

Annex 1: Study plan for full-time studies

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's Thesis	Thesis	4	30				20
	Final oral examination	4					10
Total ECTS			120	30	30	30	30

Annex 2: Example study plan for part-time studies

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's Thesis	Thesis	4	30						20	
	Final oral examination	4								10
Total ECTS				120	18	14	22	16	20	30