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

Sample course plan S Master Computational Science and Engineering (IIWMS) Specialisation Systems Engineering and Robotics

Legend:

Core qualification Compulsory

Core qualification Elective
Compulsory

Core qualification Elective
Compulsory

Compulsory

Compulsory

Compulsory

Compulsory

Focus Compulsory

Focus Elective Compulsory

Interdisciplinary complement

LP	Semester 1	Form	Hrs/w	kSemester 2	Form Hrs/	wkSemester 3	Form F	lrs/w	kSemester 4 Form Hrs/wk
1 2 3 4 5	Digital Image Analysis Digital Image Analysis	VL	4	Pattern Recognition and Data Compression Pattern Recognition and Data Compression		Research Project and Seminar Seminar Project Work		2	Master Thesis
7 8 9 10 11	Efficient Algorithms Efficient Algorithms Efficient Algorithms	VL UE	2	Information Theory and Coding Information Theory and Coding Information Theory and Coding	VL 3 HÜ 1				
13 14 15 16 17	Digital Communications Digital Communications Digital Communications Laboratory Digital Communications	VL HÜ PR	2 1 1	Methods and Applications of Differential Methods and Applications of Differential Geometry	Geometry VL 4				
19 20 21 22 23 24	Digital Signal Processing and Digital Filters Digital Signal Processing and Digital Filters Digital Signal Processing and Digital Filters	VL 	3			3D Computer Vision 3D Computer Vision 3D Computer Vision		2	
25 26 27 28 29 30	Mathematical Image Processing Mathematical Image Processing Mathematical Image Processing	UE	3 1			Numerical Methods for Medical Imaging Numerical Methods for Medical Imaging Numerical Methods for Medical Imaging	VL UE	2	
	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.