

Annex 1: Study plan for full-time studies

Module	Submodule	Sem.	ECTS	Semester			
				1	2	3	4
				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'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
				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's Thesis	Thesis	4	30						20
	Final oral examination	4							10
Total ECTS			120	18	16	22	14	20	30

Annex 3: Required documents for enrollment in the part-time program

a) Care for own children

- Child(ren)'s birth certificate(s)
- Registration certificate (*Meldebesccheinigung*) or confirmation issued by the registration office that applicant and child(ren) live in the same household (*Haushaltsbescheinigung*)
- Custody declaration (for fathers not married to the mother of the child(ren)) or marriage certificate

b) Care for close relatives (parents, grandparents, children or spouse)

- Medical certificate issued by the attending doctor

c) Own severe illness or disability

- Disability card (for persons with a degree of disability of 50% or more) or
- Specialist medical report confirming a disability or chronic disease. The report must be comprehensible for non-experts in medical matters.

d) Employment (at least 50% of a full-time position)

- Work contract / vocational training contract

e) Professional athlete

- Confirmation issued by the respective sports club

f) Other social reasons

- Corresponding proof