

Application and Selection Process
for the Master's Degree Programme
M.Sc. in Management and Engineering in Computer Aided Mechanical Engineering
(MME-CAME)"

„M.Sc. in Management and Engineering in Water (MME-Water)"

Faculty of Mechanical Engineering
Faculty of Civil Engineering
at the RWTH Aachen University

Application and Selection Process

The Examination Board of the programme decides which students will be admitted to the master programme M.Sc. in Management and Engineering in Water. The admission and selection procedure aims to select students based on measurable criteria in order to guarantee the desired quality and success rate of students entering the programme. In general, students are admitted to the Master programme on the basis of their knowledge and skill level, attitude and motivation relevant to the successful completion of the programme.

The application process follows three steps, involving several authorities:

- 1. Examination of Formal Criteria**
- 2. Examination of Academic Requirements**
- 3. Selection of the Candidates on a competitive basis**

1. Examination of Formal Criteria

Responsible: RWTH International Academy

Examination of the University Degree

The RWTH International Academy reviews the university degree. The university degree has to be approved or officially accredited by a responsible public authority of the country in which the university is located. Detailed information which universities are accredited is accessible via the Anabin database (<http://anabin.kmk.org/anabin-datenbank.html>) by the Central Office for Foreign Education.

Notice	Conversion of the mark into the German System The marks of the applicants will be converted into the German system. For this, the best mark of the home country system and the minimum pass mark will be set into relation to the German best mark (1,0) and the minimum pass mark (4,0).
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Review of English Language Requirements

The English language requirements, as defined in the examination regulations of the programme, will be examined. The certification of the English language proficiency can be presented upon enrolment - an admission can be granted with conditional approval.

For a degree course that is fully taught in English, applicants must prove sufficient fluency in English. Exemptions from this language requirement is only applicable for nationals or first degree holders from USA, UK, Canada, Ireland, New Zealand, and Australia. According to the general examination regulations (Übergeordnete Prüfungsordnung für alle Bachelor- und Masterstudiengänge - ÜPO) of RWTH Aachen University (§ 9 (3)), the following language certificates are recognised:

- a) Test of English as Foreign Language (TOEFL) „Internet-based” Test (IBT) with a result of at least 90 points,
- b) IELTS-Test with a result of at least 5.5,
- c) Cambridge Test-Certificate in Advanced English (CAE),
- d) First Certificate in English (FCE) with a grade of at least B,
- e) Documentation in accordance with the Common European Framework of Reference for Languages, CEFR (German: GeR) that demonstrates proficiency to level B2. For example, proof of proficiency can be demonstrated by submission of the German school leaving qualification, “Abitur”, stating that the applicant attended English lessons up to the end of qualification phase 1 (Year 11 in the G8 Abitur system otherwise Year 12) and achieved a minimum grade of “satisfactory”.

2. Examination of Specific Requirements

Responsible: Examination Board of the programme / Academic Programme Coordinator

Examination of knowledge and skills gained in the previous degree

The applicant’s first degree studies’ transcript will be reviewed with respect to the defined courses, that they must have completed in their previous education in order to be qualified for the Master’s degree programme. Up to 30 Credit Points of missing courses can be set as a condition along with the admission.

In order to be sufficiently qualified for the Master’s degree programme, the applicant must have acquired the necessary knowledge in the following areas:

- In total 120 credit points (CP) within mathematical and natural sciences and engineering science subjects
- Those credit points must include the following subjects from a Bachelor degree course in engineering of RWTH Aachen University or equivalent performances:

Fundamentals in Mathematics and Natural Sciences	Mathematics, Chemistry, Physics, Biology
Specific Fundamentals in Civil Engineering	Mechanics, Hydromechanics, Water, Waste Water, Urban Water Management, Energy, Construction, Infrastructure, Recycling, Environmental Management, Hydrology, Water Management
Fundamentals in Management	Management and Entrepreneurship, Accounting, Production and Logistics, Marketing, Corporate Finance

Examination of Practical Work Experience

Applicants for a continuous Master's degree programme have to prove practical work experience of as a rule not less than one year. The work experience will be reviewed regarding the scope, tasks, and relation to the programme.

Notice

Only applicants that meet the formal and specific requirements can be considered in the further selection process.

3. Selection of the Candidates

Responsible: Examination Board / Academic Programme Coordinator /
Administration of the Programme

In the final review, the criteria as defined under 1.) and 2.) will be supplemented by a relative comparison of qualified applications which will be ranked on a competitive basis.

The main criteria for the ranking are:

- a) the **graduation mark**,
- b) the **university the Bachelor degree has been obtained at** and
- c) the **letter of motivation**. Additionally,

Student applicants can enhance their chances by submitting optional documents or certificates such as Internships in a foreign country, academic awards or peer-reviewed publications.

Points are assigned to the respective criteria and will be added up depending on the individual result.

Graduation Mark

Criterion 1: Final grade of Bachelor studies (converted into the German grading system)	
Grade	Points
1,00 – 1,15	20
1,16 – 1,29	19
1,30 – 1,50	18
1,51 – 1,69	17
1,70 – 1,85	16
1,86 – 1,99	15
2,00 – 2,15	14
2,16 – 2,29	13
2,30 – 2,50	12
2,51 – 2,69	11
2,70 – 2,85	10
2,86 – 2,99	9
3,00 – 3,15	8
3,16 – 3,29	7
3,30 – 3,50	6

3,51 – 3,69	5
3,70 – 3,85	4
3,86 – 3,99	3
4,0	2
> 4,0	0

University at which the Bachelor's degree was obtained

Criterion 2: University at which the Bachelor's degree was obtained	
University	Points
University with an international reputation	10
University with a high regional reputation	5
University recognized in Germany (Listing in the Anabin database)	3
No well-known recognised university	0

The points for national and international reputation are allocated based on the universities' ranking placements in various international rankings provided by RWTH Aachen University's International Office and by the German Academic Exchange Service (DAAD). This collection of rankings includes among others the Times Higher Education Rankings, the Shanghai University Rankings and the QS Rankings both in their global, their regional and their subject related versions (eg. Shanghai Ranking's Global Ranking of Academic Subjects 2017 - Mechanical Engineering). Apart from that, the structural educational system analyses and reports published by DAAD are taken into consideration when identifying a university with a high regional reputation. These reports represent the qualitative strengths and weaknesses of national education systems. They also list the leading universities of each country including the field of research in which they stand out.

Motivation Letter

Criterion 3: Letter of motivation	
Subjects	Points
motivation for the desired course of study	1
reasons for choosing RWTH Aachen	1
relation to previous/current studies	1
future career goals	1
letter follows a clear, logical structure	1

The respective scores are summed individually for each applicant and result in a total score that can be transferred into a ranking list. On the basis of the ranked list position, the study places will then be allocated to the best applicants.

In case of several equally qualified applicants additional criteria for extraordinary performances can be drawn on. This covers, inter alia, the successful completion of an internship abroad, national and international personal awards and the number of peer-reviewed publications. Apart from that RWTH Aachen University aims to increase diversity in their study programmes as part of their second "Strategy for the Future" and has therefore founded the "Place to Be" initiative for the recruitment of international research talents. In accordance with that, selection among equally qualified candidates is guided by the wish to form as diverse a student intake as possible.