



TECHNICAL UNIVERSITY - SOFIA

CURRICULUM

of

“MECHANICAL ENGINEERING”

Professional Field:

5.1. Mechanical Engineering

Educational Degree:	Master
Professional qualification:	Master- Engineer
Training Duration:	1,5 years
Form of Education:	Full time

The training is executed in English

I. WEEKS OF ATTENDANCE:

Number of Weeks									
Course	Weeks of Study	Exam Sessions	Practical Training	Industrial Training	Specialized Practical Training	Diploma Project	State Exam	Holidays	Total
I	30	10	-	-	-	-	-	12	52
II	-	-	-	-	2	12+3	-	10	17

II. COURSE DESIGN:

ECTS subject code **T ME №**

- **T** – type of course: **B** for BEng, **M** for MEng;
- **MEC** – “Mechanical Engineering”;
- **№** – subsequent number of the subject;

lectures (L), tutorials (Tut), labs (Lab), Auditorium Total (AT), Self Study (SS) weekly;

exam (E), continuous assessment (CA), semester project (SP) / semester assignment (course work) (SA)

SEMESTER I

No	SUBJECT	Week load						Assessment				ECTS code	ECTS credits
		L	Tut	Lab	AT	SS	Total	E	CA	SP	SA		
1	Computer methods for modelling and studying of mechanical structures	3	0	2	5	5	10		1	1		MMECe01	5
2	Lifecycle management	2	0	1	3	5	8	1			*	MMECe02	5
3	Optional subject 1 (list 1)	2	0	2	4	4	8		1		*	MMECe03	5
4	Optional subject 2 (list 2)	2	0	2	4	4	8		1		*	MMECe04	5
5	Technical diagnostics of machines and systems	2	0	2	4	4	8	1				MMECe05	5
6	Marketing	2	2	0	4	4	8	1				MMECe06	5
	Total	13	2	9	24	26	50	3	3	1	1		30

SEMESTER II

No	SUBJECT	Week load						Assessment				ECTS code	ECTS credits
		L	Tut	Lab	AT	SS	Total	E	CA	SP	SA		
7	Motion control in robotic systems	2	0	2	4	6	10	1			*	MMECe07	5
8	Metrological assurance in mechanical engineering	2	0	2	4	6	10	1			*	MMECe08	5
9	Safety of products	2	2	0	4	6	10	1				MMECe09	5
10	Optional subject 3 (list 3)	3	0	2	5	5	10		1		*	MMECe10	5
11	Optional subject 4 (list 4)	3	0	2	5	5	10		1		*	MMECe11	5
	Total	12	2	8	22	28	50	3	2	0	1		30

SEMESTER III

12	Diploma project	Diploma defense	MMECe12	15
Total				15

NOTES:

1. The eligible subjects (pos. 3, 4, 10 and 11 and 46) are updated annually and adopted by the Faculty Council of the Faculty of mechanical engineering.

* **Students have to choose one course project.**

III. MAIN PARAMETERS OF THE CURRICULUM

1. Training duration: 1,5 years, 3 semesters.

2. Auditorium workload according to the curriculum:

Total: 690 h, of them:

Lectures: 375 h;

Seminars: 60 h;

Labs: 255 h.

3. Total number of the subject positions: 11

3.1. Compulsory: 7

3.2. Optional: 4

4. Assessment:

4.1. Exams: 6

4.2. Continuous Assessments: 5

4.3. Semester Projects: 1

4.4. Semester Assignments: 2

5. Practice: 2 weeks.

LIST OF OPTIONAL SUBJECTS

LIST 1 (ECHTK =5)		
1	Advances in polymer materials and technology	MMECe03.1
2	Nondestructive control	MMECe03.2

LIST 2(ECHTK =5)		
1	Modelling and simulating of elements and systems	MMECe04.1
2	Assembly automation	MMECe04.2

LIST 3(ECHTK =5)		
1	Management systems in logistics	MMECe10.1
2	Continuous transport and transport of people	MMECe10.2

LIST 4(ECHTK =5)		
1	Project management	MMECe11.1
2	Production and operations management	MMECe11.2

**DEAN of Faculty of Mechanical Engineering:
/Assoc. Prof. L. Dimitrov/**