

Networked Production Engineering – Track Smart Factory

Module	CP	WS - 1. Sem.			SS - 2. Sem.			WS - 3. Sem.			SS - 4. Sem.		
		L	E	P	L	E	P	L	E	P	L	E	P
		SWS			SWS			SWS			SWS		
Compulsory and Elective Courses	51	15			24			12			0		
Program specific	28	11			11			6			0		
Mechatronics and Control Techniques for Production Plants	6	2	2										
Manufacturing Technology I	5	2	2										
Manufacturing Technology II	6				2	2							
Production Management B	5				2	2							
Quality Management	6							2	2				
Track specific	23	4			13			6			0		
Gear and Transmission Technology	6							2	2				
Battery Storage Systems (4CP)	4	2	1										
incl. Selected Laboratory Exercises	1						1						
Battery Production	2 of 3	3			1	1							
Electric Mobility Production		3			1	1							
Production of Electric Drives		3			1	1							
Factory Planning	6				2	2							
Elective Courses	21	12			5			4			0		
Practical Experience or Elective Courses	12	0			0			12			0		
Internship (Practical Experience)	1 of 2	12						12 weeks					
Elective Courses		12						See elective courses					
Language Courses and Master Thesis	36	2			2			2			30		
Language Course (1)	2	1	1										
Language Course (2)	2				1	1							
Linguistic Elective*	2							1	1				
Master Thesis	30										6 Months		
Total	120	29			31			30			30		

Elective Courses	CP	L	E	Term
Advanced Software Engineering	5	2	2	WS
Machine Design Process	5	2	2	WS
Modeling, Model Reduction and Simulation in Laser Processing - Applications	5	2	2	WS
Tribology	5	2	2	WS
High Precision Glass Optics Manufacturing	6	2	2	WS
Laser Applications	6	2	2	WS
Simulation Techniques in Manufacturing Technology	6	2	1	WS
Process Analysis in Manufacturing Technology	5	2	1	WS
Electical Machines I	4	2	1	WS
Power Electronics	4	2	1	WS
Control Engineering	3	1	1	WS
Multibody Dynamics	6	2	2	SS
Modeling, Model Reduction and Simulation in Laser Processing - Laser	5	2	2	SS
Modeling, Model Reduction and Simulation in Laser Processing - Design	5	2	2	SS
Welding and Joining Technologies	6	2	2	SS

WS = Winter Semester | SS = Summer Semester | L = Lecture | E = Exercise | CP = Credit Points