMD04	5
5	Non-Metallic Materials for Medical Applications	30	0	15	45	75	120		1		1	MMD05	4
6	Measurements in Medicine	30	0	15	45	75	120		1	1		MMD06	4
7	Micro-Electromechanical Medical Equipment	30	0	15	45	75	120		1			MMD07	4
Tota		240	15	120	375	525	900	4	3	1	1		30

SEMESTER II

8	Optical Methods and Devices in the Medicine	30	0	15	45	45	90	1		1		MMD08	3
9	Analytical Measurements in Medicine	15	0	15	30	30	60		1		1	MMD09	2
10	Photonics and Laser Technologies in Medicine	30	0	15	45	45	90		1		1	MMD10	3
11	Optional subject (List - 1)	30	0	30	60	60	120	1		1		MMD11	4
12	Optional subject (List - 2)	30	0	15	45	45	90	1				MMD12	3
13	Diploma project					450	450	Diploma project defense				MMD13	15
Total		135	0	90	225	675	900	3	2	2	2		30

NOTES:

The list of optional subjects are annually updated and approved by the Faculty Council of Mechanical Engineering Faculty.

Subjects MMD11.1 and MMD12.1 form Master Program - “ **Electromedical Engineering**“.

Subjects MMD11.2 and MMD12.2 form Master Program - “ **Technical Assurance, Legislation and Standardization for Medical Equipment** ”.

LIST OF OPTIONAL SUBJECTS

List - 1 MMD11 (ECTS Credits - 4)		Code
1	Equipment for Medical Images	MMD11.1
2	Technical Legislation and Standardization for Medical Equipment	MMD11.2

List - 2 MMD12 (ECTS Credits - 3)		Code
1	Electromagnetic Systems for Biomedical Applications	MMD12.1
2	Technical Assurance of Medical Equipment	MMD12.2

LIST OF FACULTATIVE SUBJECTS

№	Subject	Semester load						Assessment				ECTS code	ECTS credits
		L	Tut	Lab	AT	SS	Total	E	C A	SP	S A		

SEMESTER I

1	Human Vision and Optometry	30	0	30	60	60	120		1			FaMMD01	4
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SEMESTER II

2	Photonics Interactions, Photonic Sensors, Sources, Devices and Systems for Medical Purposes	30	0	30	60	60	120		1			FaMMD02	4
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