

Application form for the admission to the M.Sc. program in Chemistry at the University of Cologne

! Please fill in online and print or use black pen!

Personal data

Family name	First name(s)	Date of birth TT-MM-JJJJ
Place of birth	Nationality	Gender
Street / Street number		
Postal code	City / Country	
Phone number	E-Mail-address	

Please make sure that your e-mail address is correct, as main correspondence and most information will be processed via e-mail.

University Bachelor degree or alternative qualifications

Name of the bachelor / study program	Degree obtained
University / Institution	
Matriculation number (only for students, who obtained their Bachelor degree at the University of Cologne)	
Title of Bachelor thesis	
Advisor of Bachelor thesis (title, family name, first name, university/institution)	
Date of certificate	Overall grade

If you have not yet finished your B.Sc. please give the expected date (marked with „expected “and the weighted average of the grades you have received so far.

Referee 1 (name, university /institution, e-mail-address)

Referee 2 (name, university / institution, e-mail-address)

Modules, that are still to be completed (please add expected date of examination)

1

2

Credit points achieved in chemical modules of the following areas

For each chemical area - please fill in the modules attended during your Bachelor program.

Physical chemistry and theoretical chemistry

Title of the module	ECTS
Total amount of credits	

Organic chemistry and biochemistry

Title of the module	ECTS
Total amount of credits	

Inorganic chemistry and analytical chemistry

Title of the module	ECTS
Total amount of credits	

Others

Title of the module	ECTS
Total amount of credits	

English language proficiency (please mark)

- UNiCert level II, CEFR level B2 in English
- German general qualification for university entrance (Allgemeine Hochschulreife)
- B.Sc. from an English taught program

Other: _____

German language skills (not valid for approval):

Experimental Prerequisites – SELF EVALUATION SHEET

It is highly recommended that applicants critically self-evaluate their level of experimental expertise with respect to the given headwords.

☞ Application for our Master of Science program is not reasonable if the candidate realizes substantial deficits on one or more of the mentioned skills and techniques. The following skills and experimental competences are presupposed from the preceding scientific Bachelor program

No.	Competence	Experience		
		high	medium	low
1.	Safety aspects & environmental properties (risk potentials) of common solvents & reagents			
2.	Calculation of concentrations, stoichiometries, yields, and conversions			
3.	Competent performance of synthetic inorganic and organic transformations, incl. extractive work-up, product isolation and purification and characterization (NMR, MS, IR, UV, optical rotation)			
4.	Handling (and proper disposal) of organometallic and metal hydride reagents (Grignard, alkyllithium, LiAlH ₄), working under inert gas, Glovebox and Schlenk-techniques			
5.	Monitoring reactions by means of TLC or GC			
6.	Proper use of reduced pressure apparatus (rotavap, oilpump with cooling trap, ...)			
7.	Basic knowledge of advanced techniques for characterization of solids: Electron Microscopy, Atomic Force Microscopy, X-ray diffraction (single crystal, powder)			
8.	<i>Practical knowledge of chemical separation and purification techniques like</i>			
	-precipitation			
	-filtration			
	-centrifugation			
	-solvent extraction			
	-column separation			
	-distillation			
	-sublimation			
	-crystallization			
	-chromatography (TLC, possibly also GC, HPLC)			

Place, date

Signature