

Information Technology (Master): Full-time Curriculum

Subject No.	Subject	Code	1st sem.	2nd sem.	3rd sem.	4th sem.	CH	CR
Compulsory Subjects								
5915	Advanced Topics in Algorithms	ATA	4				4	5 CR
5914	Discrete Signals and Systems	DSS	4				4	5 CR
5913	Probability and Statistics	PAS	4				4	5 CR
5916	Usability Engineering	UEN	4				4	5 CR
5911	Scientific Methods and Writing	SMW	4				4	5 CR
5906	Management Skills and Business Administration	MBA	4				4	5 CR
5912	Innovation and Development Strategies	IDS		4			4	5 CR
	Sum of compulsory subjects		24	4			28	35 CR
Compulsory Optional Subjects								
5918	Communication for Distributed Systems ¹⁾	CDS		4			4	5 CR
5917	Embedded Systems Design ¹⁾	ESD		4			4	5 CR
5923	Industrial Software Engineering ¹⁾	ISE		4			4	5 CR
5919	Information Fusion ¹⁾	IFU		4			4	5 CR
5922	Intelligent Technical Systems ¹⁾	ITS		4			4	5 CR
5920	Network Security ¹⁾	NWS		4			4	5 CR
5924	Advanced Topics in Machine Learning ¹⁾	AML		4			4	5 CR
5928	Authentication ¹⁾	AUT		4			4	5 CR
5636	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	Research Project	RES			x			30 CR
-	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')

¹⁾ In total, 5 out of 10 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.

Information Technology (Master): Part-time Curriculum

Module -No.	Module	Code	1st sem.	2nd sem.	3rd sem.	4th sem.	5th+6th sem.	7th+8th sem.	CH	CR
1st semester, compulsory modules										
5915	Advanced Topics in Algorithms	ATA	4						4	5 CR
5914	Discrete Signals and Systems	DSS	4						4	5 CR
5913	Probability and Statistics	PAS	4						4	5 CR
2nd semester, compulsory module										
5912	Innovation and Development Strategies	IDS		4					4	5 CR
2nd semester, compulsory optional modules										
5918	Communication for Distributed Systems ¹⁾	CDS		4					4	5 CR
5919	Information Fusion ¹⁾	IFU		4					4	5 CR
5920	Network Security ¹⁾	NWS		4					4	5 CR
	N. N. ¹⁾²⁾								4	5 CR
3rd semester, compulsory modules										
5916	Usability Engineering	UEN			4				4	5 CR
5911	Scientific Methods and Writing	SMW			4				4	5 CR
5906	Management Skills and Business Administration	MBA			4				4	5 CR
4th semester, compulsory optional modules										
5923	Industrial Software Engineering ¹⁾	ISE				4			4	5 CR
5922	Intelligent Technical Systems ¹⁾	ITS				4			4	5 CR
5917	Embedded Systems Design ¹⁾	ESD				4			4	5 CR
5924	Advanced Topics in Machine Learning ¹⁾	AML				4			4	5 CR
5928	Authentication ¹⁾	AUT				4			4	5 CR
5636	Autonomous Vehicles ¹⁾	AUV				4			4	5 CR
5th and 6th semester										
5925	Research Project	RES					x			30 CR
7th and 8th semester										
-	Master's Thesis	MAT						x		30 CR
	Total CH		12	12	12	12			48	
	Total CR		15 CR	15 CR	15 CR	15 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 10 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.

Additional information:

The compulsory optional modules listed for the second semester may also be attended in the fourth semester – and vice versa.