

# Course of Study Electrical Engineering (Study Cohort w16)

Sample course plan X Bachelor Electrical Engineering (ETBS)

Legend:

Core qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

LP	Semester 1	Form	Hrs/wk	Semester 2	Form	Hrs/wk	Semester 3	Form	Hrs/wk	Semester 4	Form	Hrs/wk	Semester 5	Form	Hrs/wk	Semester 6	Form	Hrs/wk																																																															
1	<b>Procedural Programming</b>			<b>Electrical Engineering II: Alternating Current Networks and Basic Devices</b>			<b>Electrical Engineering III: Circuit Theory and Transients</b>			<b>Theoretical Electrical Engineering I: Time-Independent Fields</b>			<b>Theoretical Electrical Engineering II: Time-Dependent Fields</b>			<b>Semiconductor Circuit Design</b>																																																																	
2																			Procedural Programming	VL	1	Electrical Engineering II: Alternating Current Networks and Basic Devices	VL	3	Circuit Theory	VL	3	Theoretical Electrical Engineering I: Time-Independent Fields	VL	3	Theoretical Electrical Engineering II: Time-Dependent Fields	VL	3	Semiconductor Circuit Design	VL	3																																													
3																			Procedural Programming	HÜ	1																Electrical Engineering II: Alternating Current Networks and Basic Devices	VL	3	Circuit Theory	UE	2	Theoretical Electrical Engineering I: Time-Independent Fields	UE	2	Theoretical Electrical Engineering II: Time-Dependent Fields	UE	2	Semiconductor Circuit Design	UE	1																														
4																			Procedural Programming	PR	2																															Electrical Engineering II: Alternating Current Networks and Basic Devices	UE	2	Circuit Theory	UE	2	Theoretical Electrical Engineering I: Time-Independent Fields	UE	2	Theoretical Electrical Engineering II: Time-Dependent Fields	UE	2	Semiconductor Circuit Design	UE	1															
5																			Procedural Programming																																																Objectoriented Programming, Algorithms and Data Structures	VL	4	Computer Engineering	VL	3	Signals and Systems	VL	3	Introduction to Communications and Random Processes	VL	3	Engineering Mechanics II	VL	3
6																			Procedural Programming																																																														
7	<b>Physics for Engineers (part 1)</b>			<b>Objectoriented Programming, Algorithms and Data Structures</b>			<b>Computer Engineering</b>			<b>Signals and Systems</b>			<b>Introduction to Communications and Random Processes</b>			<b>Engineering Mechanics II</b>																																																																	
8																			Physics for Engineers	VL	2	Materials in Electrical Engineering	VL	2	Measurements: Methods and Data Processing	VL	2	Electrical Engineering IV: Transmission Lines and Research Seminar	VL	2	Electronic Devices	VL	3	Electrical Machines	VL	3																																													
9																			Physics for Engineers	UE	1																Materials in Electrical Engineering	UE	2	Measurements: Methods and Data Processing	UE	1	Research Seminar Electrical Engineering, Computer Science, Mathematics	SE	2	Electronic Devices	PBL	2	Electrical Machines	HÜ	2																														
10	<b>Electrical Engineering I: Direct Current Networks and Electromagnetic Fields</b>			<b>Materials in Electrical Engineering</b>			<b>Measurements: Methods and Data Processing</b>			<b>Electrical Engineering IV: Transmission Lines and Research Seminar</b>			<b>Electronic Devices</b>			<b>Electrical Machines</b>																																																																	
11																			Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	VL	3	Materials in Electrical Engineering	UE	2	Measurements: Methods and Data Processing	UE	1	Transmission Line Theory	VL	2	Electronic Devices	PBL	2	Electrical Machines	HÜ	2																																													
12																			Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE	2																Materials in Electrical Engineering	UE	2	Measurements: Methods and Data Processing	UE	1	Research Seminar Electrical Engineering, Computer Science, Mathematics	SE	2	Electronic Devices	PBL	2	Electrical Machines	HÜ	2																														
13	<b>Foundations of Management</b>			<b>Electrotechnical Experiments</b>			<b>EE Experimental Lab</b>			<b>Transmission Line Theory</b>			<b>Introduction to Control Systems</b>			<b>Bachelor Thesis</b>																																																																	
14																			Introduction to Management	VL	3	Mathematics II	VL	2	Analysis III	VL	2	Electrical Engineering Project Laboratory	PR	5	Introduction to Control Systems	VL	2	Bachelor Thesis																																															
15																			Project Entrepreneurship	PBL	2																Mathematics II	UE	1	Analysis III	UE	1	Electrical Engineering Project Laboratory	PR	5	Introduction to Control Systems	UE	2	Bachelor Thesis																																
16	<b>Mathematics I</b>			<b>Mathematics II</b>			<b>Mathematics III</b>			<b>Electrical Engineering Project Laboratory</b>			<b>Introduction to Control Systems</b>			<b>Bachelor Thesis</b>																																																																	
17																			Linear Algebra I	VL	2	Mathematics II	HÜ	1	Analysis III	HÜ	1	Complex Functions	VL	2	Engineering Mechanics I	VL	3	Bachelor Thesis																																															
18																			Linear Algebra I	UE	1																Mathematics II	HÜ	1	Analysis III	HÜ	1	Complex Functions	UE	1	Engineering Mechanics I	UE	2	Bachelor Thesis																																
19	Linear Algebra I	HÜ	1	Mathematics II	UE	1	Analysis III	HÜ	1	Complex Functions	HÜ	1	Engineering Mechanics I	UE	2	Bachelor Thesis																																																																	
20	Linear Algebra I	HÜ	1																Mathematics II	UE	1	Analysis III	HÜ	1	Complex Functions	HÜ	1	Engineering Mechanics I	UE	2	Bachelor Thesis																																																		
21	Analysis I	VL	2	Mathematics II	UE	1	Analysis III	HÜ	1	Differential Equations 2	VL	2	Engineering Mechanics I	UE	2	Bachelor Thesis																																																																	
22	Analysis I	UE	1																Mathematics II	UE	1	Analysis III	HÜ	1	Differential Equations 2	UE	1	Engineering Mechanics I	UE	2	Bachelor Thesis																																																		
23	Analysis I	HÜ	1	Mathematics II	UE	1	Analysis III	HÜ	1	Differential Equations 2	UE	1	Engineering Mechanics I	UE	2	Bachelor Thesis																																																																	
24	Analysis I	HÜ	1																Mathematics II	UE	1	Analysis III	HÜ	1	Differential Equations 2	HÜ	1	Engineering Mechanics I	UE	2	Bachelor Thesis																																																		
25	Analysis I	UE	1	Mathematics II	UE	1	Analysis III	HÜ	1	Differential Equations 2	HÜ	1	Engineering Mechanics I	UE	2	Bachelor Thesis																																																																	
26	Analysis I	HÜ	1																Mathematics II	UE	1	Analysis III	HÜ	1	Differential Equations 2	HÜ	1	Engineering Mechanics I	UE	2	Bachelor Thesis																																																		
27	Analysis I	UE	1	Mathematics II	UE	1	Analysis III	HÜ	1	Differential Equations 2	HÜ	1	Engineering Mechanics I	UE	2	Bachelor Thesis																																																																	
28	Analysis I	HÜ	1																Mathematics II	UE	1	Analysis III	HÜ	1	Differential Equations 2	HÜ	1	Engineering Mechanics I	UE	2	Bachelor Thesis																																																		
29	Analysis I	UE	1	Mathematics II	UE	1	Analysis III	HÜ	1	Differential Equations 2	HÜ	1	Engineering Mechanics I	UE	2	Bachelor Thesis																																																																	
30	Analysis I	HÜ	1																Mathematics II	UE	1	Analysis III	HÜ	1	Differential Equations 2	HÜ	1	Engineering Mechanics I	UE	2	Bachelor Thesis																																																		

Nontechnical Complementary Courses for Bachelors (from catalogue) - 6LP

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.