

Molecular Biotechnology

Bachelor's Degree Program

Interest in Medical, Molecular Biotechnology

Your strengths lie in biology and chemistry. You are interested in applying medical, molecular biological technologies. With innovative spirit and patience, you like to get to the bottom of things, to develop them further or discover new things. You are a team player, manually skilled and enjoy working in a laboratory.

Analysing Healthy and Sick Cells

The bachelor's degree program Molecular Biotechnology offers you a practice-oriented education in medical molecular biotechnology. You will learn to analyse the causes of diseases at the cellular level and to develop active substances, vaccines and gene therapies against them. Starting in the winter semester 2022/23, you will be studying in the newly constructed building at the main campus with state-of-the-art lecture rooms and excellently equipped laboratories. The degree program is part of a very extensive national and international network.

Highly Qualified with a Background in Science

As a biotech generalist you are greatly in demand in industry. You can work as a scientific-technical assistant in research departments and laboratories of internationally active pharmaceutical companies as well as at universities or medical institutions. Or you may decide to work in project management or quality assurance in the manufacture of medicines. At the same time, the degree program serves as preparation for relevant master's studies (inter-) national universities, which can later lead to a doctoral thesis.



Overview



6 Semesters
180 ECTS



**Bachelor of Science in
Natural Sciences (BSc)**



Organizational form
Full-time



60
Study places



Main Campus
Favoritenstraße 222
1100 Vienna



Language of instruction
German



Tuition fee/semester
€ 363.36¹ + ÖH premium + contribution
¹ maximum € 727 for third-country students

Head of Degree Program: Dr. Beatrix Kuen-Krismer



Curriculum

	LECTURE	SCH	ECTS		LECTURE	SCH	ECTS
1st SEMESTER 30 ECTS	Analytical Chemistry I LE	1	1	4th SEMESTER 30 ECTS	Applied Microbiology LE	2	2,5
	Analytical Chemistry I LAB	6	6		Biochemistry III: Bioenergetics and Metabolism LE	1,5	2
	Business Studies LE	1	1		English in Science & Career II IC	2	2
	General Biology LE	2	3		Gene Expression LE	1	2
	General Cell Biology LE	1,5	2		Genome Organization IC	1	2
	General Chemistry LE	2	3		GxP LE	4	5
	Mathematics for Biology I IC	3	3		Instrument-based Analytics LE	2	3
	Microscopy Lab LAB	1,5	3		Microbiological Lab Techniques LAB	2,5	2,5
	Molecular Biology & Genetics I LE	2	3		Project Management IC	2	2
	Public Law LE	2	2		Protein & Enzyme Biochemistry LAB	3	3
	Scientific Communication in English IC	2	2		Protein Expression & Purification LAB	3	3
Social Skills I IC	1	1	Social Skills IV: Moderation & Problem Solving IC	1	1		
2nd SEMESTER 30 ECTS	Biochemistry I: Foundations & Building Blocks of Life LE	1,5	2	5th SEM 30 ECTS	Bachelor Thesis I & Scientific Method SE		5
	Cell Biology of the Eukaryotes LE	2	3		Industry Practical PR		25
	Cell Culture LE	1	1	6th SEMESTER 30 ECTS	Applied Genomics LE	2	3
	Chemical Calculation IC	0,5	0,5		Bachelor Exam		2
	Civil Law LE	2	2		Clinical aspects of immunology LE	1	2
	Inorganic Chemistry LE	1	2		Developmental Biology LE	2	3
	Mathematics for Biology II IC	2,5	2,5		Ethics IC	1	1
	Methods of DNA analysis LE	1	2		Histology LE	2	3
	Molecular Biology & Genetics II LE	2	3		Human Physiology LE	2	3
	Organic Chemistry LE	2	3		Intercultural Competence IC	1	1
	Quantitative Analytical Chemistry LE	1	1		Marketing & Product Lifecycle Management IC	2	2
	Quantitative Analytical Chemistry LAB	3	3		Model Organisms LE	1	2
	Scientific Communication in English II IC	2	2		Organic Chemistry LAB	3	3
Social Skills II: Self-Coaching & Communication IC	1	1	Reflection of Internship SE		2	2	
Statistics for Biology I IC	2	2	Tissue Engineering LE		2	3	
3rd SEMESTER 30 ECTS	Biochemistry II: Structure Formation, Biorecognition & Catalysis LE	1,5	2	Abbreviations			
	Bioinformatics IC	3	3	ECTS	ECTS Credits	PR	Practical
	Cell Culture Laboratory LAB	3	3	IC	Integrated Course	SCH	Semester Credit Hours
	English in Science & Career I IC	2	2	LAB	Laboratory	SE	Seminar
	Fundamentals of Microbiology LE	1,5	2	LE	Lecture		
	Genetic Engineering LAB	3	3				
	Immunology LE	1	2				
	Introduction to Molecular Biological Lab Techniques LAB	1	1				
	Molecular Biological & Biophysical Methods SE	1,5	3				
	Physical Chemistry LE	2	3				
	Quality & Process Management LE	2	2				
	Social Skills III: Teambuilding & Conflict Resolution IC	1	1				
	Statistics for Biology II IC	2	2				
	Virology LE	0,5	1				

More information:

www.fh-campuswien.ac.at/mb-b-en
 Secretary's Office: +43 1 606 68 77-3500
 biotechnology@fh-campuswien.ac.at

