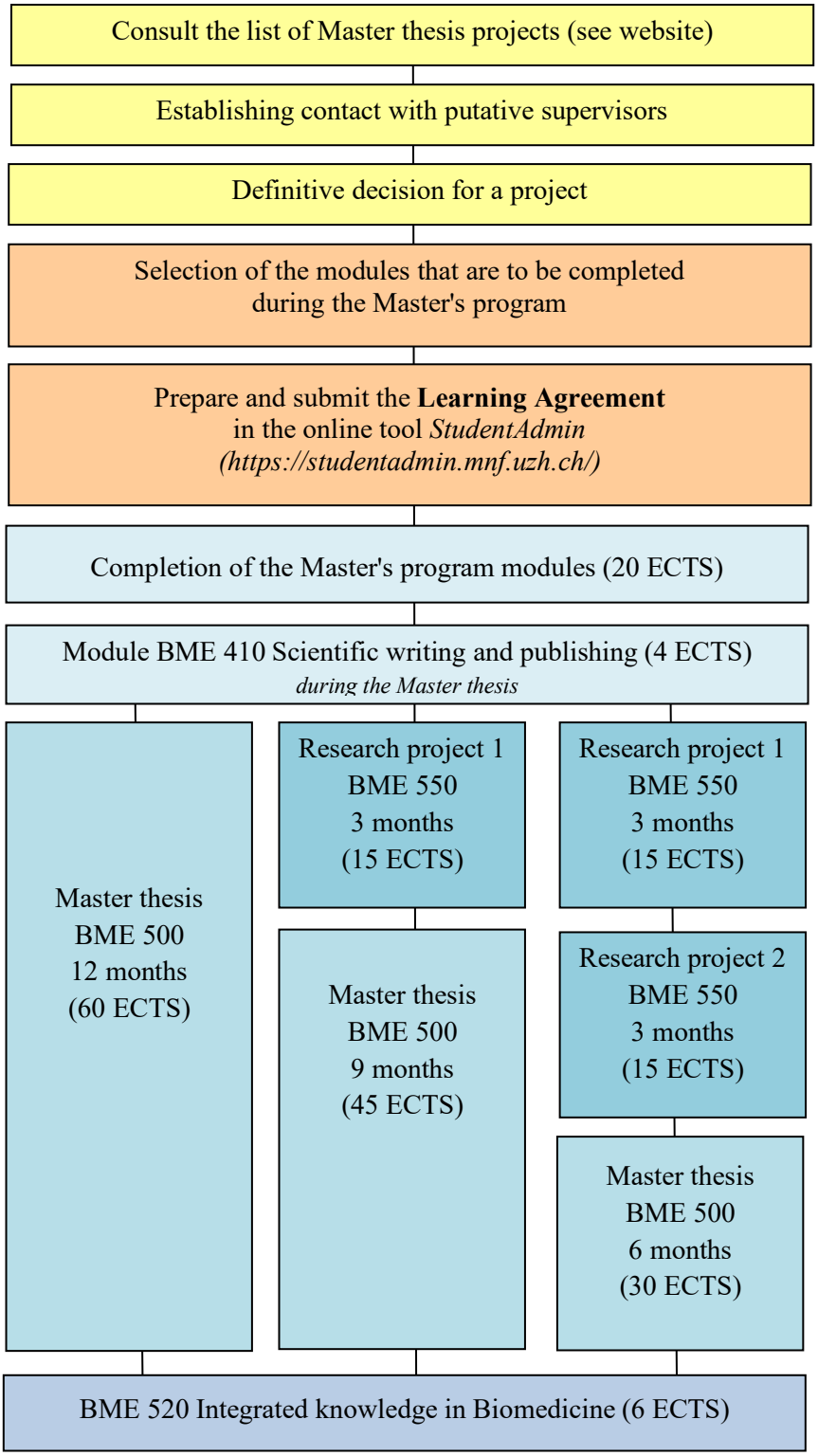
University of Zurich[UZH]

Leaflet on the Master's Program in Biomedicine

01.02.2018, rev. 15.03.2022, rev. 29.04.2024, rev. 14.08.2024, rev. 23.10.2025

Overview of the processes



University of Zurich[UZH]

1) General information

The regulations and general information on the Master's degree program can be found in the framework regulations and the study regulations for the Bachelor's and Master's degree programs of the Faculty of Science, as well as in the appendix and the module catalogue for the Master's degree program in Biomedicine. These legally binding documents are only available in German.
https://www.uzh.ch/cmsssl/mnf/de/studium/reglemente/bachelor-master.html

Completion of the Master's program modules (20 ECTS)

The modules that are attended during the Master's program must totalize at least 20 ECTS credit points. These modules must be determined at the beginning of the Master's program. 15 ECTS are selected from compulsory elective areas 2 and 3** and from MNF (faculty of science) elective modules related to the topic of the Master's thesis (no Biology and Biomedicine basic study modules). Modules of up to 5 ECTS credit points can be selected from the entire range of courses offered by UZH and ETHZ.

** Exceptions compulsory elective area 3: the following modules are not allowed in the master: BME247, BIO137, BIO138

The modules should be completed before the beginning of the Master thesis. The thesis supervisor and the Biomedicine Coordination Office must give their approval if some of the mandatory modules take place during the Master thesis.

Research project (BME550)

A research project is defined as module BME 550 and takes three months. A written report (10 - 15 pages) must be submitted within two weeks after the end of the project work to Ersilia Toscano (admin.biomedizin@physiol.uzh.ch). Responsibility for the management of project work can only be assumed by persons, who are listed in the course catalogue as lecturers in biology and/or biomedical studies. A research project must be announced at the time of registration for the Master's program.

Master thesis (BME500)

The Master's thesis consists of a project (experimental) and a Master's thesis (written). The Master thesis in Biomedicine is defined as module BME 500.

The 12-month Master thesis is worth 60 points. The 9-month Master thesis is worth 45 points, and a 3-month project thesis (15 ECTS) which must be completed before the Master thesis begins. The 6-month Master thesis is worth 30 points, and two 3-month project works (15 ECTS each) must be completed before the Master thesis begins.

2) Organization and registration

At the end of the Bachelor's program or beginning of the Master's program, students consult the list of Master thesis projects, contact the supervisors directly and discuss their possible Master's thesis project. The list is published here https://www.biomedizin.uzh.ch/de/Master (PDF). The list of topics is updated periodically and contains brief descriptions of research areas and topics, information on supervisors and institutes and details of any necessary requirements.

With a biomedical “Themenmeldung” https://www.biomedizin.uzh.ch/de/Master (Word), a Master's thesis is also possible with researchers involved in teaching in the Bachelor's or Master's degree program in Biomedicine (see point 3). In this case, the supervisors can fill out the “Themenmeldung” and send it to the Biomedicine Study Coordination Office (master.biomedizin@physiol.uzh.ch).

After choosing a Master project, all points of the **Learning Agreement (LA)** are discussed with the supervisor.

Study and Thesis Plan

Start MSc Studies: Enrolment 1st semester Master's program (possible from each semester).

Start Thesis Project: In principle, the Master's project can be started at any time if a) the Bachelor's program has been successfully completed or applied for, b) enrolment in the Master's program in Biomedicine is available, c) the Learning Agreement has been completed in full and confirmed by all parties involved.

Interim Meeting: Enter a date approx. 6 months after the start of the program or leave it blank. Ersilia Toscano will coordinate the exact date.

End Thesis Project: The date of submission of the Master's thesis is exactly 1 year after the start.

Coursework: Elective compulsory and elective modules

The compulsory elective and elective modules supplement the content of the Master's project and expand biomedical knowledge. Modules already completed in the Bachelor's program and not credited towards the degree can be credited in the Master's program if they are suitable in terms of content and administration. As a rule, the modules must be completed before the start of the Master's thesis. In exceptional cases, the Master's project can be interrupted by a block course (3.5 weeks), whereby the end date of the Master's thesis is extended by this time. The extension must be discussed with the program coordinator and defined in the Learning Agreement (LA).

Title / Description

In the description of the Master's project, the scientific background, the objectives, and the general and methodological approach are described. An experimental component is a mandatory part of the Master's project. Parameters of biological models (cells, animals, test persons) are systematically recorded, evaluated, interpreted and discussed. A Master's thesis with only literature or data analysis is not possible. It is also important to list the methods that the students learn and carry out themselves.

Compulsory modules

The module **BME410 Scientific Writing and Publishing** is completed during the Master's project as part of a fortnightly course. Registration takes place by e-mail via Ersilia Toscano, admin.biomedizin@physiol.uzh.ch. The exact registration procedure is described in the course catalogue. The module cannot be booked by the students.

The module **BME520 Integrated knowledge in Biomedicine** is completed during the Master's project in self-study. The content and aim of the module are for students to research the current scientific literature (e.g. in PubMed) on a more comprehensive (broader) topic in the related area of the Master's thesis, to recognize and summarize the relevant literature and to be able to discuss the current (uniform and/or controversial) state of the art in the oral examination. In the draft Learning Agreement, 3 possible topics are proposed by the supervisors, from which the Biomedicine study coordination team selects the definitive topic.

As soon as all points have been clarified, the Learning Agreement (LA) can be completed in the online tool "MNF StudentAdmin" (https://studentadmin.mnf.uzh.ch) and submitted as a draft. The Biomedicine Study Coordination Office checks the LA, provides the student with correction

instructions if necessary and then authorizes the LA for confirmation. The LA must be confirmed by the student, the supervisor and the Biomedicine Study Coordination Office. After this, the LA is final and will not normally be reopened. A change is only made for compelling reasons (e.g. necessary project change, module cancelled, illness/accident, etc.) and must first be discussed with the study coordinator. The adjustment of the title does not require reopening.

3) Supervision

The Master thesis can only be supervised by a professor, titular professor, assistant professor, private lecturer or module supervisor, who is **involved in teaching (block courses) in biology and/or biomedicine at the Faculty of Science (MNF).**

Furthermore, each Master thesis in Biomedicine is accompanied by a member of the Biomedicine Commission. The responsible member of the Biomedicine Commission assumes a coaching function, follows the progress of the work in an intermediary discussion and is present at the Master's examination.

Prof. Thierry Hennet, Institute of Physiology, Campus Irchel, Office 23 L42, Tel: 044 635 50 80, Thierry.hennet@uzh.ch, takes over the function of ombudsman, to whom both students and supervisors can address any problems that may arise during the Master thesis.

The Biomedicine Coordination Office is available for any questions: Institute of Physiology, Irchel Campus, Office 23 H06, Tel: 044 635 50 52, master.biomedizin@physiol.uzh.ch.

4) Master's thesis

For the experimental activities, working hours and other requirements (teamwork, lab meetings, presentations, etc.), the regulations in the research group and the agreements with the official supervisors apply. The work can also be supported by direct supervisors (PhD, PostDoc).

Holidays: Master's students at the MNF are entitled to a maximum of 20 days holiday per year. Students must plan exactly when these are possible together with their supervisor according to the requirements of the project. By signing the Learning Agreement, students and supervisors confirm that they are aware of this regulation, discuss it and plan the Master's thesis and holidays accordingly.

5) Intermediary meeting

By the middle of the Master thesis, the student, the supervisor of the Master thesis and the designated representative of the Biomedicine Commission meet for an intermediary discussion. The topics of this discussion are the accomplished course work and a brief presentation on the results collected by mid-term of the Master thesis. The student, the responsible supervisor listed on the Learning Agreement, possibly the direct supervisor and the responsible person of the 'Biomedicine Commission' (coach) are invited to this meeting. Ersilia Toscano is responsible for invitations and scheduling.

6) Submission of the Master's thesis

Upon completion, the Master thesis must be submitted printed, bound, and signed to Ersilia Toscano (Y23-L-08) and to the supervisors (1 copy each). The Master's thesis must be approx. 50 pages long (excluding references and literature). The electronic copies must also be submitted on the submission date: PDF to admin.biomedizin@physiol.uzh.ch and PDF upload https://studentadmin.mnf.uzh.ch Confirmation (clear) by the supervisors. Requests for extension of the deadline must be addressed to the Biomedicine Coordination Office for approval by the Dean of Studies. Such requests must be submitted by the middle of the Master thesis at the latest.

The master's thesis must include a statement of authorship.

Statement of Authorship
"I hereby declare that I have used no other sources and aids other than those indicated. All passages quoted from publications or paraphrased from these sources are indicated as such, i.e. cited or attributed. The usage of generative AI tools was discussed with the supervisor. All types of use of generative AI are fully disclosed. I bear full responsibility for the content of this thesis. This thesis was not submitted in any form for another degree or diploma at any university or other institution of tertiary education.". Place, Date Signature

7) Presentation of the Master's thesis and assessment

The presentation takes place approx. 2-8 weeks after submission, is open to the public on request and lasts a maximum of 20 minutes. The presentation is followed by the BME520 module examination (see point 8). Ersilia Toscano will organize the invitation and the date. If you wish to invite guests to the presentation, you must ensure that a larger room (on the Irchel campus) is booked and announce this as soon as the examination date has been fixed. The BME520 examination is not open to the public. The presentation and examination are also possible online.

Assessment of the Master's thesis

The Master's thesis is defined as a graded module BME500. The grade is made up of 60% project work (laboratory work, etc.) and 40% Master's thesis and presentation. The module is considered passed if a grade of at least 4 is achieved. A single repetition is possible. Grades are awarded immediately afterwards.

8) Exam BME520

The assessment for the compulsory module BME520 "Integrated knowledge in Biomedicine" consists of an oral examination on the topic specified in the learning agreement. In this examination, students demonstrate their ability to research scientific literature, understand, summarize and critically discuss the content. The examination takes place on the same date as the presentation of the Master's thesis (see point 7) and lasts approx. 30-40 minutes. As a rule, the examination is mainly conducted by the thesis supervisor. Also taking part: Coach Biomedicine Commission and (possibly) direct supervisors. The module is considered passed if at least the grade 4 has been reached. A single repetition is possible. Grades are awarded immediately afterwards.

Cancellations due to illness or other compelling reasons must be made directly to all persons involved (with medical certificate, etc.). In this case, Ersilia Toscano will coordinate the next possible date.

9) Completion of the Master's program

The Master's program is completed with the successful completion of the Master's thesis (BME500), the modules BME520, BME410 and the modules listed in the Learning Agreement (course work).

Students apply for their Master's degree in the "Student App" the next day after the examination. For this purpose, the individual achievements (modules) are assigned to the Master's degree.

The Office of the Dean of Studies at the MNF validates the degree as soon as possible and then issues the graduation documents https://www.uzh.ch/cmsssl/mnf/de/studium/termine/studienabschluss.html
If you have any queries regarding graduation documents or provisional certificates, please contact the Office of the Dean of Studies bama@mnf.uzh.ch.

University of Zurich[UZH]

10) Minor subjects

Minor subjects (30 ECTS) are taken after completing the main subject (90 ECTS). In the case of a major/minor (120 ECTS), the Master's degree can be applied after the minor program has also been completed.