

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

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

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	<b>Digital Image Analysis</b>	VL 4	<b>Pattern Recognition and Data Compression</b>	VL 4	<b>Research Project and Seminar</b>	SE 2 PK 10	<b>Master Thesis</b>				
2								Digital Image Analysis	Pattern Recognition and Data Compression	Seminar	Project Work
3											
4											
5											
6											
7	<b>Efficient Algorithms</b>	VL 2 UE 2	<b>Information Theory and Coding</b>	VL 3 HÜ 1							
8					Efficient Algorithms	Information Theory and Coding					
9					Efficient Algorithms	Information Theory and Coding					
10											
11											
12											
13	<b>Digital Communications</b>	VL 2 HÜ 1 PR 1	<b>Discrete Differential Geometry</b>	VL 4							
14					Digital Communications	Discrete Differential Geometry					
15					Digital Communications						
16					Laboratory Digital Communications						
17											
18											
19	<b>Digital Signal Processing and Digital Filters</b>	VL 3 HÜ 1			<b>3D Computer Vision</b>	VL 2 UE 2					
20			Digital Signal Processing and Digital Filters					3D Computer Vision	3D Computer Vision		
21			Digital Signal Processing and Digital Filters								
22											
23											
24											
25	<b>Mathematical Image Processing</b>	VL 3 UE 1			<b>Numerical Methods for Medical Imaging</b>	VL 2 UE 2					
26			Mathematical Image Processing					Numerical Methods for Medical Imaging	Numerical Methods for Medical Imaging		
27			Mathematical Image Processing								
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.

