

**Official Announcement No. 24**

**Published at Karlsruhe on April 30, 2019**

**Statutes for Admission to the Master's Program of Water  
Science and Engineering at Karlsruhe Institute of  
Technology (KIT)**

***Please note that this English translation is a service provided by KIT for your information only.  
The German version exclusively has legally binding character.***

# **Statutes for Admission to the Master's Program of Water Science and Engineering at Karlsruhe Institute of Technology (KIT)**

of April 26, 2019

Pursuant to Art. 10, par. 2, No. 6 and Art. 20, par. 2, clause 1 of the Act on Karlsruhe Institute of Technology (KIT Act), as amended on July 14, 2009, last amended by Art. 2 of the Act on the Further Development of University Legislation (HRWeitEG) of March 13, 2018 (bulletin, pp. 85, 94), Art. 60, par. 2, No. 2 and No. 6, Art. 61, par. 2, cl. 2, Art. 63, par. 2, and Art. 64, par. 1 of the Act of Baden-Württemberg on Universities and Colleges (Landeshochschulgesetz – LHG), as amended on January 1, 2005, last amended by Art. 1 of the Act on the Further Development of University Legislation (HRWeitEG) of March 13, 2018 (Bulletin, pp. 85), Art. 6, pars. 1, 2, and 4 and Art. 9, par. 3 of the Act on Admission to Higher Education (HZG) of September 15, 2005 (Bulletin, pp. 629), last amended by Art. 5 of the Act Accompanying the University Funding Agreement (HoFV-Begleitgesetz) of May 5, 2015 (Bulletin, p. 313), Art. 3, par. 3 and par. 4, Art. 6, par. 6, and Art. 23, par. 1 of the Act on the Awarding of University Places of the State of Baden-Württemberg (HVVO) of January 13, 2003 (Bulletin, pp. 63), last amended by the Ordinance of the Ministry of Science on the Modification of the Act on the Awarding of University Places of June 27, 2018 (Bulletin, p. 275), the KIT Senate adopted the following statutes on April 15, 2019.

## **I. General Regulations**

### **Article 1 – Scope**

(1) Karlsruhe Institute of Technology (KIT) awards the study places available in the Master's Program of Water Science and Engineering subject to the following provisions.

(2) If admission quota have been specified according to the valid Ordinance of the Science Ministry on the Specification of Admission Numbers at the Universities of the State of Baden-Württemberg (ZZVO), an admission procedure and, if necessary, a selection procedure will be organized. In case the number of applicants meeting the admission requirements as outlined in Articles 2 through 5 exceeds the total number of places available, the admission procedure will be followed by a selection

procedure. The selection procedure for study places in the first semester is subject to Articles 6 to 8. In case the number of applicants meeting the admission requirements as outlined in Articles 2 through 5 does not exceed the total number of places available, an admission procedure as specified in par. 3 will take place only.

(3) If no admission numbers for the Master's Program of Water Science and Engineering are specified based on the valid ZZVO, an admission procedure will be organized. In this case, the decision will be subject to the admission requirements defined below (Articles 2 to 5). A selection procedure will not take place.

## **Article 2 – Deadlines**

(1) Admission takes place for both the winter and the summer semester.

(2) If admission numbers for the Master's Program of Water Science and Engineering of Karlsruhe Institute of Technology (KIT) are specified based on the valid ZZVO, application for admission, inclusive of all documents required, must be submitted to Karlsruhe Institute of Technology (KIT)

- **by July 15** (exclusion deadline) for a start of studies in the **winter semester**,
- **by December 15 of the previous year** (exclusion deadline) for a start of studies in the **summer semester**.

(3) If no admission numbers are specified for the Master's Program of Water Science and Engineering of KIT, the said deadlines are no exclusion deadlines.

## **Article 3 – Application**

(1) The form of application depends on the general provisions valid for the admission procedure as outlined in the valid admission and enrollment regulations of KIT.

(2) The following documents must be enclosed with the application:

1. A copy of the bachelor's certificate or equivalent degree certificate according to Art. 5, par. 1, No. 1, the transcript of records (with the ECTS credits achieved being indicated), and diploma supplement, if available,

2. proofs of the minimum achievements required in Art. 5, par. 1, No. 2, which reveal the contents of the studies,
3. a declaration in writing by the applicant as to whether she/he has ultimately failed in an examination required according to the examination regulations or lost the entitlement to an examination for other reasons in the Master's Program of Water Science and Engineering or a related program with essentially the same content,
4. proofs of sufficient proficiency in English according to Art. 5, par. 1, No. 5,
5. proofs of scientific and/or professional achievements as outlined in Art. 8, if available,
6. the other documents specified in the valid admission and enrollment regulations.

During enrollment, KIT may request submission of the original documents on the basis of which the decision on admission was made.

Admission to the Master's Program of Water Science and Engineering may also be applied for, if the bachelor's degree has not been conferred until expiry of the application deadline outlined in Art. 2, but the applicant, based on her/his previous studies and examination achievements, may be expected to complete the bachelor's program in due time before the start of the Master's Program of Water Science and Engineering.

In this case, an average grade reflecting the examination achievements reached so far may be considered when making the admission and selection decision. The applicant participates with the average grade determined and the previous study and examination achievements only. The later result of the bachelor's examination will remain disregarded. A certificate of the examination achievements reached until the expiry of the application deadline (e.g. transcript) must be attached to the application.

#### **Article 4 – Admission and Selection Committee**

(1) To prepare the decision on admission and selection, the KIT Department of

Civil Engineering, Geo- and Environmental Sciences appoints an admission and selection committee consisting of at least two full-time scientific employees. A representative of the students can participate in the meetings of the admission and selection committee with an advisory vote. The admission and selection committee appoints one of its members as chairperson.

(2) In case several admission and selection committees are formed due to high numbers of applicants, all committees will meet at the beginning of the admission and selection procedure to agree on the evaluation criteria. This meeting will be chaired by the Studies Dean. At the end of the procedure, a final meeting may be organized.

(3) Upon the completion of the admission and selection procedure, the admission and selection committee reports the experience gained to the KIT Department Council. In addition, it makes proposals regarding the improvement and further development of the admission and selection procedure.

## **Article 5 – Requirements for Admission**

(1) For admission to the Master's Program of Water Science and Engineering, the following requirements must be met:

1. A bachelor's degree or an at least equivalent degree in an engineering program, such as Civil or Environmental Engineering, Chemical or Biological Engineering, in a natural science program, such as Geoecology, Environmental Sciences, or Geosciences, or a related program with essentially the same content at a university, university of applied sciences, cooperative state university in Germany, or at a foreign university. Studies must have been completed within a regular study period of at least three years with a minimum of 180 ECTS credits.
2. Minimum knowledge and achievements in the following areas:
  - a) Higher Mathematics in the amount of at least 12 credits,
  - b) basic natural science and engineering subjects, such as Physics, Chemistry, Biology, Mechanics, and/or Thermodynamics in the amount of at least 12 credits,

- c) engineering and/or natural sciences, such as Water Resources Management, Hydraulic Engineering, Hydrology, Urban Water Management, Hydromechanics, Water Treatment Technologies, Hydrogeology, Engineering Geology, Geophysics, Physical Geography, Soil Science, Environmental Systems Sciences, Climatology, and/or Hydrometeorology in the amount of at least 12 credits.

If the requirements above are missed by up to three credits, the applicant may still be admitted subject to the requirement of successfully completing the lacking courses by the end of the first semester of the Master's Program parallel to the valid studies plan. Compliance with this requirement must be proved at the time of reregistration for the third semester at the latest. Such requirements are specified by the admission committee and communicated to the applicant during the admission procedure.

- 3. Any additionally required examinations are subject to the valid Studies and Examination Regulations for the Bachelor's Program of Civil Engineering and the condition that a second repetition of such ultimately failed examinations is not permitted.
- 4. No ultimate failure in an examination required according to the Examination Regulations in the Master's Program of Water Science and Engineering or a related program with essentially the same content and no loss of the entitlement to the examination for another reason.
- 5. Sufficient proficiency in the English language corresponding to the level of at least B2 of the Common European Framework of Reference for Languages (CEFR), as confirmed by one of the following internationally recognized tests:
  - a) Test of English as a foreign language (TOEFL) with at least 90 points in the Internet-based test or
  - b) IELTS test with a total score of at least 6.5 and no section result being worse than 5.5, or
  - c) University of Cambridge Certificate in Advanced English (CAE) or University of Cambridge Certificate of Proficiency in English (CPE), or
  - d) UNlcert of level II at least.

The requirement to prove proficiency in English by one of the above tests does not apply to applicants, who graduated from secondary school or university in the USA, Canada, Great Britain, Ireland, Australia, or New Zealand.

The requirement to prove proficiency by one of the above tests also does not apply to applicants having a degree of a university in the EU/EEA or in Switzerland, with English being the only teaching and examination language. English as the only and official language of a completed degree program must be confirmed in the diploma supplement, the transcript of records, or in the degree certificate. Other confirmations relating to the teaching and examination language will not be accepted as a proof of language proficiency.

In case a proof of language proficiency cannot be presented before the expiry of the application deadline, admission may be granted subject to the requirement of presenting one of the accepted proofs of English proficiency at the time of enrollment at the latest.

(2) The admission and selection committee for the Master's Program of Water Science and Engineering, in agreement with the Examination Committee of the Master's Program of Water Science and Engineering, decides on equivalence of the bachelor's degree according to par. 1, No. 1 and the determination of programs with essentially the same content as outlined in par. 1, No. 3. For recognition of foreign degrees, the recommendations of the Conference of Ministers of Education and agreements concluded within the framework of university partnerships must be considered.

## **II. Selection Procedure**

### **Article 6 – Selection Procedure**

(1) If admission quota have been specified for the Master's Program of Water Science and Engineering based on the valid ZZVO and if the number of applicants

meeting the admission requirements as outlined in Article 5, par. 1 exceeds the total number of places available, the selection procedure is subject to the following provisions.

(2) To take part in the selection procedure, applicants

a) must have applied for a study place in due time and form and

b) must have fulfilled the admission requirements outlined in Article 5, par. 1.

(3) The admission and selection committee ranks the applicants meeting the admission requirements based on the overall grade of the final academic examination, the study and examination achievements reached so far according to Article 7, other scientific and/or professional achievements as outlined in Article 8, and the result of the interview according to Article 9.

(4) The points given by the admission and selection committee according to Articles 7 through 9 are added to calculate an overall score (maximum 200 points). This overall score is calculated with one decimal place. It is not rounded.

(5) In the case of equal ranking, Article 20, par. 3 HVVO applies.

## **Article 7 – Overall Grade of the Final Academic Examination and Studies and Examination Achievements**

(1) A maximum of 90 points are granted for the overall grade of the final academic examination and studies and examination achievements reached so far.

(2) A maximum of 45 points are granted for the overall grade of the final academic examination. The overall grade is calculated and evaluated based on the table given in the Annex.

(3) Study achievements reached so far according to Article 5, par. 1, No. 2 are evaluated as follows (maximum of 45 points):

1. For Higher Mathematics in the amount of up to 20 credits: 0.5 points per credit,
2. for basic natural science and engineering subjects, such as Physics, Chemistry, Biology, Mechanics, and/or Thermodynamics in the amount of up to 35 credits: 0.5 points per credit,



3. for engineering and/or natural sciences, such as Water Resources Management, Hydraulic Engineering, Hydrology, Urban Water Management, Hydromechanics, Water Treatment Technologies, Hydrogeology, Engineering Geology, Geophysics, Physical Geography, Soil Science, Environmental Systems Sciences, Climatology, and/or Hydrometeorology in the amount of up to 35 credits, including a final thesis on a topic in water-related engineering and/or natural sciences in the amount of up to 12 credits: 0.5 points per credit.
- (4) Subjects with names other than those given in par. 3, but the same contents will be considered in the selection procedure, provided that they are equivalent. The admission and selection committee decides on equivalence of subjects. The documents required for this purpose (for example, transcript of records, module descriptions) must be attached to the application by the applicant.

#### **Article 8 – Scientific and/or Professional Achievements**

The members of the admission and selection committee evaluate other scientific and professional achievements separately on a scale from 0 to 10 points. The following criteria are considered, provided that they clearly reflect the qualification of the applicant for the desired degree program:

1. Completed vocational training in a relevant profession and relevant professional activity even without completed vocational training,
2. practical activities and special previous trainings relevant to the subject,
3. extracurricular achievements and qualifications, e.g. scientific publications, awards, and honors.

From the sum of the points given by the committee members, the arithmetic mean is calculated with one decimal place (maximum 10 points). No rounding takes place.

#### **Article 9 – Interview**

(1) The interview is aimed at finding out whether the scientific expertise of the applicant resulting from the know-how acquired during studies or at other institutions is sufficient to pass the Master's Program within the regular period of studies. The interview will reveal whether the applicant is qualified and motivated for joining the

desired degree program. Applicants must prove that they are able to analytically apply contents of their studies to problems and topics of water-related engineering and natural sciences. Such problems and topics of water-related engineering and natural sciences cover the areas of transport and conversion processes in the natural and urban water cycles, the description and analysis of aquatic systems, and approaches to balancing and dimensioning. The applicant's demeanor during the interview and in particular her/his choice of words, approach to discussing problems, and persuasiveness of argumentation will also be evaluated, as will the competence of the applicant to discuss in a structured way subject-related problems in intercultural contexts.

(2) To limit the number of participants, applicants are preselected based on the overall grade of their degree qualifying them for admission to the Master's Program according to Article 5, par. 1, No. 1, the credits earned in studies and examinations so far according to Article 7, par. 1, and other scientific and professional achievements. On this basis, a first ranking of all applicants is made according to Articles 7 and 8. The number of applicants ranked best and invited to the interview must correspond to at least twice the number of places available.

(3) The interviews of the preselected applicants by the admission and selection committee last about 20 minutes each. They take place about three to six weeks after the expiry of the application deadline. As a rule, the exact dates and venues will be announced by KIT two weeks in advance. Applicants invited to the interviews will be informed by KIT via email in due time. In justified exceptional cases, the interview can be made by phone or via the Internet.

(4) The members of the admission and selection committee document major questions asked and answers given during the interview and sign the minutes afterwards. The minutes also contain the date and place of the interview, the names of the members of the committee, the names of the applicants, and the respective evaluation(s).

(5) At the end of the interviews, the members of the admission and selection committee evaluate the applicant's qualification and motivation to attend the Master's Program of Water Science and Engineering and to pursue the desired profession on a scale from 0 to 100 points.

Up to 50 points are granted for the applicant's competence to apply contents of her/his previous scientific education and training to problems and topics in water-related engineering and natural sciences. Up to 30 points are given for the study motivation and planning of studies by the applicants. The applicant's competence to discuss subject-related problems in a structured manner is given up to 20 points.

(6) The interview will be evaluated with 0 points, if the applicant fails to appear at the time scheduled for the interview without any good reason. In case the applicant stops the interview after its start, she/he will be evaluated based on the result reached up to that time. The applicant has the right to participate again on the next following date of an interview or in the next possible admission procedure, if she/he can prove in writing immediately after the scheduled date that the absence or stop of the interview was due to a good reason. In case of sickness, a medical certificate must be submitted.

(7) In case the applicant tries to influence the result of the interview by deception or by using impermissible aids, the interview will be evaluated with 0 points. An applicant disturbing the proper course of the interview may be excluded from its continuation by the admission and selection committee. In this case, the interview is given 0 points.

### **III. Admission Decision and Final Provisions**

#### **Article 10 – Admission and Selection Decision / Decision on Enrollment**

(1) The President decides on admission based on the proposal made by the admission and selection committee. If the number of applicants qualified according to Art. 5 exceeds the total number of study places available, selection and admission will be decided upon based on the ranking made according to Art. 6.

(2) Admission will be refused, if

- a) the application documents were not submitted in due time according to Art. 2 or not complete according to Art. 3, par. 2, Nos. 1 through 4,
- b) the requirements outlined in Art. 5 are not fulfilled,

- c) the applicant ultimately failed in an examination required according to the examination regulations or lost the entitlement to the examination for other reasons in the Master's Program of Water Science and Engineering or a related program with essentially the same content (Art. 60, par. 2, No. 2 LHG, Art. 9, par. 2 HZG).

(3) In the case of Art. 3, par. 3, admission is subject to proof of the bachelor's degree immediately, up to two months upon the start of the semester for which enrollment was applied for at the latest. If this proof is not presented in due time, admission to the Master's Program of Water Science and Engineering expires.

If no admission numbers have been specified based on ZZVO for the Master's Program of Water Science and Engineering, enrollment may be promised subject to proof of the bachelor's degree immediately, up to two months upon the start of the semester for which enrollment was applied for at the latest. If this proof is not presented in due time, the promise expires and no enrollment will take place.

If the applicant is not responsible for having exceeded the deadline, she/he must provide the respective proof in writing to the admission and selection committee. In the justified individual case, the admission and selection committee may extend the deadline for submission of the final certificate.

(4) If the applicant is not admitted upon the completion of the selection procedure, she/he will be informed in writing about the result of the selection procedure. This notification must contain the reasons and an information about the legal remedies available.

(5) The course of the admission and selection procedure must be documented in writing.

(6) As for the rest, the general provisions applying to the admission procedure in the admission and enrollment regulations of KIT remain unaffected.

## **Article 11 – Entry into Force**

The present Statutes enter into force on the day after their publication in the official announcements of Karlsruhe Institute of Technology (KIT). They apply to admission to the 2019/20 winter semester for the first time.

At the same time, the Statutes for Admission to the Master's Program of Water Science and Engineering of December 17, 2015 (Official Announcement of KIT No. 115 of December 17, 2015) cease to be in force.

Karlsruhe, April 26, 2019

Professor Dr.-Ing. Holger Hanselka  
(President)

#### Annex to Article 7, par. 2

Grade	Evaluation
1.0	45.0
1.1	43.5
1.2	42.0
1.3	40.5
1.4	39.0
1.5	37.5
1.6	36.0
1.7	34.5
1.8	33.0
1.9	31.5
2.0	30.0
2.1	28.5
2.2	27.0
2.3	25.5
2.4	24.0
2.5	22.5
2.6	21.0
2.7	19.5
2.8	18.0
2.9	16.5
3.0	15.0
3.1	13.5
3.2	12.0
3.3	10.5
3.4	9.0
3.5	7.5
3.6	6.0
3.7	4.5
3.8	3.0
3.9	1.5
4.0	0.0