

# SPACE FOR BIOLOGICAL CHEMISTRY.



Master's Degree Program



JOHANNES KEPLER  
UNIVERSITY LINZ

# Biological Chemistry.

The joint Master's degree program in Biological Chemistry is a unique program between the Johannes Kepler University and the University of South Bohemia (USB) in Budweis (České Budějovice). The program expands on the curriculum of the joint Bachelor's degree program in Biological Chemistry (JKU/USB). The curriculum is highly flexible, allowing students to pursue an interdisciplinary combination of subjects in chemistry, biochemistry, biology and biophysics as well as individual course selections. Graduates of the Bachelor's degree program in Technical Chemistry (JKU) – and other comparable undergraduate majors – can be admitted to the Master's degree program after successfully completing bridging subjects in Biology. The Master's degree program is offered entirely in English and students are awarded two diplomas (MSc, Mgr.).

## YOUR BENEFITS

Expertise in bioorganic chemistry, structural biology and chemistry, systems biology, etc.

Proficiency in modern laboratory technologies

Flexible, interdisciplinary program

Engage in hands-on research for your thesis

## To the Point



**Mgr. MARTINA MITTERMAYR BSc MSc**  
Graduate of the Master's Degree Program in Biological Chemistry

'My studies gave me a broad basis for various fields of work and I was particularly interested in the program's intercultural aspect. English as the language of instruction has been a great advantage as I now work at an international company.'



**Mgr. ADRIANA RATHNER BSc MSc**  
Graduate of the Master's Degree Program in Biological Chemistry

'I completed my Bachelor's degree in 2010 and I highly recommend the program to those who are not only interested in modern life sciences, but enjoy actively conducting research in an international environment. The program is demanding and challenging but very rewarding.'

# Educational Objectives, Career Prospects.

## Educational Objectives

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The Master's degree program offers a wide range of in-depth subjects enabling you to tailor your learning experience in modern life sciences and to conduct your own research. Detailed attention is given to:

- Developing problem-solving skills in chemistry and biology, high quality, interdisciplinary education, boosting communication skills in an international research environment
- Advanced expertise in bioanalytical chemistry, bioorganic chemistry, biochemistry, structural biology, etc.
- Continuing expertise in current fields of life science and instrumental technologies
- Acquiring hands-on, real-world experience by applying the latest bioanalytical and preparative methods as well as maintain appropriate safety standards

## Job Opportunities

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The scientific scope of the joint Master's degree program in Biological Chemistry is broad and graduates are highly qualified to enter demanding professions in research, development, monitoring, and management at many different lines of business:

- White biotechnologies (bio-processes in production)
- Red biotechnologies (biomedical and medical technologies)
- Green biotechnologies (phyto-chemistry and biotechnologies)
- Chemical and pharmaceutical industries
- Foodstuffs, drinks and the cosmetics industry
- Medical diagnostic laboratories
- Private and public research facilities
- Bioanalysis and environmental analysis
- Regional, national, and international regulatory authorities and agencies

# Master's Degree Program.

## Subject Areas

As part of the Master's degree program, students are required to complete courses totaling 150 ECTS credits in the following areas:

SEMESTER	JKU		USB		JKU USB
	1	2	3	4	5
Fundamentals of Chemistry and Technology for Biological Chemistry	•	•			
Advanced Biology and Biochemistry			•	•	
Support Subjects	•				
Chemical Elective 1	•	•			
Chemical Elective 2	•	•			
Biological Elective 1			•	•	
Biological Elective 2			•	•	
Free Electives	•	•	•	•	
Master's Thesis					•
Master's Seminar and Master's Exam					•

**PROGRAM:**  
Master's Degree  
Biological Chemistry

**ACADEMIC DEGREE:**  
Master of Science (MSc)  
Magistr (Mgr.)

**PROGRAM DURATION:**  
5 semesters

**ECTS:**  
150 credits

**PROGRAM LANGUAGE:**  
English

See: [jku.at/studienrichtung](http://jku.at/studienrichtung), the curriculum, or visit the Student Information and Advising Services (SIBS) for detailed information.

## Additional Information

- Admission requirements to the Master's degree program: BA Biological Chemistry (JKU), BA Technical Chemistry (JKU)\*, BA Molecular Biology (JKU)\*\*, Degree programs with comparable curricula or equivalent in content and scope\*\*\*

\* Passing bridging subjects in Biology required

\*\* Passing bridging subjects in Chemistry required

\*\*\* Admission after an individual evaluation

See: [jku.at/studienrichtung](http://jku.at/studienrichtung) or contact the Admissions Office for information about admission requirements.

- The first year of the program is generally spent at the JKU in Linz (A); the second year is at the USB in Budweis (CZ).

## Advance Degrees at the JKU

- Doctorate Degree in Natural Sciences

# Academic Advising.

## General Information

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### STUDENT INFORMATION AND ADVISING SERVICES (SIBS)

Lecture Tract, Hall A  
+43 732 2468 3450  
studium@jku.at  
jku.at/sibs

### AUSTRIAN STUDENT UNION LINZ - OFFICE OF ACADEMIC ADVISING

Main Campus Library (ground floor)  
and the Lecture Tract  
+43 732 2468 1122  
studienberatung@oeh.jku.at  
oeh.jku.at

### ADMISSIONS OFFICE

Bank Building, 1st Floor,  
Rm. 113 A/B  
+43 732 2468 3180, -3181, -3271  
admission@jku.at  
jku.at/admission

### CONTACT

**Biological Chemistry**

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**Institute of Organic  
Chemistry**

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Přírodovědecká  
fakulta  
Faculty  
of Science

Jihočeská univerzita  
v Českých Budějovicích  
University of South Bohemia  
in České Budějovice