

# Course of Study Computational Science and Engineering (Study Cohort w17)

Sample course plan R Bachelor Computational Science and Engineering (IIWBS)

Specialisation Engineering Sciences

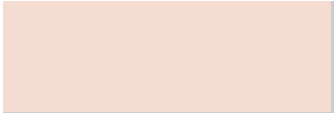
Legend:

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

LP	Semester 1	FormHrs/wk	Semester 2	FormHrs/wk	Semester 3	FormHrs/wk	Semester 4	FormHrs/wk	Semester 5	FormHrs/wk	Semester 6	FormHrs/wk								
1	<b>Discrete Algebraic Structures</b>	VL 2	<b>Electrical Engineering II: Alternating Current Networks and Basic Devices</b>	VL 3	<b>Engineering Mechanics I</b>	VL 3	<b>Engineering Mechanics II</b>	VL 3	<b>Seminars Computer Science and Mathematics</b>		<b>Stochastics</b>	VL 2								
2													Discrete Algebraic Structures	Engineering Mechanics I	UE 2	Engineering Mechanics II	SE 2	Stochastics	UE 2	
3													Discrete Algebraic Structures	Engineering Mechanics I	UE 2	Engineering Mechanics II	SE 2	Stochastics	UE 2	
4													Discrete Algebraic Structures	Engineering Mechanics I	UE 2	Engineering Mechanics II	SE 2	Stochastics	UE 2	
5													Discrete Algebraic Structures	Engineering Mechanics I	UE 2	Engineering Mechanics II	SE 2	Stochastics	UE 2	
6													Discrete Algebraic Structures	Engineering Mechanics I	UE 2	Engineering Mechanics II	SE 2	Stochastics	UE 2	
7	<b>Procedural Programming</b>	VL 1	<b>Objectoriented Programming, Algorithms and Data Structures</b>	VL 4	<b>Numerical Mathematics I</b>	VL 2	<b>Signals and Systems</b>	VL 3	<b>Introduction to Control Systems</b>		<b>Introduction into Medical Technology and Systems</b>	VL 2								
8													Procedural Programming	UE 2	Signals and Systems	SE 2	Introduction to Control Systems	UE 2	Introduction into Medical Technology and Systems	UE 2
9													Procedural Programming	UE 2	Signals and Systems	SE 2	Introduction to Control Systems	UE 2	Introduction into Medical Technology and Systems	UE 2
10													Procedural Programming	UE 2	Signals and Systems	SE 2	Introduction to Control Systems	UE 2	Introduction into Medical Technology and Systems	UE 2
11													Procedural Programming	UE 2	Signals and Systems	SE 2	Introduction to Control Systems	UE 2	Introduction into Medical Technology and Systems	UE 2
12													Procedural Programming	UE 2	Signals and Systems	SE 2	Introduction to Control Systems	UE 2	Introduction into Medical Technology and Systems	UE 2
13	<b>Electrical Engineering I: Direct Current Networks and Electromagnetic Fields</b>	VL 3	<b>Automata Theory and Formal Languages</b>	VL 2	<b>Computer Engineering</b>	VL 3	<b>Embedded Systems</b>	VL 3	<b>Introduction to Communications and Random Processes</b>		<b>Algebra and Control</b>	VL 2								
14													Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	Computer Engineering	UE 1	Embedded Systems	UE 1	Introduction to Communications and Random Processes	UE 2	
15													Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	Computer Engineering	UE 1	Embedded Systems	UE 1	Introduction to Communications and Random Processes	UE 2	
16													Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	Computer Engineering	UE 1	Embedded Systems	UE 1	Introduction to Communications and Random Processes	UE 2	
17													Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	Computer Engineering	UE 1	Embedded Systems	UE 1	Introduction to Communications and Random Processes	UE 2	
18													Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	Computer Engineering	UE 1	Embedded Systems	UE 1	Introduction to Communications and Random Processes	UE 2	
19	<b>Mathematics I</b>	VL 2	<b>Foundations of Management</b>	VL 3	<b>Computernetworks and Internet Security</b>	VL 3	<b>Graph Theory and Optimization</b>	VL 2	<b>Measurements: Methods and Data Processing</b>		<b>Bachelor Thesis</b>									
20													Linear Algebra I	Computer Networks and Internet Security	Graph Theory and Optimization	Measurements: Methods and Data Processing				
21													Linear Algebra I	Computer Networks and Internet Security	Graph Theory and Optimization	Measurements: Methods and Data Processing				
22													Linear Algebra I	Computer Networks and Internet Security	Graph Theory and Optimization	Measurements: Methods and Data Processing				
23													Analysis I	Computer Networks and Internet Security	Graph Theory and Optimization	Measurements: Methods and Data Processing				
24													Analysis I	Computer Networks and Internet Security	Graph Theory and Optimization	Measurements: Methods and Data Processing				
25	<b>Mathematics II</b>	VL 2	<b>Mathematics III</b>	VL 2	<b>Mathematics IV</b>	VL 2	<b>Measurements: Methods and Data Processing</b>		<b>Bachelor Thesis</b>											
26												Linear Algebra II	Mathematics III	Mathematics IV	Measurements: Methods and Data Processing					
27												Linear Algebra II	Mathematics III	Mathematics IV	Measurements: Methods and Data Processing					
28												Linear Algebra II	Mathematics III	Mathematics IV	Measurements: Methods and Data Processing					
29												Linear Algebra II	Mathematics III	Mathematics IV	Measurements: Methods and Data Processing					
30												Linear Algebra II	Mathematics III	Mathematics IV	Measurements: Methods and Data Processing					

29						
30						
31						
32						

Analysis II	VL 2	Differential Equations 1	VL 2	Differential Equations 2	VL 2
Analysis II	HÜ 1	Differential Equations 1	UE 1	Differential Equations 2	UE 1
Analysis II	UE 1	Differential Equations 1	HÜ 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.