

# UNIVERSITY OF KONSTANZ

## University of Konstanz Regulations on the Selection Procedure for Admission to the Master's Programme in Social and Economic Data Science

MA 33.3

(as of 26 February 2018)

The German version of this document is the only *legally binding version*. This English translation is for your convenience only.

### § 1 Applicability

Admission to the Master's Programme in Social and Economic Data Science (Master of Science) takes place in accordance with these regulations. The number of places is limited. If more applicants meet the admission requirements as per § 3 than there are places, there will be a university-internal selection process as per § 6. Selection decisions are made based on who has the greatest potential to meet the demands of the curriculum.

### § 2 Application

- (1) First-semester students can start in the winter semester only. The application for admission must have been received by the University of Konstanz by 30 April at the latest (cut-off date).
- (2) Admission must be denied if the application for admission, including the required documents (see §§ 2 and 4), is not submitted by the due date or is incomplete.

### § 3 Admission requirements

- (1) Admission requirements for the Master's Programme in Social and Economic Data Science are:
  - a) above-average bachelor's degree in a study programme with a standard period of study of at least three years in economics, social sciences or mathematics/natural sciences at a state or state-recognized institution of higher education or *Berufsakademie* or equivalent institution (abroad).
  - b) adequate English language skills (active and passive) proved by one of the following language tests, or, in individual cases, an equivalent test checked and recognized by the corresponding Examination Board: Cambridge Certificate of Proficiency in English: minimum result: Grade C; IELTS (International English Language Testing System) minimum result: band 6.5; TOEFL (Test of English as a Foreign Language) minimum result: 92 points (internet-based)
  - c) documentation of knowledge acquired in a total of at least three courses (or equivalent) in at least two of the following four focus areas:
    - *Focus Area Computer Science*  
BA courses on the foundations of computer science, in which students have deepened the knowledge gained in the introductory lectures, especially in the fields of algorithms and data structures, data bases, automatic processing of texts and visualization of data.
    - *Focus Area Mathematics*  
BA courses on the foundations of analysis, linear algebra, mathematical logic and discrete mathematics.

- *Focus Area Social-scientific Methods*  
BA and fundamental MA courses on the theoretical and practical foundations of quantitative empirical social research, especially cognitive science, research logic, measurement theory, selection procedures and data collection techniques, as well as alternative research designs.
- *Focus Area Statistics*  
BA courses on the foundations of probability calculation, as well as descriptive and inductive statistics, especially discrete and continuous probability distribution, sampling theory, point and interval estimation, hypothesis testing, linear regression and generalized linear models.

More detailed information about the curriculum at the University of Konstanz is included in the attachment.

- (2) If applicants cannot present their examination certificate until the end of the application deadline, they have to prove that they will probably meet the admission requirements (as per para. 1) by documenting all performance assessments completed so far that are relevant for the final grade. The examination certificate has to be submitted no later than two months after the start of the semester that was applied for. Admission and enrolment can be granted with the provision that applicants prove their qualifying degree within this time limit.
- (3) When recognizing bachelor's degrees or equivalent degrees completed outside of Germany, the following have to be considered:
  - Recommendations of the *Kultusministerkonferenz, Zentralstelle für ausländisches Bildungswesen* (Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany, Central Office for Foreign Education)
  - Agreements on Equivalence of the Federal Republic of Germany
  - Agreements with partner universities.

#### **§ 4 Form and components of application**

- (1) The application for admission must be submitted in the form requested by the university.
- (2) Copies of the following documents have to be attached:
  - a) Documentation of an above-average degree in a bachelor's programme in economics, social science or mathematics/natural sciences completed at a state or state-recognized institution of higher education or *Berufsakademie* or institution abroad recognized as equivalent. If the bachelor's degree has not yet been completed, applicants have to attach documentation certifying all performance assessments that have been completed so far and are relevant for the final degree.
  - b) Documentation of knowledge in the focus areas as per § 3 para. 1 c;
  - c) Curriculum vitae

- d) Application letter in English (1 page) showing the candidate's aptitude and motivation for participating in the programme
  - e) Two letters of recommendation written by academic teachers, stating the applicant's aptitude and motivation for participating in the programme
  - f) Documentation of adequate English language skills (see § 3 para. 1 b)
  - g) Result of the GRE-test (Graduate Record Examination), if completed
- (3) The university may request that students present the original documents mentioned above when they enrol.

### **§ 5 Admissions committee**

- (1) The Departmental Council Economics appoints an admissions committee, consisting of at least one member of each of the departments involved (Mathematics and Statistics, Economics, Politics and Public Administration, Computer and Information Science, History and Sociology, Psychology). The admissions committee decides whether applicants meet the admission requirements (as per § 3) and prepares the admission decision (as per § 6).
- (2) The admissions committee may suggest to the Departmental Councils involved (Mathematics and Statistics, Economics, Politics and Public Administration, Computer and Information Science, History and Sociology, Psychology) further steps to develop the selection process.

### **§ 6 Selection process and criteria**

- (1) If there are more applicants who meet the admission requirements than places, a selection process will take place.
- (2) Applicants will only be considered in the selection process if they meet the admission requirements as per § 3 and have applied in due form and in due time (see § 2 and § 4).
- (3) Initially, 5 % of places, (minimum: 1 place), have to be provided for cases of hardship (§ 20 para. 6 in connection with § 9 para. 1 no. 1 and § 12 of the *Hochschulvergabeordnung HVVO* (regulation on university admission)). The remaining places and those not required for cases of hardship are allocated according to a ranking list of all applicants considered as per para. 2.

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- (4) The ranking list is based on the following criteria:
1. Type, topics and overall grade of the final examination that is the admission requirement as per § 3; if the degree has not been completed yet, the average grade (arithmetic mean) of the performance assessments completed so far that are relevant for the final grade (0 - 4 points)
  2. Knowledge in mathematics, statistics and computer science as per § 4 para 2 b (0-2 points)
  3. Result of the English language test (admission requirement as per § 3) (0-1 points)
  4. Assessment of the application letter in English as per § 4 (0-1.5 points)
  5. The letters of recommendation by two academic teachers as per § 4 (0-1 points)
  6. Result of the GRE test as per § 4 (0-0.5 points)
- (5) The sum total results from adding up the points reached in the individual criteria
- (6) In cases of parity, § 20, para. 3 *Hochschulvergabeverordnung Baden-Württemberg* applies.
- (7) The rector decides on admissions based on the recommendations of the admissions committee

### § 7

Furthermore, the provisions of the admission and enrolment regulations of the University of Konstanz as well as of the *Hochschulvergabeverordnung Baden-Württemberg (HVVO)* (regulation on university admission) apply as amended.

### § 8 Coming into effect

- (1) These admission regulations come into effect the day after their publication in the "*Amtlichen Bekanntmachungen*" (official announcements) of the University of Konstanz. They apply for the first time to the admission procedure for the winter semester 2017/18.
- (2) At the same time the admission regulations for the Master's Programme Social and Economic Data Analysis as of 04 May 2016) (*Amtlichen Bekanntmachungen*" 24/2016) become invalid.

### **Attachment**

**Attachment: Overview of courses regularly offered at the University of Konstanz for the documentation of knowledge as per § 3 para. 1c***a) Focus Area Computer Science*

- Data Visualization (VL), Department of Computer and Information Science, 6 ECTS
- "Konzepte der Informatik" (concepts of computer science) and Programmierkurs I (programming course I) (VL+Ü) 12 ECTS
- Algorithmen und Datenstrukturen (algorithms and data structures) and Programmierkurs II (programming course II) (VL+Ü), Department of Computer and Information Science, 12 ECTS
- Datenbanksysteme (database systems) (VL), Department of Computer and Information Science, 9 ECTS

*b) Focus Area Mathematics*

- Diskrete Mathematik und Logik (discrete mathematics and logic), Department of Computer and Information Science, 9 ECTS
- Analysis und Lineare Algebra, Department of Computer and Information Science, 9 ECTS
- Datenmathematik (data mathematics), Department of Computer and Information Science, 9 ECTS
- Mathematik für Wirtschaftswissenschaftler (mathematics for economics) (VL+Ü), Department of Mathematics and Statistics, 9 ECTS
- Lineare Algebra I (VL+Ü), Department of Mathematics and Statistics, 9 ECTS

*c) Focus Area Social-scientific Methods*

- Econometrics I (VL+Ü), Department of Economics, 8 ECTS
- Introduction to Survey Methodology (VL+Ü), Department of Politics and Public Administration, 9 ECTS
- Research Design I: Research Design and Causal Inference (VL), Department of Politics and Public Administration, 9 ECTS
- Methoden der empirischen Politik & Verwaltungsforschung (empirical research methods in politics and public administration) (VL), Department of Politics and Public Administration, 9 ECTS
- Empirie: Quantitative Methoden (empiricism: quantitative methods) (VL), Department of History and Sociology, 6 ECTS
- Methoden I (methods I) (VL), Department of Psychology, 5 ECTS
- Methoden II (methods II) (VL), Department of Psychology, 5 ECTS

*d) Focus Area Statistics*

- Statistik I (statistics I) (VL+Ü), Department of Economics, 6 ECTS
- Statistik I (statistics I) (VL+Ü), Department of Psychology, 6 ECTS
- Statistik (statistics) (VL+Ü), Department of Politics and Public Administration, 9 ECTS
- Statistik I (statistics I) (VL+Ü), Department of History and Sociology, 7 ECTS

The course catalogue only lists courses that take place regularly. Other courses from the changing set of courses offered by the departments may also be recognized as admission requirement subject to the approval of the Examination Board.

**Note:**

These regulations were published in the *Amtliche Bekanntmachungen* (official announcements) of the University of Konstanz No. 11/2018 on 26 February 2018.