Master's degree programme
Mathematics (M.Sc.)

Study and examination plan (Appendix I)

TECHNISCHE UNIVERSITÄT DARMSTADT

Key		Examination components						Course			CPs:	Semester			
Assessment system:	St = standard (graded); bnb = passed/not passed											Examinations are assigned to semesters for guidance only.			
Form of examination:	s = written; m = oral; SF = special form; H = homework assignment; f = optional, R = paper														
Duration (min.):	Duration of examination in minutes (optional)														
SWS:	Contact hours per week														
Status:	o = compulsory; f = optional														
Type of teaching:	VL = lecture; PS = proseminar; S = seminar; Ü = excercise class; P = internship; T = tutorial														
CPs:	Credit points														
TUCaN number (#) and assignment of CPs to module components are informative in nature. The CPs are given once the module is completed.		Technical examination	Study examination	Form of examination	Duration (min.) refer to §22(2) and (5) APB	Weighted for module grade	Weighted for overall grade	SWS	Status	Form of teaching	Total	1.	2.	3.	4.
Advanced Courses in Mathematics From two different fields of research one specialisation module each must be chosen (18 CPs each). The contents of the respective specialisation module will be agreed between students and examiners individually. In general, the contents of the respective area of specialisation consist of the module contents totalling 18–20 CPs which are distributed as follows: 2x9 or 1x9+2x5 or 4x5.									o		36				
04-13-0103/en	Advanced Course in Algebra						100		f						
	Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics: Academic year 4/5: Algebra	St		m	35-70	100							18		
04-13-0111/en	Advanced Course in Analysis						100		f						
	Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics: Academic year 4/5: Analysis	St		m	35-70	100							18		
04-13-0105/en	Advanced Course in Geometry and Approximation						100		f						
	Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics: Academic year 4/5: Geometry and Approximation	St		m	35-70	100							18		
04-13-0107/en	Advanced Course in Mathematical Logic						100		f						
	Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics: Academic year 4/5: Mathematical Logic	St		m	35-70	100							18		
04-13-0109/en	Advanced Course in Numerical Analysis						100		f						
	Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics: Academic year 4/5: Numerical Analysis	St		m	35-70	100							18		
04-13-0113/en	Advanced Course in Optimisation						100		f						
	Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics: Academic year 4/5: Optimisation	St		m	35-70	100							18		
04-13-0115/en	Advanced Course in Stochastics						100		f						
	Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics: Academic year 4/5: Stochastics	St		m	35-70	100							18		
Seminars or Projects in Mathematics Two seminars or one seminar and one project (10 CPs) from differing research areas must be taken.										o		10				
04-13-0139	Seminar in Mathematics (alg), Master							0	2	f		5				
04-00-0203-se	Seminar in Mathematics (alg), Master		bnb	SF		100		2		S					5	
04-13-0140	Seminar in Mathematics (ana), Master							0	2	f		5				
04-10-0204-se	Seminar in Mathematics (ana), Master		bnb	SF		100		2		S					5	
04-13-0141	Seminar in Mathematics (geo), Master							0	2	f		5				
04-10-0205-se	Seminar in Mathematics (geo), Master		bnb	SF		100		2		S					5	
04-13-0142	Seminar in Mathematics (log), Master							0	2	f		5				
04-10-0206-se	Seminar in Mathematics (log), Master		bnb	SF		100		2		S					5	
04-13-0143	Seminar in Mathematics (num), Master							0	2	f		5				
04-10-0207-se	Seminar in Mathematics (num), Master		bnb	SF		100		2		S					5	
04-13-0144	Seminar in Mathematics (opt), Master							0	2	f		5				
04-10-0208-se	Seminar in Mathematics (opt), Master		bnb	SF		100		2		S					5	
04-13-0145	Seminar in Mathematics (sto), Master							0	2	f		5				
04-10-0209-se	Seminar in Mathematics (sto), Master		bnb	SF		100		2		S					5	

04-10-0080 Project in Mathematics (Master)					0	2	f		5			
Project in Mathematics (Master)		bnb	SF		100						5	
Electives									39			
Programme-related Courses									31-36			
Additional Courses in Mathematics **(Type § 30(6) with unrestricted module change)** Before registering in a module from this area the first time, an exemplary study and examination plan must be presented to the Examination Board.							o		14-27			
Module with recommendation "Mathematics: Master" according to the Modules handbook: Refer to catalogue listed under M.Sc. Mathematics: Academic year 4/5					100		f		0-27	0-27		
Module from the Compulsory Elective area Mathematics of the B.Sc. Mathematics (field of study Mathematics) with recommendation "Mathematics: Bachelor academic year 3" according to the Modules handbook: Refer to catalogue listed under B.Sc. Mathematics: Academic year 3					100		f		0-9	0-9		
Additional modules subject to approval by the Examination Board					100		f		0-27	0-27		
Courses in a Minor or Additional Courses in Mathematics **(Type § 30(4) limited to a single justifiable change of minor)** Exactly one of the three following options can be chosen (9-22 CPs each): - a minor intermediate (only if required prior knowledge can be demonstrated) - a minor basic - additional mathematics modules at Master's level (at least 9 CPs from research areas differing from the two selected Advanced Courses)							o		9-22			
Minor intermediate (e.g. Computer Science in the determining degree programme M.Sc. Distributed Software					100		f		9-22	9-22		
Minor basic (e.g. Entrepreneurship and Innovation in the determining degree programme M.Sc. Business Information Systems)					100		f		9-22	9-22		
Additional courses (basic/intermediate) subject to approval by the Examination Board					100		f		9-22	9-22		
Module with recommendation "Mathematics: Master" according to the Modules handbook (type § 30(6) with unrestricted module change): Refer to catalogue listed under M.Sc. Mathematics: academic year 4/5 (at least 9 CPs in areas differing from selected Advanced Courses)					100		f		9-22	9-22		
Interdisciplinary Courses (type § 30(6) with unrestricted module change)							o		3-8			
Interdisciplinary Electives							f		0-5			
04-10-0051 Non-Academic Internship					0		f		5			
Non-Academic Internship		bnb			100						5	
04-10-0077 Holding Exercise Classes					0		f		3			
Holding Exercise Classes		bnb	SF		100						3	
If the minor for the Master's degree has been changed, modules from the compulsory section of the respective Bachelor's minor may be taken to compensate for missing prior knowledge.					0		f		0-5	0-5		
Studium Generale (general studies) Students who cannot demonstrate knowledge of German on C1 level must earn at least 6 CPs from UNIcert German courses offered by the Language Resource Centre (SPZ).							o		3-8			
Complete catalogue of all modules at TU Darmstadt Not included are courses of the Department of Mathematics and of the minor, if they cannot be chosen exclusively as general studies. Modules with mathematical contents also covered in similar form by the Department of Mathematics are also excluded.					0		f		3-8	3-8		
Thesis							o		35			
04-10-0229 Research Project Preparation					0		o		5			
Research Project Preparation		bnb	SF		100						5	
04-00-5000 Master's Thesis	St		H		100		o		30			30
TOTAL									**120**	30	30	30	30