

# Biotechnological Quality Management

## Master's Degree Program

### Scientific and Technical Know-How

You have fundamental know-how in natural sciences, process biotechnology and quality management. Your awareness for risk-benefit is outstanding. You think analytically and in a process-oriented manner, enjoy working in teams and on projects and are interested in a management position. Naturally, you have an adequate knowledge of English.

### Unique Training

The part-time master's degree program combines technical expertise with methods of operations management. The focus is on quality management for biotechnological processes and products. The basics of Good Manufacturing Practice as well as business management optimization are taught. In addition, with this program you can take the qualification examination as an internal or external auditor for quality management systems in accordance with ISO 9001. The degree program cooperates with universities and research institutions, e.g. with the Austrian Centre of Industrial Biotechnology (acib), and maintains cooperations with renowned biotech companies.

### Deployable Across a Variety of Industries

As a graduate you will work in quality assurance, quality control, product registration, plant design, auditing and/or in Good Manufacturing Practice. You will be primarily employed in the biopharmaceutical industry and industrial biotechnology, but can also be deployed in authorities, ministries, the food and feed industry or in the cosmetics industry.

### Overview



4 Semesters  
120 ECTS



Master of Science  
in Engineering (MSc)



Organizational form  
Part-time



18  
Study places



Main Campus  
Favoritenstraße 222  
1100 Vienna



Language of instruction  
German



Tuition fee/semester  
€ 363.36<sup>1</sup> + ÖH premium + contribution  
<sup>1</sup> maximum € 727 for third-country students

Head of Degree Program: Dr. Michael Maurer



## Curriculum

	LECTURE	SCH	ECTS
1 <sup>st</sup> SEMESTER   30 ECTS	Bioprocesses and Products LE	1,5	3
	Good Manufacturing Practice, Eudralex IC	1	2
	Immunology LE	1	2
	Implementation of Analytical Methods EX	1,5	2
	Introduction to GMP and Quality Management LE	1	2
	ISO 9001 IC	1,5	3
	Parenterals LE	1	2
	Physiology LE	1	2
	QM-System Development IC	1	2
	Selected Subjects in Quality Management and Master Thesis Preparation SE	1	2
	Selected topics in Quality Management LE	1	2
	Technical Risk Analysis IC	1	2
	Technical Risk Analysis Practice EX	1	2
Validation IC	1	2	

2 <sup>nd</sup> SEMESTER   30 ECTS	Auditing IC	0,5	1
	Behavior and Error Performance SE	1	2
	Biopharmakology LE	1,5	3
	External and Internal Auditing LE	0,5	1
	Introduction to Operations Research LE	1	2
	Optimization Methods EX	1	2
	Pharmaceutical Technology IC	2	4
	Process Modelling and Simulation IC	2,5	5
	QM in Food Production LE	1	2
	Six Sigma, Lean, Kaizen IC	2	4
	Specific Statistics IC	1	2
	Specific Statistics Practice EX	1	2

	LECTURE	SCH	ECTS
3 <sup>rd</sup> SEMESTER   30 ECTS	Accreditation and Auditing IC	1	2
	Biosafety and Biosecurity LE	0,5	1
	Business Plan and Cost Accounting IC	2	4
	Data Mining and Visualization IC	1	2
	Energy Technology for Quality Management IC	1	2
	Good Clinical Practice and Pharmacovigilance LE	1	2
	Industrial Facility Hygiene LE	1	2
	ISO 45001 and integrated QM LE	0,5	1
	Materials Stream and Environmental Management IC	1	2
	Quality Control and Quality Assurance in the Laboratory IC	2,5	4
	Regulatory Requirements in Drug Licensing IC	1,5	3
	Statistical Process Control IC	1,5	3
	Sterilization and Disinfection IC	1	2

4 <sup>th</sup> SEM   30 ECTS	Master Exam		1
	Master Thesis		28
	Master Thesis Seminar SE	1	1

### Abbreviations

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

**More information:** [www.fh-campuswien.ac.at/bioqu-m-en](http://www.fh-campuswien.ac.at/bioqu-m-en)

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