

# Course of Study Computational Science and Engineering (Study Cohort w18)

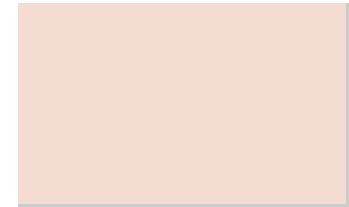
Sample course plan R Bachelor Computational Science and Engineering (IIWBS)  
Specialisation Engineering Sciences

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

27	Linear Algebra II	VL 2	Analysis III	VL 2	Complex Functions	VL 2
28	Linear Algebra II	UE 1	Analysis III	UE 1	Complex Functions	UE 1
29	Linear Algebra II	HÜ 1	Analysis III	HÜ 1	Complex Functions	HÜ 1
30	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
31						
32						



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.