Anlage 1: Studienverlaufsplan bei Vollzeitstudium

Module	Submodule	Sem.	ECTS	Semester			
				1	2	3	4
Industrial Communication and Information Security in Industrial Automation	Industrial Communication	1	12	3			
	Industrial IoT	1		5			
	IT-Security	2			4		
				ECTS			
Integration of Technical and Business Information Systems	Object oriented Programming for Data Science	1	9	3			
	Relational Databases	1		3			
	Enterprise Resource Planning Systems	1			3		
Modelling and Simulation of Technical Systems	Modelling and Simulation of Continuous Systems	2	15		4		
	Modelling and Simulation of Discrete Event Systems	2			2		
	Data-driven Modelling and Model Optimization	2			5		
	Modelling and Simulation of Electrical Energy Systems	1		4			
Control of Technical Systems	Digital Signal Processing and Optoelectronics	2	14		4		
	Linear, Nonlinear and Model Predictive Control	1		5			
	Automation of Discrete Event Systems	1			2		
	Protection Automation and Control in Electrical Energy Supply	2			3		
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
Sum ECTS			**120**	**30**	**30**	**30**	**30**

Anlage 2: Exemplarischer Studienverlaufsplan bei Teilzeitstudium

Module	Submodule	Sem.	ECTS	ECTS/ Semester					
				1	2	3	4	5	6
Industrial Communication and Information Security in Industrial Automation	Industrial Communication	1	12	3					
	Industrial IoT	1				5			
	IT-Security	2					4		
				ECTS					
Integration of Technical and Business Information Systems	Object oriented Programming for Data Science	1	9	3					
	Relational Databases	1				3			
	Enterprise Resource Planning Systems	1					3		
Modelling and Simulation of Technical Systems	Modelling and Simulation of Continuous Systems	2	15		4				
	Modelling and Simulation of Discrete Event Systems	2			2				
	Data-driven Modelling and Model Optimization	2			5				
	Modelling and Simulation of Electrical Energy Systems	1		4					
Control of Technical Systems	Digital Signal Processing and Optoelectronics	2	14				4		
	Linear, Nonlinear and Model Predictive Control	1		5					
	Automation of Discrete Event Systems	1					2		
	Protection Automation and Control in Electrical Energy Supply	2			3				
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
Sum ECTS			**120**	**18**	**14**	**22**	**16**	**20**	**30**