## Information Technology (Master): MPO-IT-16 Full-time Curriculum

Course - No.	Course	Abbr.	1st sem.	2nd sem.	3rd sem.	4th sem.	СН	CR
1st semester, compulsory courses								
5915	Advanced Topics in Algorithms	ATA	4				4	5 CR
5914	Discrete Signals and Systems	DSS	4				4	5 CR
5917	Embedded Systems Design	ESD	4				4	5 CR
5913	Probability and Statistics	PAS	4				4	5 CR
5916	Usability Engineering	UEN	4				4	5 CR
5931	Lab Project 1 1)	LAB1	Х					5 CR
2nd semester, compulsory courses								
5912	Innovation and Development Strategies	IDS		5			5	6 CR
2nd semester, compulsory elective courses (4 out of 6) plus Lab Project 2								
5918	Communication for Distributed Systems 2)	CDS		4			4	5 CR
5923	Industrial Software Engineering 2)	ISE		4			4	5 CR
5919	Information Fusion <sup>2)</sup>	IFU		4			4	5 CR
5922	Intelligent Technical Systems 2)	ITS		4			4	5 CR
5920	Network Security 2)	NWS		4			4	5 CR
5921	Software Engineering for Web Services 2)	SWE		4			4	5 CR
5932	Lab Project 2 3)	LAB2		Х				4 CR
3rd semester, compulsory courses								
5906	Management Skills and Business Administration	MBA			5		5	6 CR
5911	Scientific Methods and Writing	SMW			2		2	3 CR
5910	Seminar on Industrial Information Technologies	SEM			Х			3 CR
5909	Project Work	PIT			х			18 CR
4th semester								
-	Master's Thesis	MAT				Х		30 CR
	Total CH		20	21	7		48	
	Total 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) LAB1 complements the compulsory courses ATA, DSS, ESD, PAS and UEN.
- 2) In total, 4 out of the 6 compulsory elective courses CDS, IFU, NWS, ISE, ITS and SWE have to be selected.
- 3) LAB2 complements the compulsory elective courses CDS, IFU, NWS, ISE, ITS and SWE.