



Universität
Basel

Departement
Chemie

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Chemie



MSc in Chemistry



Why chemistry at the University of Basel?

- The Master's program (3 semester, 90 CP) includes a specialization with hands-on experience.
- Study in a friendly and international atmosphere.
- Have close contact with professors.
- Have contact to the Basel chemical industry in joint seminars and lectures.
- Basel is the city of chemistry.

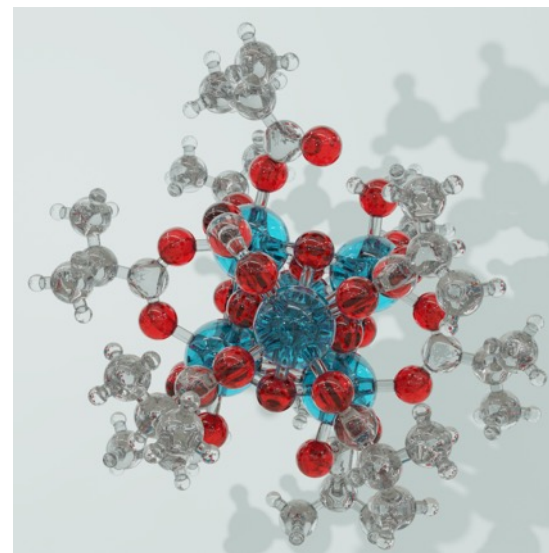


Research focus at the Department of Chemistry

Our research covers the whole breadth and thematic diversity of modern chemistry.

In addition to the classic fields of inorganic, organic and physical chemistry:

- Chemical Biology
- Nanomaterials
(nanocrystals, molecular systems, ...)
- Synthesis & Catalysis
- Theoretical Chemistry



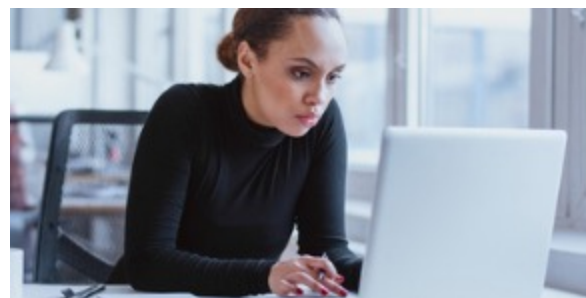
Please visit the website of the Department of chemistry for more information:
<https://chemie.unibas.ch/en/research/research-in-brief/>



What do you do when you graduate?

As a chemist you have a broad variety of career options

- Chemical research
- Education
- Process development
- Quality control
- Environmental protection
- Science communication
- Food industry
- Forensics
- Consulting, patent lawyer
- ...



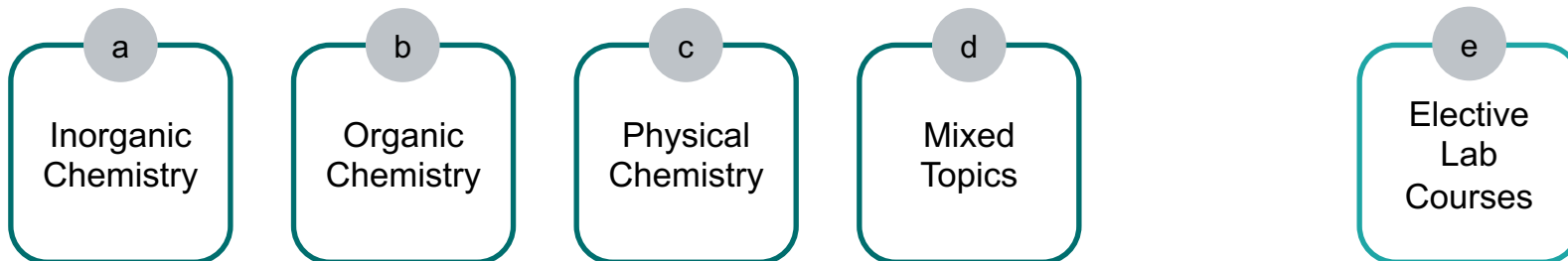
Program Structure

Module	Credit Points
a. Inorganic Chemistry	30 in total <u>compulsory lectures</u> (12 CP, chosen from at least two different modules a, b or c) <u>elective lectures</u> (18 CP, modules a-d)
b. Organic Chemistry	
c. Physical Chemistry	
d. Mixed Topics	
e. Elective Laboratory Courses	30
f. Master's Project and Thesis	26
g. Oral Master's Exam	4



Program Structure – lectures and elective lab courses

Lectures are grouped in **modules a-d**.



Lectures (usually 3 CP each)

Compulsory lectures (12 CP) in the core subjects inorganic chemistry, organic chemistry and physical chemistry must be chosen from at least two different modules a-c.

Elective lectures (18 CP) can be chosen from modules a-d.

Elective laboratory courses (2 x 15 CP)

6 weeks fulltime or 12 weeks part-time.

Project work within two different research groups.

Compulsory Lectures

Inorganic Chemistry	Organic Chemistry	Physical Chemistry
Metals in Biology	Chemical Biology	(Bio)Molecular Behaviour at the Nanoscale
Photophysics and Photochemistry	Supramolecular Chemistry	Molecular and Chemical Physics
Colloidal Nanocrystals and Quantum Dots	Synthesis and Physical Properties of Nanomolecular Systems	Molecular Simulations with Chemical and Biological Applications
Surface Chemistry and Heterogenous Catalysis	Stereoselective Organic Synthesis	Advanced Molecular Spectroscopy
	Total Synthesis of Natural Products	
	Introduction to NMR Spectroscopy of Proteins and other Biomolecules	

For the full spectrum of courses offered, please refer to the course directory at <https://vorlesungsverzeichnis.unibas.ch>



Elective Lectures / Mixed Topics

Elective Lectures / Mixed Topics	
Biocatalysis for Organic Synthesis	Organic Reactions in Industry – Theory & Case Studies
Forensic Chemistry and Toxicology	Analytical Chemistry of the Atmosphere: Quantifying Climate Change
X-ray Crystallography	Electrochemistry – Basics and Practice (lecture and practical course)
Basics in Recombinant Protein Production (practical course)	Scientific writing clinic: How to efficiently plan, assemble, write, and finalize a scientific article

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General Information

Start of program

- spring or fall semester

Admission requirements

- BSc in Chemistry from the University of Basel
- BSc in Chemistry from a University certified by the University of Basel (additional requirements may be necessary)

Admission deadline

(does not apply for BSc students from the University of Basel)

- 30th April (for fall semester)
- 30th November (for spring semester)

Language of instruction

- English

Fellowships for international candidates

- Basel Excellence Fellowship for Master Studies
- Alfred Werner Master's Student Scholarship (by the Swiss Chemical Society)

Any questions? Then ...

... contact us

Prof. Dr. Jonathan de Roo (for academic advice)
Email: jonathan.deroo@unibas.ch

Dr. Ina Emme-Papastavrou, study coordinator
(for more administration-related questions)
Email: studium-chemie@unibas.ch

... visit our website

<https://chemie.unibas.ch/study>



... join us

at the Master's info event on **20 March 2025**



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Thank you
for your attention ...

... see you on **20 March 2025**