Self-disclosure for M.Sc. Chemistry at TU Dortmund University

Dear applicant for our Master's degree program in Chemistry:

Thank you for your interest in our Master's degree program. Please read this document before you apply. It will give you a preliminary overview of our admission criteria and help you determine your eligibility for the Master's program.

For the assessment of your eligibility for our Master's degree program in Chemistry, we need detailed information about your academic background in order to evaluate your application.

Family name, First name	
Date of birth	
Degree 1, University	
Degree 2, University	
Further degrees and courses	

Admission requirements

Admission to the Master's degree program in Chemistry requires a Bachelor's degree in Chemistry or a comparable degree of at least three years (six semesters). Once your application has been received by uni-assist and if all documents are complete and in order, it will be forwarded to us and we will assess the comparability of your degree with ours.

You can find more information about the admission requirements in the Examination Regulations.

To be eligible for our Master's degree program, you must meet four different admission criteria. Each of the four criteria is described in detail in the following subsections. Apart from these criteria, the program is not restricted.

Candidates who appear to have comparable qualifications to our Bachelor's degree in the relevant theory and also sufficient hands-on experience in the laboratory, especially in synthetic chemistry, will be invited to an admission's interview. The purpose of the interview is to get to know the candidates, their practical skills and their basic knowledge of working in a laboratory. The outcome of this 15-20 minute interview will determine whether the candidate is admitted to the Master's degree program and whether stipulations of a maximum of 30 credits will be imposed.

Criterion 1: Scope of the Courses in Chemistry

We compare the scope of your qualifications with the relevant scope of academic achievements of our Bachelor's degree program in Chemistry. Please list the relevant courses you have successfully completed in the tables below. Please note that each of your courses can only be counted once.

In the following list you will find information **about the scope of the courses** in chemistry in our Bachelor's degree program and which contents are relevant for us. Please enter the total number of hours (not credits, grades, marks etc.). If a module consists of two different parts (e.g. organic and physical chemistry), please write each part under the right heading. In the column for laboratory courses, please enter only the hours in which you actually performed experiments in the laboratory. Demonstrations, films, lecture etc. about how to perform experiments do not count as laboratory experience. There is an additional table about your **practical laboratory skills on a second form.**

1. **General and Inorganic Chemistry:** Please note that this category refers to basic and advanced knowledge in general and classic inorganic chemistry. Related disciplines such as applied chemistry, materials chemistry/science or industrial (inorganic) chemistry are not considered relevant.

For your comparison: B.Sc. Chemistry at TU Dortmund: Module "General and Inorganic Chemistry" 90h (6h per week, 15 weeks), "Inorganic Chemistry 2": 60h (4h per week), "Inorganic Chemistry 3" 90h (4h per week)

Degree program	Course title	Theory (h per week)	Laboratory (h per week)
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks

2. **Analytical Chemistry and basic laboratory courses in Inorganic Chemistry:** Please note, this category includes courses about quantitative and qualitative analysis as well as basic experiments in inorganic chemistry for beginners.

For your comparison: B.Sc. Chemistry at TU Dortmund: Module "General and Inorganic Chemistry Laboratory Course" 165h (10h per week laboratory course, 1h per week seminar), "Laboratory Course Inorganic Chemistry 2": 135h (7h per week laboratory course, 2h per week seminar)

Degree program	Course title	Theory (h per week)	Laboratory (h per week)
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks

3. **Instrumental Analysis and Methods of Structure Elucidation:** Please note, this category includes fundamental information about instrumental methods of analysis and their application. The detailed theoretical background is a topic of courses in physical chemistry.

For your comparison: B.Sc. Chemistry at TU Dortmund: Module "Applied Analytical Chemistry" 45h (3h per week), "Structure Elucidation" 60h (4h per week)

Degree program	Course title	Theory (h per week)	Laboratory (h per week)
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks

4. **Organic Chemistry and advanced laboratory courses in synthetic chemistry (inorganic and organic chemistry):** Please note that this category refers to the classic disciplines of organic chemistry. Related disciplines such as applied chemistry (e.g. polymer chemistry, petroleum chemistry, green chemistry), medicinal chemistry, biochemistry, industrial organic chemistry or physical organic chemistry are not considered equivalent.

For your comparison: B.Sc. Chemistry at TU Dortmund: Module "Organic Chemistry 1" 60h (4h per week), "Organic Chemistry 2" 60h (4h per week), "Organic Chemistry 3" 45h (3h per week), "Laboratory Course in Organic Chemistry" 180h (10h per week laboratory course, 2h per week seminar), "Laboratory Course Synthesis and Methods" 150h (8h per week laboratory course, 1h per week seminar, 1h per week exercise course)

Degree program	Course title	Theory (h per week)	Laboratory (h per week)
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks

5. **Physical Chemistry:** Please note that this category refers to the classic disciplines of physical chemistry as chemical kinetics, thermodynamics, electrochemistry, transport phenomena, properties of gases and liquids, quantum theory, theory of atoms and molecules structure, theory of spectroscopy, statistical description of matter.

For your comparison: B.Sc. Chemistry at TU Dortmund: Module "Physical Chemistry 1 and 2" 105h (7h per week), "Physical Chemistry 3" 60h (4h per week), "Physical Chemistry 4" 45h (3h per week), "Laboratory Course in Physical Chemistry 1" 90h (5h per week laboratory course, 1h per week seminar), "Laboratory Course in Physical Chemistry 2" 105h (7h per week laboratory course)

Degree program	Course title	Theory (h per week)	Laboratory (h per week)
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks

6. **Other courses:** Here you can add chemistry courses that do not fit to the categories above but could be interesting for us.

Degree program	Course title	Theory (h per week)	Laboratory (h per week)
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks
Bachelor _____		___ hours ___ weeks	___ hours ___ weeks

Criterion 2: Practical laboratory skills

The Bachelor's degree program in Chemistry at TU Dortmund University comprises 67 contact hours per week of practical laboratory training and a total of 9 hours per week of seminars during the Bachelor's degree program and the Bachelor's thesis. Our aim is to enable students to carry out all important analytical methods, physical chemistry and synthesis, especially in organic and inorganic chemistry, and to be able to conduct scientific research at the end of their Bachelor's degree program.

As the laboratory courses of the Master's degree program build on the practical skills of our previous Bachelor's degree program, we can only admit applicants with a high level of practical experience in synthetic chemistry and experience in chemical research methods. We therefore ask applicants to

complete the second form about their practical laboratory skills. There you will find more information about the content of our laboratory courses and the methods we are interested in. Please submit both forms with your application. There you can also add any skills you have gained through work experience.

Criterion 3: Thesis and experience with scientific experiments and writing

The Bachelor's degree in Chemistry concludes with a Bachelor's thesis at the end of the studies. The thesis is based on the analysis of relevant scientific literature and includes original scientific experiments. During the thesis work, students acquire the ability to work independently on a project within a given timeframe, discuss the results and write a scientific thesis.

Prospective students of the Master's degree program are expected to be able to carry out scientific experiments, work with scientific literature, to know different citation methods, to be able to write a thesis and to know the principles of good scientific practice. Therefore, please let us know if you have already written a thesis, a report about a scientific project or relevant scientific publications.

7. Bachelor's / Master's thesis

☐ I have **not** written a Bachelor's thesis
☐ I have written a Bachelor's thesis
Title:

☐ The thesis included experimental work
☐ The thesis was based only on literature reviews

Another scientific project(s):

Experimental part contained: ☐ yes, ☐ no
Scope of the experimental part:_____weeks

☐ I have **not** written a Master's thesis
☐ I have written a Master's thesis
Title:

☐ The thesis included experimental work
☐ The thesis was based only on literature reviews

Another scientific project(s):

Experimental part contained ☐ yes, ☐ no
Scope of the experimental part:____weeks

Remarks

In this field you can add additional information that could be of interest or important for the assessment of your application.

Criterion 4: Language requirements

Most of the courses are taught in English. Therefore, applicants must provide evidence of **language proficiency at level B2** (or above) of the Common European Framework of Reference for Languages. The following forms of evidence of English language proficiency are accepted:

- Proof of English language skills in a German high school diploma
- Through an internationally recognized language certificate (TOEFL, IELTS, Cambridge English Language Assessment, Pearson PTE Academic, TOEIC, telc, UNIcert, Cambridge IGCSE)
- By attending an English-speaking school for at least one year
- Applicants whose native language is English or who have obtained a degree in an English taught program.

A certificate of German language proficiency is not required. Starting from the summer semester 2027, the minimum grade for the Master's degree program will be eliminated.

I hereby confirm that the information I have provided regarding my courses is correct to the best of my knowledge and belief.

Place and Date Signature