## Master study program

## Artificial Intelligence and Machine Learning (M.Sc.)





## Study and examination plan (Appendix I)

Key			Examination components								se				Semester			
Grading system	St= Standard (graded); bnb= passed/not passed		Ī															
Forms of examinations	A = submission, B = report, E = essay, H = research assignment, HÜ = homework, worksheets, K = written exam, Kq = colloquium M = oral examination as specified in module description, mP = oral examination, M/S = oral/written examination as specified in module description, P = log, Pt = presentation, R = seminar paper, S = written examination as specified in module description, SF = special form, Th = thesis														Examinations are assigned to semesters for guidance only.			
Status:	o= compulsory; f= optional VL=Lecture; S=Seminar; Ü=tutorial; iV= integrated lecture;					APB												
Forms of teaching	VÜ=lecture, 3-3eiilinar, 0-tutoriar, 1V=lintegrated recture, VÜ=lecture and tutorial; PR=Lab;					30 (1a)												
Compulsory attendance:	yes = courses with compulsory attendance according to §11 (6) APB, except lectures, justification in the module description. MHB = see module handbook, modules with compulsory attendance in this area, if applicable.  x = A grade improvement attempt in accordance with § 30 (1a)				Grade improvement attempt in accordance with § 30													
Grade improvement attempt (optional):	APB is only possible in the examination(s) correspondingly marked with x.		Prerequisite for admission Subject examinations (Fachprüfungen) Study credits (Studienleistungen)				(%)	factor)	s)	5				Study Load per semester (CPs)				
Prerequisite for admission	MHB: see module handbook, for this examination or module there is a prerequisite for admission according to §18 APB.	dmission	ions (Fachp	ıdienleistun	ion	nent atter		dule grade	erall grade (	r week (SW:			ndance					
CP:	Credit Point	fora	ninat	s (Stu	mina	rove	ë	or mo	or ove	rs pe		ching	atte					
TUCaN number and assignment of CPs to module elements are informative in nature. The CPs are given once the module is completed.		Prerequisite for admission	Subject exa	Study credits (Studienleistungen)	Form of examination	Grade imp	Duration (min)	Weighting for module grade (%)	Weighting for overall grade (factor)	Contact hours per week (SWS)	Status	Form of teaching	Compulsory attendance	Total CPs	1. 2. 3.	4.		
Elective Areas and Generale Education			3,	,							, , , , , , , , , , , , , , , , , , ,			90	30 30 30			
A Elective Areas (open catalo	ogues)										0			72-84	72-84			
A.1 Subject examinations from the elective areas of the M.Sc. Artificial Intelligence and Machine Learning (open catalogues)											0			60-72	60-72			
Foundations of Artificial Inte	elligence (Typ § 30 Abs. 5 APB)										0							
Foundations of Artificial Intelligence (Typ § 30 Abs. 5 APB)									1		0			18-30	18-30			
AI Models and Methods (Typ § 30 Abs. 5 APB)											О							
Al Models and Methods (Typ § 30 Abs. 5 APB)									1		o			18-30	18-30			
AI Systems (Typ § 30 Abs. 5 APB)											0							
Al Systems (Typ § 30 Abs. 5 APB)									1		o			12-24	12-24			
Al Domains and Applications (Typ § 30 Abs. 5 APB)											o							
AI Domains and Applications (Typ § 30 Abs. 5 APB)									1		o			12-24	12-24			
A.2 Seminars, Labs, Practical Labs in Teaching (Type § 30 Abs. 6 APB).  Choice from the listed catalogues of the M.Sc. Artificial intelligence and Machine Learning.  Examination form and duration according to the specifications of the department offering the course.  Open catalogues min. 12 CP - max. 24 CP											0			12-24	12-24			
Seminar (min. 1)									1		0			3-18	3-18			
Practical lab in teaching (max. 1)									1		f			0-5	0-5			
Lab, Project Lab, etc. (min. 1)									1		0			6-21	6-21			
Research Paper									1		f			0-9	0-9			

Science (other catalogues o	e § 30 Abs. 6 APB) atalogues of TU Darmstadt except for the Department of Computer can be added if necessary). Examination form and duration ions of the department offering the course.						0		6-18		6-18		
Electives: Languages							f		0-18				
Gesamtkatalog des Sprachenzentrums						1	f				0-18		
Electives: Humanities, Social Science, Economics & Business Administration							f		0-18				
Gesamtkataloge der Fachbereiche 01, 02, und 03						1	f				0-18		
Electives: Environmental Studies, Engineering, Natural Sciences							f		0-18				
Gesamtkataloge der Fachbereiche 04, 05, 07, 10, 11, 13, 15, 16, 18						1	f				0-18		
Masterarbeit									30				
20-AM-5700	Master Thesis Artificial Intelligence and Machine Learning	St	Th			1	0						30
	•	 			Т	otal			120	30	30	30	30
v4.0						•					Stand:	01.03.2	023 (JB)