

Bioprocess Technology | Master's Degree Program

Process Technology, Biotechnology And Laboratory

You are familiar with process technology and natural sciences. You want to improve your research competency and further develop and optimize process technologies. You think analytically and in a process-oriented and system-related manner. You enjoy working in teams, but are also open for a management position. An adequate knowledge of English is expected.

The Living Cell Makes The Difference

In bioprocess technology, biotechnological methods are transferred to technical applications in the industry. You will learn to develop manufacturing processes from the gene to the product, to transfer them to production scale and, based on simulations, to evaluate them in economic terms. You also have the opportunity to participate in research projects with the University of Natural Resources and Applied Life Sciences, Vienna (BOKU), the Austrian Centre of Industrial Biotechnology (acib) and renowned biotech companies.

And After Graduation!?

As a bioprocess technologist you will plan, develop and implement new biotechnological production processes and plants in the biopharmaceutical industry, industrial biotechnology, the food industry and in environmental technology. You work as project manager, lead production teams in large-scale plants, or are responsible for the accompanying quality management.

Overview



4 Semesters
120 ECTS



Diplom-Ingenieur (DI)¹
¹comparable to „Master of
Science in Engineering (MSc)“



Organizational form
Part-time



18
Study places



Main Campus
1100 Vienna, as of winter
semester 2022/23



Language of instruction
German



Tuition fee/semester
€ 363.36² + ÖH premium + contribution
² maximum € 727 for third-country students

Head of Degree Program: Dr. Michael Maurer



Curriculum

	LECTURE	SCH	ECTS
1 st SEMESTER 30 ECTS	Automation Tutorial LAB	1	2
	Biogas Production and Algal Technology LE	1	2
	Bioprocesses and Products LE	1,5	3
	Bioreactors and Bioprocess Engineering IC	2	4
	Differential Equations for Bioprocess Engineering IC	1	2
	Energy, Heating and Cooling Technologies I IC	1,5	3
	Measurement, Control and Automation IC	1,5	3
	Parenterals LE	1	2
	Platform Chemicals and Biopolymers IC	1,5	3
	Technical Risk Analysis IC	1	2
	Technical Risk Analysis Practice EX	1	2
Validation IC	1	2	
2 nd SEMESTER 30 ECTS	Bioprocess Engineering (Practical Course) LAB	2	4
	Downstream Processing (Practical Course) LAB	3	6
	Downstream Processing, Proteins IC	1,5	3
	Energy, Heating and Cooling Technologies II IC	1,5	3
	Enzyme Technology LE	1	2
	Pharmaceutical Technology IC	2	4
	Plant Cleaning IC	1	2
	Selected Subjects in Bioprocess Engineering and Master Thesis Preparation SE	1	2
	Specific Statistics IC	1	2
	Statistical Design of Experiments I IC	1	2

	LECTURE	SCH	ECTS
3 rd SEMESTER 30 ECTS	Biosafety and Biosecurity LE	0,5	1
	Business Plan and Cost Accounting IC	2	4
	Fermentation Practical LAB	1	2
	Industrial Facility Hygiene LE	1	2
	Innovation and Entrepreneurship IC	1	2
	Microbial Production Strains and Strain Development LE	1,5	2
	Molecular Biology Laboratory Practical LAB	1	2
	Patenting IC	1	2
	Plant Design and Construction IC	1,5	3
	Statistical Design of Experiments II EX	1	2
	Sterilization and Disinfection IC	1	2
	Technical Project Management IC	0,5	1
	Wastewater Treatment IC	1,5	3
	Water and Ventilation Technology IC	1	2
4 th SEM 30 ECTS	Master Exam		1
	Master Thesis		28
	Master Thesis Seminar SE	1	1

Abbreviations

ECTS	ECTS Credits	LE	Lecture
EX	Exercise	SCH	Semester Credit Hours
IC	Integrated Course	SE	Seminar
LAB	Laboratory		

More information: www.fh-campuswien.ac.at/bvt-m-en

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