

# Course of Study Electrical Engineering (Study Cohort w14)

## Sample course plan X Bachelor Electrical Engineering (ETBS)

Legend:

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

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

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.