

**Note that this is not an official document. Only the German version of this text is legally binding.**

## **Regulations for admission of applications in the M.Sc. Data Science:**

**Preliminary remarks:** The point limits stated here refer to a Bachelor's degree programme with 180 ECTS. If an applicant has acquired a different number of credit points in their Bachelor's degree programme, the analogous proportion of points stated in brackets applies. The Examination Committee decides which modules are relevant in each case solely based on the application documents submitted.

### **Assignment of a differently named degree to subjects according to Section 2 case 1a of the FPO:**

- Computer Science / Business Informatics:
  - „Computer Science“ without further checks
  - „Computer Science and Engineering“, „Software Engineering“, „Software Technology“, „Information Technology“, „Computer Engineering“, „Data Science“, „Data Engineering“ and similar programmes: At least 100/180 ECTS (or 55.5% of the points shown in the Bachelor's certificate) are expected from the field of computer science or mathematics. At least 7 ECTS (or 3.9% of the points shown in the Bachelor's certificate) must clearly come from the field of theoretical computer science (e.g. complexity theory, analysis of algorithms, formal languages, automata theory). Seminars, projects, internships and theses can only be taken into account if their connection to computer science or mathematics is evident from the transcript.
- Statistics/Economics:
  - „Statistics“ and „Applied Statistics“ without further checks
  - „Economics“ without further checks
  - „Economic Sciences“: At least 100/180 ECTS (or 55.5% of the points shown in the Bachelor's certificate) are expected from the field of economics or statistics or mathematics. At least 24 ECTS (or 13.3% of the points shown in the Bachelor's certificate) must clearly come from the subject areas of statistics, mathematics and quantitative methods. Seminars, projects, internships and theses can only be taken into account if their connection to statistics, mathematics, or quantitative methods is evident from the transcript.
- Mathematics:
  - B.Ed. Mathematics (but not restricted to primary schools only) without further checks
  - Otherwise, at least 100/180 ECTS (or 55.5% of the points shown in the Bachelor's certificate) are expected in the field of mathematics.

### **Related degree according to Section 2 case 1b of the FPO:**

At least 50/180 ECTS (or at least 27.7% of all points shown in the Bachelor's certificate) must come from in subject-relevant modules. Subject-relevant modules are, for example

- Computer Science and Business Informatics: Programming and programming languages, database systems, algorithms and data structures, software engineering, software development, complexity theory, formal languages, automata theory, operating systems, data mining, machine learning, language processing, basics of AI, introduction to business informatics
- Mathematics: Introduction to mathematics, analysis, linear algebra, probability theory, numerical mathematics

- Statistics and Economics: Descriptive Statistics, Inductive Statistics, Mathematical Statistics, Probability Theory, Empirical Economic Research, Empirical Social Research, Statistical Programming Languages, Experimental Design, Statistical or Data Literacy

Modules from previously completed Master's degree programmes can also be taken into account if they are very close to or overlap with the modules listed as examples, up to a maximum of 20 ECTS credits. Achievements that were not completed within a degree programme (e.g. online courses) cannot be taken into account. The same applies to practical professional experience in the subject area, as this cannot be formally verified.

**Admission of applications with a Bachelor's degree with a grade between 1.8 and 2.2 in Computer Science, Business Informatics, Mathematics, Business Mathematics or Economics and with a Bachelor's degree with a grade between 1.5 and 1.9 in a related subject:**

- Computer Science and Business Informatics: weighted average grade from modules totalling 20/180 ECTS (or 11.1% of the points shown in the Bachelor's certificate) from the areas of programming, algorithms, database systems at least 1.7
- Mathematics and Business Mathematics: weighted average grade from modules amounting to 20/180 ECTS (or 11.1% of the points shown in the Bachelor's certificate) from the areas of Linear Algebra, Analysis, Optimisation, Numerics at least 1.7
- Statistics and Economics: weighted average grade from modules totalling 20/180 ECTS (or 11.1% of the points shown in the Bachelor's certificate) from the modules Descriptive Statistics, Inductive Statistics, Mathematical Statistics, Probability Theory, Empirical Economic Research, Empirical Social Research, Statistical Programming Languages, Experimental Design, Statistical or Data Literacy at least 1.7
- Related subjects: weighted average grade of at least 1.4 from modules listed here for one of the three subjects mentioned above, totalling 20/180 ECTS (or 11.1% of the points shown in the Bachelor's certificate).

For all calculations, the individual grades are first converted into the German grading system using the modified Bavarian formula (to one decimal place, without rounding).

Ideally, the application should already contain a list of the modules to be considered. If this is not the case, or if the list submitted with the application contains modules that are unsuitable in the opinion of the Examination Committee, the Examination Committee will determine which modules will be taken into consideration. If there is no module combination that comprises exactly the required number of points, a minimum module combination must be selected that does not fall below the limit. Minimality here means that no module can be omitted without falling below the limit.

**as of February 16, 2024**