Mechatronic Engineering study plan

CPs	1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester	7th Semester	8th Semester
1	MATH110 Mathematics I 6 CP (6 UoIL)	MATH120 Mathematics II 8 CP (8 UoIL)	MECH210 Engineering Mechanics II (Dynamics) 4 CP (4 UoIL)	EEEJ221 Measurement, Instrumentation and Control Basics 4 CP (4 UoIL)	MECH310 Engineering Mechanics III (Mechanics of Materials) 4 CP (4 UoL)	MECH321 Engineering Mechanics IV (Machine Elements) 6 CP (6 UoIL)	SOFT410 Software Engineering 4 CP (4 UoL)	ROBT420 Robotics 6 CP (6 UoIL)
2								
3								
4								
5			STAT210 Introduction to Statistic 4 CP (4 UoIL)	CAD220 Computer Aided Design (CAD) 4 CP (4 UoIL)	EEEM 312 Mechatronics and Controllers 4 CP (4 UoL)		SENT410 System engineering + Network Technology 6 CP (6 UoIL)	
6								
7						MECH323 Hydraulic and Pneumatic Drives 4 CP (4 UoL)		PROJ420 Final Study Project 6 CP (6 UoIL)
8	CHEM110 Chemistry 5 CP (3 UoIL, 2 UoIR)							
9		MATS120 Materials Science 4 CP (4 UoIL)	THER210 Engineering Thermodynamics 4 CP (4 UoIL)	FLME220 Fluid Mechanics 4 CP (4 UoIL)	EEEM 313 Control Systems 4 CP (4 UoL)			
10								
11								
12	GEOS110 Introduction to Geosciences 4 CP (4 UoIL)					EEEM 322 Power Electronics 4 CP (4 UoL)	CNCM410 CNC Machines 6 CP (6 UoIL)	
13		MECH120 Engineering Mechanics I (Statics) 4 CP (4 UoIL)	DESN210 Engineering Design 4 CP (4 UoIL)	RREC220 Raw Materials & Recycling 4 CP (4 UoIL)	EEEE 314 Electronics 6 CP (6 UoIL)			
14								
15								
16	EEEJ111 Algorithm and Programming 4 CP (4 UoIL)					EEEM 323 Electric Machines and Drive 4 CP (4 UoL)		THES420 Bachelor Thesis + Colloquium 12 CP
17			ELEC210 Introduction to Electrical Engineering 4 CP (4 UoIL)	SCIM220 Scientific Methods 2 CP (2 UoIL)			MECH410 Engineering Mechanics V (Dynamics of Machinery) 6 CP (6 UoIL)	
18		PHYS120 Physics 6 CP (1 UoIL, 1 UoIR, 4 UoILab)						
19				HSE220 Health-Safety-Environment 4 CP (4 UoIL)		EEEM 324 Digital Signal Processing 4 CP (4 UoL)		
20	ENSO110 Engineer in Society 2CP (2 UoIL)				MECH313 Production Process Technology 6 CP (6 UoIL)			
21			MINE210 Introduction to Mining 4 CP (4 UoIL)					
22	PROJ110 Engineering Project 2 CP (2 UoIL)							
23				LAW220 Law 2 CP (2 UoIL)			STWR410 Scientific Writing 4 CP (4 UoL)	
24		CHEM120 Chemistry Lab 3 CP (3 UoIL)				INTR320 Industrial Internship + Reflection 10 CP 14 weeks		
25	ENGL110 Technical English 4 CP (4 UoIL)		ECON210 Introduction to Economics 4 CP (4 UoIL)	INTR220 Basic Internship 2 CP				
26		IEMB120 Introduction to Engineering Management & BA 4 CP (4 UoIL)						
27								
28	TIME110 Time Management 2 CP (2 UoIL)							
29								
30		INCC120 Intercultural Comm & Competence 2 CP (2 UoIL)						
31								
32								
Total CP	29	31	28	26	24	32	26	24

Legend:	CP =	Credit Points	Fundamentals	Specialization	General	Foreign Languages	Internship / Thesis	Electives
	UoI =	Unit of Instruction (45 min. per unit)	UoILab =	Unit of Instruction Laboratory				
	UoIL =	Unit of Instruction Lecture	UoIFt =	Unit of Instruction Field trip				
	UoIR =	Unit of Instruction Recitation						

**Electives: Every 3rd and 4th year student can choose professional engineering modules from the other programs as electives. Presupposed for participation and recognition of the elective module is that the required prerequisites of the chosen elective module already have been passed. Furthermore, the adjustment of the lecture times for attendance in the chosen elective modules can only be made by ASA in exceptional cases. The student must choose his subjects in such a way that participation in his program-related modules is not endangered or restricted.
**** The total amount of CP's from Electives has to be minimium 24.