Studien- und Prüfungsplan (Anhang I)
Studienrichtung Mathematics
(Typ § 30 Abs. 4 mit einmaligen Studienrichtungswechsel aus wichtigem Grund)

Legende			**Prüfungen**							**Kurs**					**Semester**			
Bewertungssystem:	St = Standard (benotet); bnb = bestanden/nicht bestanden														Die Zuordnung der Prüfungen zu Semestern hat empfehlenden Charakter.			
Prüfungsform:	K = Klausur, M=Mündliche Prüfungsleistung mit Spezifizierung in der Modulbeschreibung, M/S=Mündliche/Schriftliche Prüfungs-leistung mit Spezifizierung in der Modulbeschreibung, Pt= Präsentation, SF= Sonderform, Th=Thesis																	
Status:	o = obligatorisch; f = fakultativ																	
Art der Lehrform:	VL=Vorlesung; PS=Proseminar; S=Seminar; Ü=Übung: P=Praktikum														**Arbeitsaufwand pro Semester (CP)**			
Voraussetzung für Zulassung:	MHB: siehe Modulhandbuch, für diese Prüfung oder dieses Modul besteht eine Voraussetzung für die Zulassung nach §18 APB																	
Notenverbesserungs-versuch (optional):	x = Ein Notenverbesserungsversuch nach § 30 Abs. 1a APB ist nur in der/den entsprechend mit x ausgewiesenen Prüfung/en möglich.																	
Anwesenheitspflicht:	ja = Lehrveranstaltungen mit Anwesenheitspflicht nach §11 Abs. 6 APB, ausgenommen Vorlesungen. Begründung in der Modulbeschreibung.																	
CP:	Leistungspunkte																	
TUCaN-Nr. und Zuordnung von CP zu Modulbausteinen haben informativen Charakter. Die Anrechnung der CPs erfolgt nach Abschluss des Moduls.		**Voraussetzung für Zulassung**	**Fachprüfung**	**Studienleistung**	**Prüfungsform**	**Notenverbesserung nach §30 Abs. 1a APB**	**Dauer (min)**	**Gewichtung f. Modulnote**	**Gewichtung f. Gesamtnote**	**Semesterwochenstunden (SWS)**	**Status**	**Lehrform**	**Anwesenheitspflicht**	**CP gesamt**	**1**	**2**	**3**	**4**
1. Advanced Courses in Mathematics (Type § 30(5) limited to a single justifiable change) One specialisation module each from two different fields of research must be chosen (18 CP 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 consists of the module contents with the total of 12 contact hours per week, which are distributed as follows: (2x(4+2) or 1x(4+2)+2x(2+1) or 4x(2+1)).											**o**			**36**				
04-13-0103/en	Advanced Course in Algebra		St		M		45	100	100		f			18		18		
	Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics: Algebra																	
04-13-0111/en	Advanced Course in Analysis		St		M		45	100	100		f			18		18		
	Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics Analysis																	
04-13-0105/en	Advanced Course in Geometry and Approximation		St		M		45	100	100		f			18		18		
	Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics: Geometry and Approximation																	
04-13-0107/en	Advanced Course in Mathematical Logic		St		M		45	100	100		f			18		18		
	Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics: Mathematical Logic																	
04-13-0109/en	Advanced Course in Numerical Analysis		St		M		45	100	100		f			18		18		
	Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics: Numerical Analysis																	
04-13-0113/en	Advanced Course in Optimisation		St		M		45	100	100		f			18		18		
	Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics: Optimisation																	
04-13-0115/en	Advanced Course in Stochastics		St		M		45	100	100		f			18		18		
	Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics: Stochastics																	
2. Seminars or Projects in Mathematics Two seminars or one seminar and one project (5 CP each) from distinct research areas must be taken.											**o**			**10**				
04-13-0139	Seminar in Mathematics (alg), Master			bnb	Pt				0	2	f			5			5	
04-00-0203-se	Seminar in Mathematics (alg), Master									2		S						
04-13-0140	Seminar in Mathematics (ana), Master			bnb	Pt				0	2	f			5			5	
04-10-0204-se	Seminar in Mathematics (ana), Master									2		S						
04-13-0141	Seminar in Mathematics (geo), Master			bnb	Pt				0	2	f			5			5	
04-10-0205-se	Seminar in Mathematics (geo), Master									2		S						
04-13-0142	Seminar in Mathematics (log), Master			bnb	Pt				0	2	f			5			5	
04-10-0206-se	Seminar in Mathematics (log), Master									2		S						
04-13-0143	Seminar in Mathematics (num), Master			bnb	Pt				0	2	f			5			5	
04-10-0207-se	Seminar in Mathematics (num), Master									2		S						
04-13-0144	Seminar in Mathematics (opt), Master			bnb	Pt				0	2	f			5			5	
04-10-0208-se	Seminar in Mathematics (opt), Master									2		S						
04-13-0145	Seminar in Mathematics (sto), Master			bnb	Pt				0	2	f			5			5	
04-10-0209-se	Seminar in Mathematics (sto), Master									2		S						
04-10-0080	Project in Mathematics (Master)			bnb	Pt				0	2	f			5			5	
	Project in Mathematics (Master)									2		S						
3. Electives											o			39				
3.1.Programme-related Courses											o			31-34				

3.1.1 Additional Courses in Mathematics (Type § 30(6) with unrestricted module change) Before first registering for a module from this area, an attentative Study and Examination Plan must be presented to the Examination Board.										o			14-25				
Modules with recommendation “Mathematics: Master” according to the Modules Handbook: Refer to catalogue listed under M.Sc. Mathematics								100		f			0-25	0-25			
Modules 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			0-25	0-25			
Additional modules subject to approval by Departmental Council (Fachbereichsrat)								100		f			0-25	0-25			
3.1.2 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 (9-20 CP 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 CP from research areas distinct from the two selected Advanced Courses)										o			9-20				
Minor intermediate										f			9-20	9-20			
Chemistry (Reference degree programme: B.Sc. Chemie, M.Sc. Chemie)								100		f			9-20	9-20			
Computer Science (Reference degree programme: B.Sc. Informatik, M.Sc. Informatik)								100		f			9-20	9-20			
Mechanics (Reference degree programme: B.Sc. Ingenieurwissenschaften und Mechanik, M.Sc. Mechanics)								100		f			9-20	9-20			
Physics (Reference degree programme: B.Sc. Physik, M.Sc. Physik, M.Sc. Physics)								100		f			9-20	9-20			
Economics (Reference degree programme: B.Sc. WInf, B.Sc. WI MB, M.Sc. WI MB)								100		f			9-20	9-20			
Additional courses subject to approval by the Examination Board								100		f			9-20	9-20			
Minor basic								100		f			9-20	9-20			
Chemistry (Reference degree programme: B.Sc. Chemie)								100		f			9-20	9-20			
Computer Science (Reference degree programme: B.Sc. Informatik)								100		f			9-20	9-20			
Mechanics (Reference degree programme: B.Sc. Ingenieurwissenschaften und Mechanik)								100		f			9-20	9-20			
Physics (Reference degree programme: B.Sc. Physik)								100		f			9-20	9-20			
Economics (Reference degree programme: B.Sc. WInf, B.Sc. WI MB)								100		f			9-20	9-20			
Additional courses subject to approval by the Examination Board								100		f			9-20	9-20			
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 (at least 9 CP in areas distinct from selected Advanced Courses)								100		f			9-20	9-20			
3.2 Interdisciplinary Courses (type § 30(6) with unrestricted module change)										**o**			5-8				
3.2.1 Interdisciplinary Electives										**f**			0-3				
04-30-0051/en	Non-Academic Internship			bnb	SF				0		f			3	3			
	Non-Academic Internship											P						
04-10-0077/en	Holding Exercise Classes			bnb	SF				0		f			3	3			
	Holding Exercise Classes																	
3.2.2 Studium Generale										o			5-8				
Complete catalogue of all modules at TU Darmstadt. Excluded are courses of the Department of Mathematics and of the minor, if not specifically dedicated as Studium Generale. Modules with mathematical contents also covered in similar form by the Department of Mathematics are also excluded. Students who cannot demonstrate knowledge of German at level B2 must earn at least 6 CP from UNIcert German courses offered by the Language Resource Centre (SPZ).								0		f			**5-8**	5-8			
4. Thesis										o			**35**				
04-10-0229/en	Research Project Preparation			bnb	SF				0		o			5			5	
	Research Project Preparation																	
04-00-5000/en	Master’s Thesis				Th				100		o			30				30
Summe													**120**	30	30	30	30