Module catalog and curriculum

Module	Sub-module	Sem.	ECTS	ECTS/ Semester			
		Š		1	2	3	4
Industrial Communications	Industrial IT and Mobile Communications	1	8	4			
	Industrial Internet and Web-Technologies	2			4		
Information and Network Security in Industrial Au- tomation	IT-Security - Management and Technologies	1	8	4			
	Industrial Security in Au- tomation	2			4		
	Relational Databases	1		2			
Integration of Technical and Business Information Systems	Manufacturing Execution Systems	2	8		2		
	Enterprise Resource Plan- ning Systems	1		4			
Modeling and Simulation of Technical Processes	Numerical methods	1	- 14	2			
	Modeling and simulation of continuous systems	2			4		
	Modeling and simulation of discrete event systems	2			2		
	Data-driven modeling and model optimization	2			6		
Advanced Process Control and Optimization	Fundamentals of digital signal processing	1	18	4			
	Linear, nonlinear and model predictive control	1		6			
	Automation of discrete event systems	2			2		
	Optimization	2			6		
Technical Project Planning and Software Engineering	Technical project planning	1	4	2			
	Software engineering	1		2			

	Case Study I	3				10	
Case Studies	Case Study II	3	30			10	
	Case Study III	3				10	
	Thesis	4					20
Master's thesis	Final oral examination (Kolloquium)	4	30				10
Total ECTS			120	30	30	30	30