Year	Sem	Subject name	Weekly number of hours				Practice	ECTS
			Lecture	Tutorial	Labwork	Project		
First Year Compulsory subjects								
1	1	Calculus I	2	2				4
1	1	Linear Algebra, Analytic and Differential Geometry	2	1				4
1	1	Engineering Graphics and Infographics I	1		2			3
1	1	Chemistry	1		1			3
1	1	Materials Science I	2		1			4
1	1	Professional Communication		2				2
1	1	Mechanics I	2	1				3
1	1	Applied Informatics	2		2			4
1	1	Physical Education I		2				3
1	2	Calculus II	2	2				5
1	2	Physics I	2	1	1			4
1	2	Mechanics II	2	2	1			4
1	2	Engineering Graphics and Infographics II	1		2			3
1	2	Computer programming and Programming Languages II	1		2			4
1	2	Materials Science II	2		1			4
1	2	Physical Education II		1				2
1	2	Foreign Language 1 (French)		2				2
1	2	Collaborative Work		1				2
Optional subjects								
1	1	Langue française pour ingenieurs I		2				2
1	1	Romanian Language (for foreign students) I		2				2
1	1	Educational Psychology	2	2				5
1	1	Volunteering 1						3

1	2	Langue française pour ingenieurs II		2				2
1	2	English for Engineering Academic Study I		2				2
1	2	Romanian Language and culture (for foreign students) II		2				2
1	2	Pedagogy 1	2	2				5
1	2	Volunteering 2						3
Second Year Compulsory subjects								
2	1	Special Mathematics	2	1				4
2	1	Probabilities & Statistics	2	1				3
2	1	Physics II	2		1			4
2	1	Material Technology	2		1			4
2	1	Strength of Materials I	2	1	1			4
2	1	Introduction to Mechanical Engineering	1		2			4
2	1	Electrical engineering	2	1				3
2	1	Microeconomics	1	1				2
2	2	Engineering Thermodynamics I	2	1	1			5
2	2	Strength of Materials II	2	1				3
2	2	Manufacturing Processes I	2		1			3
2	2	Machines Elements I	2		1			4
2	2	Numerical Methods	2		1			5
2	2	Software Tools for Mechanical Engineering I (solid body design)	1		2			3
2	2	Technical writing		1				2
2	2	Macroeconomics	1	1				2
Elective subjects (one subject must be chosen among the following)								
2	1	Foreign Language (French) 2		2				2
2	1	Collaborative Work 2		2				2
2	2	Electrical machines	2		2			3
2	2	Measurements & Transducers	2		2			3
Optional subjects								
2	1	Romanian language and culture for foreign students III		2				2

2	1	English for Engineering Academic Study 2	1	1				2
2	1	Pedagogy 2	2	2				5
2	1	Volunteering 3						3
2	2	Romanian Language (for foreign students) IV		2				2
2	2	Didactics of the specialization	2	2				5
2	2	Volunteering 4						3
Third Year Compulsory subjects								
3	1	Finite Element Analysis	2		2			4
3	1	Engineering Thermodynamics II	2	1				5
3	1	Fluid Mechanics	2	1				4
3	1	Machine Elements II	2		1	2		5
3	1	Manufacturing Processes II	2		1			3
3	1	Design for recycling	2			2		3
3	1	Strength of Materials III	2			1		4
3	1	Money & Banking	1	1				2
3	2	Heat & Mass Transfer	2	2				4
3	2	Dynamics of Machinery	2		1			3
3	2	Machines Elements III	3		1			3
3	2	Computational Structural Mechanics	2	1	1			3
3	2	Machines Elements III - Project				2		2
3	2	Engineering analysis and control technics	2		2			3
3	2	Practical Workshop					360 h	8
3	2	Business Administration	1	1				2
Elective Subjects								
3	2	Mechanical Measurements	2		1			2
3	2	Data Acquisition Systems and Interfaces	2		1			2
Optional subjects								
3	1	Computer Aided Training	1	1				2

3	1	Pedagogy Internship in Pre-University Education 1					42h	3
3	1	Volunteering 5						3
3	2	Student class management	1	1				3
3	2	Pedagogy Internship in Pre-University Education 2					36h	2
3	2	Pedagogical Graduation Exam: Level I						5
3	2	Volunteering 6						3
Fourth Year Compulsory subjects								
4	1	Software Tools for Mechanical Engineering II	2		2			4
4	1	Tribology	2		2			5
4	1	Nanotechnology applications in mechanical engineering	1			2		3
4	1	Heat Engines I (Internal Combustion Engines)	2		1			4
4	1	Project: Heat engines I (Internal Combustion Engines)				2		2
4	1	Management Fundamentals	1	1				2
4	2	Heat Engines II (Turbines & Steam Generators)	2		2			4
4	2	Refrigeration and Air Conditioning	2	1	2			5
4	2	Environmental Engineering	2	1				4
4	2	Diploma Project				4		4
Elective Subjects								
4	1	Applied Electronics	2		1			4
		Control Theory	2		1			4
4	1	Design of Innovative Products	2		1			3
		Heat Pumps	2		1			3
4	1	Quality Assurance	1		1			3
		Optimization in Mechanical Engineering	1		1			3
4	2	Applied Fluid Dynamics (Pumps)	2		2			4
		Fluid Power Systems	2		2			4
4	2	Compressors and Fans	2	1				4

		Hybrid propulsion systems	2	1				4
4	2	Design of thermal systems	1		2			3
		Industrial Project Management	1			1		2
Optional Subjects								
4	1	Volunteering 7						3
4	2	Volunteering 8						3