

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

CURRICULUM

ECTS subject code **T MEH SN₂**

- **T** – type of course: **B** for BEng, **M** for MEng;
- **MEH** - „Mechatronics“
- **SN₂** – subsequent number of the subject;

Lectures (L), tutorials (Tut), labs (Lab), 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	Aud. Total	SS	Total	E	CA	SP	SA		

SEMESTER I

1	Lifecycle Management of Mechatronic Products	30	0	30	60	60	120	1			1	MMEH01	4
2	Innovation and Project Management	30	15	0	45	75	120		1			MMEH02	4
3	Design of Mechatronic Systems	30	0	30	60	60	120		1			MMEH03	4
4	Intelligent Measurement Systems	30	0	15	45	75	120	1				MMEH04	4
5	Engineering Research	30	0	15	45	75	120	1			1	MMEH05	4
6	Optional subject (List - 1)	30	0	30	60	60	120	1				MMEH06	4
7	Optional subject (List - 2)	30	0	30	60	60	120		1			MMEH07	4
8	Course Project (subjects № 6 or № 7)	0	0	0	0	60	60				1	MMEH08	2
Total		210	15	150	375	525	900	4	3	1	2		30

№	Subject	Semester load						Assessment				ECTS code	ECTS credits
		L	Tut	Lab	Aud. Total	SS	Total	E	CA	SP	SA		

SEMESTER II

9	Control Systems for Mechatronic Systems and Industrial Networks	30	0	15	45	45	90	1			1	MMEH09	3
10	Micro and Electromechanical Systems	30	0	15	45	45	90	1			1	MMEH10	3
11	Integrated Manufacturing	30	0	15	45	45	90	1				MMEH11	3
12	Optional subject (List - 3)	30	0	15	45	45	90		1	1		MMEH12	3
13	Optional subject (List - 4)	30	0	15	45	45	90		1	1		MMEH13	3
14	Diploma Project					450	450	Diploma project defense				MMEH14	15
Total		150	0	75	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 MMEH06.1, MMEH07.1, MMEH12.1 and MMEH13.1 form Master Program – „**Mechatronic Systems in Discrete Production Engineering**“

Subjects MMEH06.2, MMEH07.2, MMEH12.2 and MMEH13.2 form Master Program – „**Optical, Micromechanical and Measuring Devices**“

LIST OF OPTIONAL SUBJECTS

List - 1 MMEH06 (ECTS Credits - 4)		Code
1	Assembly Automation	MMEH06.1
2	Measuring Devices	MMEH06.2

List - 2 MMEH07 (ECTS Credits - 4)		Code
1	Implementation of Mechatronic Systems in Discrete Production Engineering	MMEH07.1
2	Optical and Laser Devices	MMEH07.2

List - 3 MMEH12 (ECTS Credits - 3)		Code
1	Motion Control in Mechatronic Systems	MMEH12.1
2	Micromechanical Devices	MMEH12.2

List - 4 MMEH13 (ECTS Credits - 3)		Code
1	Design and Implementation of Automated Mechatronic Complexes in Discrete Production Engineering	MMEH13.1
2	Accuracy and Reliability of Mechatronic Systems	MMEH13.2

LIST OF FACULTATIVE SUBJECTS

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

SEMESTER I

1	Automotive Mechatronics	30	0	30	60	60	120		1			FaMMEH 01	4
---	-------------------------	----	---	----	----	----	-----	--	---	--	--	------------------	----------

SEMESTER II

2	Computer Aided Modeling and Analysis of Mechanical Systems	30	0	30	60	60	120		1			FaMMEH 02	4
---	------------------------------------------------------------	----	---	----	----	----	-----	--	---	--	--	------------------	----------