

International Mechatronics

	1. Semester / St. Petersburg (WiSe)	2. Semester / St. Petersburg (SuSe)	3. Semester / Hannover (WiSe)	4. Semester / Hannover (SuSe)	
1	Software Development Technology (5 CP) Pass-fail test	Scientific Discourse (3 CP) Grading Test	Compulsory elective courses, in total 15 CP - Production of opto-electronic Systems (5CP) - Data- and Learning-Based Control (5CP) - Optical Measurement Technology (5 CP) - Engineering Dynamics and Vibrations (5CP) - Image sequence analysis (5CP) - Micro- and Nano Systems (5CP) - Fundamentals and Configuration of Laser Beam Sources (5CP) - Power Electronics (5CP) - Physics of ultrasound and its applications (5 CP) Written or Oral Examination	Master's Thesis (30 CP)	
2					
3		Knowledge Engineering and Knowledge Management (4 CP) Written Examination			
4					
5	History and Methodology of Science (3 CP) Pass-fail Test	Cognitive Multiagent Systems (4 CP) Written Examination Course work			
6					
7		High-level Synthesis and Modeling of Digital Devices (4 CP) Pass-fail test Course project			
8					
9	Foreign Language in Professional Activity (4CP) Written Examination	Software Development Technology (5 CP) Written Examination Course work			Aspects of Process Design in Forming Technology (5 CP) Written/Oral Examination
10					
11		Methods of Optimisation and Decision Making Theory (5 CP) Pass-fail Test			
12					
13	Neuroinformatics and Neurotechnologies (4CP) Written Examination Course work	Introduction Practice (6 CP) Report	Electrical Machines and Drives (5 CP) Written/Oral Examination		
14					
15		Project Management (4 CP) Report	Project Thesis based on scientific and research work (5 CP)		
16					
17	Research Methods (4 CP) Report	Corporate Information Systems (4 CP) * Pass-fail test			
18					
19					
20					
21	Intelligent Systems (5 CP) Written Examination				
22					
23					
24					
25	LP	30	Master complete	124	
26					
27					
28					
29	30				
30					
31					
32					
33	34				
34					

4 CP Scientific and research work will still be assigned to the 5 courses of the 3rd semester.

* Additional, elective course (not obligatory)