

Anlage 1: Studienverlaufsplan bei Vollzeitstudium

Modul	Teilmodul	Sem.	ECTS	Semester			
				1	2	3	4
				<b>ECTS</b>			
Industrial Communication and Information Security in Industrial Automation	Industrial Ethernet	1	12	3			
	Industrial IT and Industrial IoT	2			3		
	IT-Security - Management and Technologies	1		3			
	Industrial Security in Automation	2			3		
Integration of Technical and Business Information Systems	Object oriented Programming for Data Science	1	11	3			
	Relational Databases	1		2			
	Enterprise Resource Planning Systems	1		3			
	Industrial IoT and Manufacturing Execution Systems	2			3		
Modelling and Simulation of Technical Systems	Modelling and Simulation of Continuous Systems	2	14		4		
	Modelling and Simulation of Discrete Event Systems	2			3		
	Data-driven Modelling and Model Optimization	2			5		
	Modelling and Simulation of Electrical Energy Systems	1		2			
Control of Technical Systems	Digital Signal Processing and Optoelectronics	2	13		4		
	Linear, Nonlinear and Model Predictive Control	1		5			
	Automation of Discrete Event Systems	2		2			
	Protection Automation and Control in Electrical Energy Supply	2			2		
Optimization of Technical Systems	Numerical Methods	1	10	3			
	Optimization	1		4			
	Machine Learning and AI	2			3		
Case Studies	Case Study I	3	30			10	
	Case Study II	3				10	
	Case Study III	3				10	
Master Thesis	Thesis	4	30				20
	Colloquium	4					10
<b>Summe ECTS</b>			<b>120</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>

Anlage 2: Exemplarischer Studienverlaufsplan bei Teilzeitstudium

Modul	Teilmodul	Sem.	ECTS	ECTS/ Semester					
				1	2	3	4	5	6
				ECTS					
Industrial Communication and Information Security in Industrial Automation	Industrial Ethernet	1	12	3					
	Industrial IT and Industrial IoT	2			3				
	IT-Security - Management and Technologies	1				3			
	Industrial Security in Automation	2					3		
Integration of Technical and Business Information Systems	Object oriented Programming for Data Science	1	11	3					
	Relational Databases	1		2					
	Enterprise Resource Planning Systems	1				3			
	Industrial IoT and Manufacturing Execution Systems	2					3		
Modelling and Simulation of Technical Systems	Modelling and Simulation of Continuous Systems	2	14		4				
	Modelling and Simulation of Discrete Event Systems	2			3				
	Data-driven Modelling and Model Optimization	2					5		
	Modelling and Simulation of Electrical Energy Systems	1		2					
Control of Technical Systems	Digital Signal Processing and Optoelectronics	2	13		4				
	Linear, Nonlinear and Model Predictive Control	1		5					
	Automation of Discrete Event Systems	2				2			
	Protection Automation and Control in Electrical Energy Supply	2			2				
Optimization of Technical Systems	Numerical Methods	1	10	3					
	Optimization	1				4			
	Machine Learning and AI	2					3		
Case Studies	Case Study I	3	30			10			
	Case Study II	3						10	
	Case Study III	3							10
Master Thesis	Thesis	4	30						20
	Colloquium	4							
<b>Summe ECTS</b>			<b>120</b>	<b>18</b>	<b>16</b>	<b>22</b>	<b>14</b>	<b>20</b>	<b>30</b>