

## 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
<b>Compulsory Subjects</b>									
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
<b>Compulsory Optional Subjects</b>									
5918	11951	Communication for Distributed Systems <sup>1)</sup>	CDS		4			4	5 CR
5917	11658	Embedded Systems Design <sup>1)</sup>	ESD		4			4	5 CR
5919	11828	Information Fusion <sup>1)</sup>	IFU		4			4	5 CR
5922	11563	Intelligent Technical Systems <sup>1)</sup>	ITS		4			4	5 CR
5920	11678	Network Security <sup>1)</sup>	NWS		4			4	5 CR
5924	11663	Advanced Topics in Machine Learning <sup>1)</sup>	AML		4			4	5 CR
5928	11814	Authentication <sup>1)</sup>	AUT		4			4	5 CR
5636	15152	Autonomous Vehicles <sup>1)</sup>	AUV		4			4	5 CR
		N. N. <sup>1) 2)</sup>						4	5 CR
		Sum of compulsory optional subjects			20			20	25 CR
5925	11729	Research Project	RES			x			25 CR
--	11517	Master's Thesis	MAT				x		30 CR
		Sum of CH		24	24			48	
		Sum of CR		30 CR	30 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')

<sup>1)</sup> In total, 5 out of 9 compulsory optional subjects have to be selected.

<sup>2)</sup> 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.