

Information Technology (Master): Full-time Curriculum

According to the Examination Regulations of 2025 (MPO-IT-25)

Module No. old	Module No. new	Module	Code	1st sem.	2nd sem.	3rd sem.	4th sem.	CH	CR
Compulsory Subjects									
5915	11952	Advanced Topics in Algorithms	ATA	4				4	5 CR
5923	11780	Industrial Software Engineering	ISE	4				4	5 CR
5913	11866	Probability and Statistics	PAS	4				4	5 CR
5916	11706	Usability Engineering	UEN	4				4	5 CR
5911	11656	Scientific Methods and Writing	SMW	4				4	5 CR
5906	11849	Management Skills and Business Administration	MBA	4				4	5 CR
5912	11763	Innovation and Development Strategies	IDS		4			4	5 CR
		Sum of compulsory subjects		24	4			28	35 CR
Compulsory Optional Subjects									
--	16088	Gamification Innovation Lab	GIL	4				4	5 CR
--	15606	Project Work	PRW	4				4	5 CR
5918	11951	Communication for Distributed Systems ¹⁾	CDS		4			4	5 CR
5917	11658	Embedded Systems Design ¹⁾	ESD		4			4	5 CR
5919	11828	Information Fusion ¹⁾	IFU		4			4	5 CR
5922	11563	Intelligent Technical Systems ¹⁾	ITS		4			4	5 CR
5920	11678	Network Security ¹⁾	NWS		4			4	5 CR
5924	11663	Advanced Topics in Machine Learning ¹⁾	AML		4			4	5 CR
5928	11814	Authentication ¹⁾	AUT		4			4	5 CR
5636	15152	Autonomous Vehicles ¹⁾	AUV		4			4	5 CR
		N. N. ^{1) 2)}						4	5 CR
		Sum of compulsory optional subjects			20			20	25 CR
5925	11729	Research Project	RES			x			30 CR
--	11517	Master's Thesis	MAT				x		30 CR
		Sum of CH		28	20			48	
		Sum of CR		35 CR	25 CR	30 CR	30 CR		120 CR

CR = Credits (1 CR corresponds to 30 hours)

CH = Contact hours per week (equivalent to the German abbreviation SWS for 'Semesterwochenstunden')

¹⁾ In total, 5 out of 9 compulsory optional subjects have to be selected.²⁾ Compulsory optional subject from the range of subjects offered by TH OWL or other universities, as approved by the examination board with a minimum of 4 CH, 5 CR.