

Electrical 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 UoL)	MATH120 Mathematics II 8 CP (8 UoL)	MECH210 Engineering Mechanics II (Dynamics) 4 CP (4 UoL)	EEEJ221 Measurement, Instrumentation and Control Basics 4 CP (4 UoL)	EEEE311 Electrotechnical Materials 4 CP (4 UoL)	EEEJ321 Renewable Energy System 4 CP (4 UoL)	EEEE 411 Transmission and Distribution Engineering 6 CP (6 UoL)	EEEE 421 Power Systems Planning Operation and Control 6 CP (6 UoL)
2								
3								
4								
5								
6								
7	CHEM110 Chemistry 5 CP (3 UoL, 2 UoIR)	MATS120 Materials Science 4 CP (4 UoL)	STAT210 Introduction to Statistic 4 CP (4 UoL)	CAD220 Computer Aided Design (CAD) 4 CP (4 UoL)	EEEM 312 Mechatronics and Controllers 4 CP (4 UoL)	EEEM 322 Power Electronics 4 CP (4 UoL)	EEEE 412 Embedded Systems 4 CP (4 UoL)	EEEE 422 Power System Relaying & Protection 6 CP (6 UoL)
8								
9								
10								
11	GEOS110 Introduction to Geosciences 4 CP (4 UoL)	MECH120 Engineering Mechanics I (Statics) 4 CP (4 UoL)	THER210 Engineering Thermodynamics 4 CP (4 UoL)	FLME220 Fluid Mechanics 4 CP (4 UoL)	EEEM 313 Control Systems 4 CP (4 UoL)	EEEM 323 Electric Machines and Drive 4 CP (4 UoL)		
12								
13								
14								
15	EEEJ111 Algorithm and Programming 4 CP (4 UoL)	PHYS120 Physics 6 CP (1 UoL, 1 UoIR, 4 UoLab)	DESN210 Engineering Design 4 CP (4 UoL)	RREC220 Raw Materials & Recycling 4 CP (4 UoL)	EEEE 314 Electronics 6 CP (6 UoL)	EEEM 324 Digital Signal Processing 4 CP (4 UoL)	EEEE 413 Power Plant Engineering 6 CP (6 UoL)	
16								
17								
18								
19	ENSO110 Engineer in Society 2CP (2 UoL)	MINE210 Introduction to Mining 4 CP (4 UoL)	ELEC210 Introduction to Electrical Engineering 4 CP (4 UoL)	SCIM220 Scientific Methods 2 CP (2 UoL)	EEEE 315 Energy Storage & Conversions 4 CP (4 UoL)	EEEE 325 High voltage engineering 6 CP (6 UoL)	STWR410 Scientific Writing 4 CP (4 UoL)	THES420 Bachelor Thesis + Colloquium 12 CP
20								
21								
22								
23	PROJ110 Engineering Project 2 CP (2 UoL)	CHEM120 Chemistry Lab 3 CP (3 UoL)	ECON210 Introduction to Economics 4 CP (4 UoL)	LAW220 Law 2 CP (2 UoL)	EEEE 316 Circuit Analysis 6 CP (6 UoL)	INTR320 Industrial Internship + Reflection 10 CP 14 weeks	PROJ420 Final Study Project 6 CP (6 UoL)	
24								
25								
26								
27	ENGL110 Technical English 4 CP (4 UoL)	IEMB120 Introduction to Engineering Management & BA 4 CP (4 UoL)		INTR220 Basic Internship 2 CP				
28								
29								
30								
31	TIME110 Time Management 2 CP (2 UoL)	INCC120 Intercultural Comm & Competence 2 CP (2 UoL)						
32								
Total CP	29	31	28	26	28	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 minimumum 24.