

Studien- und Prüfungsplan (Anhang I)

Studienrichtung Mathematics in Data Science

(Typ § 30 Abs. 4 mit einmaligen Studienrichtungswechsel aus wichtigem Grund)

| Legende | Bewertungssystem: St = Standard (benotet); bnb = bestanden/nicht bestanden | Prüfungen | Kurs | Semester | | | | | | | | |
|--|---|--|--|----------|-----|-----|---|---|----|------|------|---|
| | | | | 1 | 2 | 3 | 4 | | | | | |
| Prüfungsform: | K = Klausur, M=Mündliche Prüfungsleistung mit Spezifizierung in der Modulbeschreibung, M/S=Mündliche/Schriftliche Prüfungsleistung mit Spezifizierung in der Modulbeschreibung, Pt= Präsentation, SF= Sonderform, Th=Thesis | 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 | Die Zuordnung der Prüfungen zu Semestern hat empfehlenden Charakter. Arbeitsaufwand pro Semester (CP) | | | | | | | | | |
| Status: | o = obligatorisch; f = fakultativ | | | | | | | | | | | |
| Art der Lehrform: | VL=Vorlesung, PS=Proseminar, S=Seminar, Ü=Übung, P=Praktikum | | | | | | | | | | | |
| Voraussetzung für Zulassung: | MHB: siehe Modulhandbuch, für diese Prüfung oder dieses Modul besteht eine Voraussetzung für die Zulassung nach §18 APB | | | | | | | | | | | |
| Notenverbesserungsversuch (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. MHB = siehe Modulhandbuch, ggf. in diesem Bereich Module mit Anwesenheitspflicht | | | | | | | | | | | |
| CP: | Leistungspunkte | | | | | | | | | | | |
| TUCaN-Nr. und Zuordnung von CP zu Modulbausteinen haben informativen Charakter. Die Anrechnung der CPs erfolgt nach Abschluss des Moduls. | | | | | | | | | | | | |
| 1. Advanced Course in Mathematics (Type § 30(5) limited to a single justifiable change) One specialization module each from two different fields of research must be chosen (18 CP each). The contents of the specialization module will be agreed between students and examiners individually. In general, the contents consists of the module contents with a 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)). | | | | | | | | | | | | |
| 04-13-0211/en | Advanced Course in Analysis (Data Science) | St | M | 45 | 100 | 100 | f | | 18 | 18 | | |
| | Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics Analysis (Data Science) | | | | | | | | | | | |
| 04-13-0209/en | Advanced Course in Numerical Analysis (Data Science) | St | M | 45 | 100 | 100 | f | | 18 | 18 | | |
| | Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics Numerical Analysis (Data Science) | | | | | | | | | | | |
| 04-13-0213/en | Advanced Course in Optimization (Data Science) | St | M | 45 | 100 | 100 | f | | 18 | 18 | | |
| | Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics Optimization (Data Science) | | | | | | | | | | | |
| 04-13-0215/en | Advanced Course in Stochastics (Data Science) | St | M | 45 | 100 | 100 | f | | 18 | 18 | | |
| | Refer for instance to course catalogue: Catalogue: M.Sc. Mathematics Stochastics (Data Science) | | | | | | | | | | | |
| 2. Seminars or Projects in Mathematics Two seminars or one seminar and one project (5 CP each) from distinct research areas must be taken. | | | | | | | | | | | | |
| 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 | | | |
| 04-13-0143 | 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 | | | |
| | Project in Computer Science | | bnb | Pt | | 0 | 2 | f | | 5 | | 5 |
| | Project in Computer Science | | | | | | 2 | | | | | |
| 3. Electives | | | | | | | | | | | | |
| 3.1. Programme-related Courses | | | | | | | | | | | | |
| 3.1.1 Additional Courses in Mathematics (Type § 30(6) with unrestricted module change) Before first registering for a module from this area, an attentive Study and Examination Plan must be presented to the Examination Board. | | | | | | | | | | | | |
| Modules with recommendation "Mathematics: Master" according to the Modules Handbook: Refer to catalogue listed under M.Sc. Mathematics | | | | | | 100 | f | | | 0-14 | 0-14 | |
| 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 | | | 0-14 | 0-14 | |
| Additional modules subject to approval by Departmental Council (Fachbereichsrat) | | | | | | 100 | f | | | 0-14 | 0-14 | |

