

# **Admission Regulations for Mechanical Engineering M.Sc. and Bionics M.Sc. Faculty of Technology and Bionics Rhine-Waal University of Applied Sciences**

Dated 14 November 2018  
(Official Notice 27/2019)

As amended by the first amending statutes  
Dated 16 March 2021  
(Official Notice 17/2021)

In accordance with Section 2 (4) sentence 1, Section 49 (6), and Section 64 of the Higher Education Act of North Rhine-Westphalia (*Hochschulgesetz NRW*), in the amended form produced by the Act for the Future Development of Universities (*Hochschulzukunftsgesetz*) of 16 September 2014 (GV.NRW. 2014, p. 547), which entered into force on 1 October 2014 and was last amended by the Act of 1 December 2020 (GV.NRW., p. 1110), which entered into force on 8 December 2020, as well as in accordance with the General Examination Regulations for Bachelor's and Master's Degree Programmes of Rhine-Waal University of Applied Sciences (RPO) from 3 January 2018 (Official Notice 7/2018), the Faculty Council of the Faculty of Technology and Bionics of Rhine-Waal University of Applied Sciences has enacted the following Admission Regulations for Mechanical Engineering M.Sc. and Bionics M.Sc.:

## **Section 1 Scope**

- (1) These Regulations govern admission to the degree programmes Mechanical Engineering M.Sc. and Bionics M.Sc. of the Faculty of Technology and Bionics of Rhine-Waal University of Applied Sciences.
- (2) Admission requirements are defined in Section 2.

## **Section 2 Admission requirements**

- (1) The minimum requirements for admission to the aforementioned degree programmes are:
  1. a professionally-qualifying undergraduate degree in a related field (listed explicitly in the annex of these Regulations) that had at least 210 total credits (ECTS) or a standard period of study (full-time) of at least seven semesters,
  2. a final cumulative grade for said undergraduate degree of at least 2.5 or better according to the German grading scale, equivalent to an "A" or a "B" on the ECTS grading scale,
  3. at least C1 level proficiency in English according to the Common European Framework (CEFR), verified by an internationally recognised language certificate.

- (2) International applicants whose qualifications are not considered equivalent to those of German applicants by international treaty must demonstrate their academic aptitude in a special examination in addition to fulfilling the minimum requirements defined in subsection 1. Only the following aptitude tests and scores are accepted:
- TestAS (minimum combined score of 100 for the core test and the engineering test)
  - Graduate Aptitude Test in Engineering (GATE) with a score of 80% (or the corresponding percentile rank for the year) in the areas defined in the annex or
  - Graduate Record Examination (GRE) with a score of at least 85% (or the corresponding percentile rank for the year)
- (3) Deviating from subsection 1 number 1, applicants applying on the basis of a professionally-qualifying undergraduate degree that had between 180 and 210 credits (ECTS) or a full-time study duration of at least six semesters may be admitted on a provisional basis, generally on the condition that they complete the missing undergraduate requirements during their postgraduate studies. In addition to completing additional modules, applicants may also request credit for prior learning or qualifications equivalent to the aims and objectives of the missing undergraduate requirements. Periods of prior learning or prior qualifications that have been recognised for credit will be recorded in the final grade certificate, but not included in final grade calculations.
- (4) The Examination Board is responsible for decisions on the relevancy of an applicant's undergraduate degree according to subsection 1 number 1 based on submitted documentation and, if necessary, a technical discussion with the individual applicant. In general, the relevancy requirement is considered fulfilled if an applicant's undergraduate degree was in a field corresponding to the master's degree specialisation for which they are applying. Should other qualifications be provided, applicants must demonstrate a level of technical expertise corresponding both in scope and content to an undergraduate degree as defined by sentence 2.
- (5) Applicants may request an exemption from the language certificate requirement defined in subsection 1 number 3. Requests are justified, for example, for persons applying on the basis of a professionally-qualifying undergraduate degree that was in English and obtained in one of the countries listed in the annex that are recognised as majority English-speaking. The Examination Board is responsible for deciding these requests. The English language requirement is also considered fulfilled for applicants who completed their professionally-qualifying undergraduate degree in English at Rhine-Waal University of Applied Sciences.
- (6) Applicants are ineligible for admission if they have previously failed the final attempt at a mandatory examination in an identical degree programme at a university that is subject to German Basic Law. This also applies to degree programmes that share a significant overlap in content with the desired degree programme at Rhine-Waal University of Applied Sciences.

**Section 3**  
**Intake and application deadlines**

- (1) Mechanical Engineering M.Sc. and Bionics M.Sc. accept new applicants in both the winter and summer semesters.
- (2) Applications must be received by Rhine-Waal University of Applied Sciences by no later than 15 July for winter semester intake or 15 January for summer semester intake.
- (3) For more details, refer to the Enrolment Regulations of Rhine-Waal University of Applied Sciences.

**Section 4**  
**Entry into force**

These Admission Regulations shall enter into force on the day of publication in the Official Notices of Rhine-Waal University of Applied Sciences. The previously valid Admission Regulations for Mechanical Engineering, M.Sc. shall expire simultaneously.

Note: *These Admission Regulations entered into force on 24 April 2021.*

**Degree programmes considered to be relevant for admission to Mechanical Engineering M.Sc. in accordance with Section 2 (1) no. 1**

A degree in this field is considered relevant:

- Mechanical Engineering

Additionally, a degree in a neighbouring field with emphasis areas similar to mechanical engineering is considered relevant:

- Mechatronics / Systems Engineering
- Industrial Engineering
- Materials Science / Materials Engineering
- Vehicle Technology / Automotive Engineering
- Aerospace Engineering
- Manufacturing/Production Technology/Engineering
- Automation Technology/Engineering
- Process Engineering

The relevancy of a non-listed undergraduate degree programme can be determined in a separate process, provided it has an emphasis in engineering.

Accordingly, during the application phase the Examination Board can judge on a case-by-case basis the relevancy of a degree in one of the following fields based on its module descriptions:

- Electrical Engineering / Electronics
- Environmental Technology/Engineering
- Logistics
- Computer Science/Engineering
- Energy Technology
- Bionics
- Physics

**Degrees programmes considered to be relevant for admission to Bionics M.Sc. in accordance with Section 2 (1) number 1**

A degree in the following fields is considered relevant:

- Mechatronics / Robotics
- Bionics / Biomimetics
- Informatics / Computer Science and derivatives
- Electrical/Electronic Engineering
- Mechanical Engineering and derivatives like Aerospace, Marine, Automotive, Naval
- Automation Engineering
- Materials Science/Engineering
- Chemical Engineering
- Kinesiology / Movement Science

The relevancy of a non-listed undergraduate degree programme can be determined in a separate process, provided it has an emphasis in bionics.

Accordingly, during the application phase the Examination Board can judge on a case-by-case basis the relevancy of a degree in one of the following fields based on its module descriptions:

- Biology / Zoology / Botany / Ecology / Oceanography
- Chemistry / Physics / Mathematics
- Bioengineering / Microbiology
- Architecture / Civil Engineering
- Environmental Science (chemistry focus)
- Energy & Environment
- Environmental Science (biology focus)
- Biomechanics
- Sports Sciences
- Other Engineering

### **Annex 3: Acceptable GATE tests:**

For Mechanical Engineering:

- AE: Aerospace Engineering
- ME: Mechanical Engineering, M.Sc.
- PI: Production and Industrial Engineering
- XE-ABx: Maths, Fluids and one other engineering
- XE-ACx: Maths, Materials and one other engineering
- XE-ADx: Maths, Solid Mechanics and one other engineering
- XE-AEx: Maths, Thermodynamics and one other engineering

For Bionics:

- AE: Aerospace Engineering
- BM: Biomedical
- CH: Chemical Engineering
- CS: Computer Science & IT
- CY: Chemistry
- EC: Electronics & Communication Engineering
- ES: Environmental Science & Engineering
- EY: Ecology & Evolution
- IN: Instrumentation Engineering
- MA: Mathematics
- ME: Mechanical Engineering
- MT: Metallurgical Engineering
- PH: Physics
- XE-ABx: Maths, Fluids and one other engineering
- XE-ACx: Maths, Materials Science and one other engineering
- XE-ADx: Maths, Solid Mechanics and one other engineering
- XE-AEx: Maths, Thermodynamics and one other engineering
- XE-AEx: Maths, Polymer Sci and one other engineering
- XL-PRx: Chemistry, Botany and one other life science
- XL-PTx: Chemistry, Zoology and one other life science
- XL-PUx: Chemistry, Food Tech and one other life science

**Annex 4: The following countries are recognised as majority English-speaking:**

- Antigua and Barbuda
- Australia
- Bahamas
- Barbados
- Belize
- Dominica
- Grenada
- Guyana
- Ireland
- Jamaica
- Canada
- New Zealand
- St. Kitts and Nevis
- St. Lucia
- St. Vincent and the Grenadines
- Trinidad and Tobago
- The United Kingdom of Great Britain and Northern Ireland
- United States of America