



Guidelines of the Minor in BioMed Entrepreneurship

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These regulations and guidelines apply to the Minor in BioMed Entrepreneurship, UZH. Current information as well as detailed information on the individual courses in BioMed Entrepreneurship can be found in the course catalog and on the Minor webpage www.bep.uzh.ch.

1 General Regulations UZH

1.1 Regulations MNF - UZH

For an overview of the regulations for Bachelor's and Master's degree programs at the Faculty of Science (MNF) of the University of Zurich (UZH), visit www.mnf.uzh.ch/en/studium/reglemente.html. Among other things, it contains the generally binding criteria for the awarding of degrees, the requirements for the individual degree programs as well as the modalities of examinations and performance records.

1.2 Overview training offers MNF - UZH

The Master's degree program with a Major can be studied for 180, 150 or 120 ECTS credits. The last two variants are supplemented with a Minor worth 30 or 60 ECTS credits. Instead of a 60 credit program, two 30 credit Minors may be chosen. The 30 credit Minor in BioMed Entrepreneurship is not available as a Major option www.uzh.ch/cmsssl/en/studies/master.html.

1.3 Enrollment MNF - UZH

All students must be enrolled for as long as they are using UZH services. These include attending classes, completing internships, receiving advice and counseling, using libraries and collections, using the Center for Information Technology Services, and taking exams.

Find details of semester dates at www.uzh.ch/studies/dates.html.

1.4 ECTS credits MNF - UZH

All degree programs are evaluated according to the principle of the European Credit Transfer System (ECTS). One ECTS credit corresponds to an average student workload of 30 hours. This includes the attendance time during a course as well as the time required for self-study and learning in student work groups. ECTS credits are only awarded based on successful completion of a course. The ECTS credits status can be viewed on an ongoing basis at www.students.uzh.ch/record.html.

2 Minor in BioMed Entrepreneurship

2.1 Learning Objectives of the Minor

The Minor in BioMed Entrepreneurship (30 ECTS credits) provides a well-founded, problem-oriented training in the translation of scientific knowledge in the fields of BioTech, MedTech and Pharma. In addition, candidates will acquire the competence to tackle translational questions with suitable scientific instruments and to develop promising solutions. The Minor demonstrates approaches and methods for translating scientific results in the field of life sciences into marketable offerings for patients. The internship in a life sciences company, as an interface between university and entrepreneurial practice, offers insights into the professional world and can also open up new potential opportunities after graduation.

The Minor BioMed Entrepreneurship focuses on overarching questions of translational research and does not include other purely life science subjects, as these are covered in the Major.

Graduates of a Minor in BioMed Entrepreneurship are able to:

- recognize and formulize company-relevant questions for the translation of scientific knowledge;
- acquire in-depth specialist knowledge through independent work;
- apply methods of interdisciplinary collaboration and understand the value of interdisciplinarity;
- analyze theories and case studies to critically evaluate their results and incorporate them into concrete projects;
- understand the various dimensions of entrepreneurial implementation and their significance in specialist and operational contexts;
- communicate knowledge and complex interrelationships in a way that is appropriate for a range of different stakeholders.

2.2 How do I register for the Minor? Can I deregister?

For this Minor, an application to the program management is required via the application form at www.bep.uzh.ch. A limited number of students will be selected from applications received by the deadline. Applicants will be notified of acceptance by email from the program management. Once accepted, you can enroll for the Minor via semester enrollment (Master's program 120 ECTS credits with your Major program at 90 ECTS credits and the Minor program in BioMed Entrepreneurship at 30 ECTS credits). After enrollment, the modules are bindingly booked for you, and you are obliged to complete the associated credits. Withdrawal after successful admission to the program are only possible with the submission of a medical certificate to the Office of Student Affairs and the program management.

2.3 Requirements for admission

- The number of places per year is limited. Fully submitted application in the online form are a prerequisite for admission. You can find the application form and deadline at www.bep.uzh.ch.
- Students who have completed a Bachelor of Science degree in a scientific or medical field of study from UZH with at least 120 ECTS credits in life sciences (biology, biochemistry, biomedicine, chemistry, business chemistry, medicine, pharmaceutical sciences, physics) are eligible.
- Students with a Bachelor's degree from another university can apply if they are enrolled in a Master's program in the Faculty of Science at UZH.
- Classes are taught in English. Students must be able to demonstrate sufficient knowledge of English, unless English is their first language, or they have already completed the BSc in English. www.uzh.ch/cmsssl/en/studies/application/languagerequirements.html.
- This Minor is particularly suitable for Master's students in their final year of study, i.e., the compulsory modules of the Major program and the Master's thesis should ideally be completed before the start of the Minor. If the Major program requires a Learning Agreement, it must be included with the application.
- If more applications are received than places available, further criteria apply, including proof of motivation and quality of the application, or additional qualifications relevant to the field of study.
- The Minor can only be started in the fall semester. It can only be completed if all modules are taken consecutively in the same semester and the internship is taken during the following spring.

2.4 What documents should I provide with my online application?

- Letter of Motivation (CV can be added but not required)
- Bachelor's degree certificate (Academic Record)
- Transcript of Records of the current Master's program
- Proof of English knowledge, preferentially: www.uzh.ch/cmsssl/en/studies/application/languagerequirements.html.
- If the Major program requires a Learning Agreement, it must be included with the application

2.5 How are each modules assessed?

The Minor in BioMed Entrepreneurship is worth 30 ECTS credits total, which are acquired by attending the mandatory modules. Each module is completed separately with assessments. In the lectures, the focus is on presentations (pitches). The block courses focus on teamwork with a module exam at the end of each block course. The module exams usually take place on the last course day of the respective module. Date, time, and place of the exams are published online in the course tool and announced in the modules. You can view the results of your assessments in your personal account www.students.uzh.ch/record.html.

2.6 What if I miss or fail an assessment?

If no medical certificate is available, a failure to appear at an assessment will be assessed as a fail. If you are ill on the day of the assessment, you must give notice of your situation by e-mail before the assessment with the relevant reason and submit a doctor's certificate within five working days. If you were sick on an initial exam date, the exam must be taken on the retake date.

Failed module exams may be repeated once for each module. If a compulsory module is not passed after the permitted retake, the Minor is failed and cannot be continued. Repetition examinations for each module are held once a year (approximately the end of January). The date, time and place of the repetition exams are published in the course tool and announced in the modules.

2.7 Completion of the Minor

The degree of the Minor is only awarded if all modules have been successfully attended and passed: all five modules have been assessed as having a sufficient grade and the internship have been defended.

3 Modules of the Minor in BioMed Entrepreneurship

3.1 Modules overview

The Minor in BioMed Entrepreneurship is divided into modules. Each module is listed separately in the course catalog. All modules are compulsory. ECTS credits are awarded for each module that is fully completed and successfully passed. The four modules must be completed in the fall semester and the internship preferentially in the following spring.

These modules can only be taken by students of the Minor in BioMed Entrepreneurship program. They are not available for students of other programs, mobility students and auditors.

Semester	Module	Type	Time	ECTS	Evaluation
Fall	BEP 101 - Pitch training & lectures	Lecture	Monday afternoon	2	Oral presentation
Fall	BEP 102 - BioMed Entrepreneurship - from team to company	Block course	Tuesday-Friday	6	Oral presentation, Exam
Fall	BEP 103 - Corporate management of BioMed ventures	Block course	Tuesday-Friday	6	Oral presentation, Exam
Fall	BEP 104 - Legal requirements for BioMed ventures	Block course	Tuesday-Friday	6	Oral presentation, Exam
Spring	BEP 105 - Internship in a BioTech/MedTech company	Internship	10 weeks	10	Oral presentation, Report

3.2 BEP 101: Pitch lectures and training

Learning objectives: The student will be able to:

1. distinguish between idea, innovation, and marketable product.
2. identify needs and opportunities with innovation potential.
3. compare different entrepreneurial approaches in BioTech, MedTech and Pharma.
4. understand her/his audience, analyze their requirements, and adapt his/her presentation to the audience for most effective outcome.

Content: One of the most important tasks and skills for entrepreneurs is to convince an audience of a business idea in a short but comprehensive pitch. This module teaches and trains with students all the tools they need to make the most effective and efficient pitch. Students learn how to identify a potentially successful idea and develop various entrepreneurial approaches to turn an idea into a product or service. In addition, students identify different target audiences for a business and research stakeholder needs. This knowledge is applied to projects and practiced in hands-on exercises that are recorded and discussed.

3.3 BEP 102: Block course 1: BioMed Entrepreneurship – From team to company

Learning objectives: The student will be able to:

1. know about the importance of teamwork in entrepreneurship and reflect on his/her own behavior;
2. describe the basic requirements in finance and legal for a venture and can apply those in a case study;
3. use a project management process for different requirements;
4. apply the gained knowledge in a milestone planning for a concrete market introduction.

Content: This module provides an introduction to entrepreneurship in the BioTech, MedTech and Pharmaceutical industries. Students learn how to translate an idea or scientific discovery into a commercially viable product or service. This includes market insights, design thinking, project management, and finance and legal basics. The knowledge is imparted via e-learning tools and lectures held by guest lecturers from a venture (start-ups, specialists from various fields), amongst others.

3.4 BEP 103: Block course 2: Corporate management of BioMed ventures

Learning objectives: The student will be able to:

1. describe and differentiate theories of finance models for a venture.
2. analyze balance sheets, business reports, and earning statements.
3. know the difference of vision, mission and strategy and can define them for her/his project.
4. understand conflicts and their different stages that can arise in a company and can develop solution approaches.
5. illustrate the requirements of leadership.

Content: This module focuses on the financial aspects of a company, marketing, clinical trials. The knowledge is imparted via e-learning tools and lectures held by guest lecturers from a venture (start-ups, specialists from various fields), amongst others. In addition, students will enhance their teamwork skills by addressing conflict management and leadership requirements.

3.5 BEP 104: Block course 3: Legal requirements for BioMed ventures

Learning objectives: The student will be able to:

1. acquire relevant knowledge of intellectual property, e.g. patents, brands and trademarks.
2. select and explain topics related to life science regulations, e.g., Swissmedic or Food and Drug Administration (FDA) requirements.
3. understand business rights and responsibilities, as well as labor and employment law.
4. be aware of the importance of data protection and data security and act accordingly.
5. classify and evaluate international papers and practical examples.

Content: This module focuses on the legal requirements for a BioTech and MedTech company and covers topics such as intellectual property (IP), regulatory affairs, and the various legal aspects of a business. Business law and labor and employment law are taught and the importance of proper data handling is discussed. Soft skills are strengthened through negotiation training. The knowledge is imparted via e-learning tools and lectures held by guest lecturers from a venture (start-ups, specialists from various fields), amongst others.

3.6 BEP 105: Internship in a BioTech, MedTech or pharmaceutical company

Learning objectives: The student will be able to:

1. apply the acquired knowledge to projects in a selected BioTech or MedTech company and explain product development, production and quality control.
2. discuss the organizational structure of the company and develop potential improvements.
3. explain the company's value chain.
4. reflect on his/her tasks and can connect theoretical knowledge to practical work, thereby improving hard and soft skills.

Content: The student will carry out a 10-week full-time internship project in a BioTech, MedTech or pharmaceutical company, where he/she can analyze a real case and apply his/her acquired knowledge. This opportunity offers the student the first direct contact with the business world and could open doors for future potential employment opportunities. Achievements are reflected upon and documented in a weekly statement. In a final report, the student discusses the project, and the findings are presented to the committee. The internship is managed by a supervisor from the company and a member of the organizing institute (IREM).

The compulsory 10-week internship (10 ECTS credits) offers insights into the professional world as an interface between university and practice and can open up further potential professional opportunities. It

has to be completed after the end of the modules of the fall semester in the following spring. The assessment is based on written weekly progress reports according to a report template, a final report and a presentation, in which the knowledge learned in the modules is applied.