

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

Sample course plan M Master Computational Science and Engineering (IIWMS)
Specialisation Scientific Computing

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
1	Efficient Algorithms			High-Performance Computing			Research Project and Seminar			Master Thesis		
2	Efficient Algorithms	VL	2	Fundamentals of High-Performance	VL	2	Seminar	SE	2			
3	Efficient Algorithms	UE	2	Computing			Project Work	PK	10			
4				Fundamentals of High-Performance	PBL	2						
5				Computing								
6												
7	Hierarchical Algorithms			Approximation and Stability								
8	Hierarchical Algorithms	VL	2	Approximation and Stability	VL	3						
9	Hierarchical Algorithms	UE	2	Approximation and Stability	UE	1						
10												
11												
12												
13	Matrix Algorithms			Numerical Mathematics II								
14	Matrix Algorithms	VL	2	Numerical Mathematics II	VL	2						
15	Matrix Algorithms	UE	2	Numerical Mathematics II	UE	2						
16												
17												
18												
19	Matrix Theory			Numerical Treatment of Ordinary Differential Equations			Scientific Computing and Accuracy					
20	Numerical Analysis and Matrix Theory	VL	2	Numerical Treatment of Ordinary Differential	VL	2	Verification Methods	VL	2			
21	Numerical Analysis and Matrix Theory	UE	2	Equations	UE	2	Verification Methods	UE	2			
22				Numerical Treatment of Ordinary Differential	UE	2						
23				Equations								
24												
25							Numerics of Partial Differential Equations					
26							Numerics of Partial Differential Equations	VL	2			
27							Numerics of Partial Differential Equations	UE	2			
28												
29												
30												
Business & Management (from catalogue) - 6LP												
Nontechnical Elective Complementary Courses for Master (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.