



Master of Science ETH Biochemistry — Chemical Biology

Study guide

The legal basis for this programme is the «Studienreglement 2023, Ausgabe 05.07.2022, für den Master-Studiengang Biochemie - Chemische Biologie» (BCB). The present study guide provides practical information on the programme. Further sources of information are given in the text and at the end of this brochure. Students are requested to consult the departmental website for up-to-date information.

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1 Study programme

Students with an appropriate Bachelor's degree usually complete their studies in four semesters.

1.1 Categories of course units

In order to obtain the Master's degree students have to acquire a total of 120 credits in the following categories in no more than four years:

Category	Credits
Core and compensatory subjects	18
Elective subjects	36
Semester projects	32
Electives in science in perspective	2
Master's thesis	32

Actual and detailed information on the courses in the various categories can be found in the online course catalogue of ETH (see page 5 for link).

1.2 Core subjects

Core subject area of «chemical biology». All students have to take three courses from this area.

1.3 Elective subjects

Elective subjects include a broad spectrum of advanced topics in chemical biology, biology, and chemistry as well as topics from related areas. Students may also take as elective subjects (a) core subjects as long as they have not taken them as such, (b) elective subjects from the Bachelor's degree programme.

1.4 Semester projects

Students have to carry out two semester projects, they are free to choose the area but it should fit to the programme. The chosen supervisor should be contacted at an early date. (See also section 3.6)

1.5 Master's thesis

The Master's thesis is carried out under the supervision of a professor in a core or elective subject area. Students are free to choose the area. The duration of the Master's thesis is 6 months. (See also section 3.7)

1.6 Electives in science in perspective (SiP)

All students must collect credits in courses offered by the Department of Humanities, Social and Political Sciences (D-GESS).

2 Credit system

The Master's degeree programme uses a credit system which is based on the European Credit Transfer System (ECTS). Credits are a measure for the total labour required from the students to reach the educational goal. Calculations are based on a total of 1500 to 1800 working hours per year, equivalent to 60 credits. Therefore, 1 credit corresponds to 25 to 30 hours of total work.

Credits are allocated after the performance assessment intended for the course has been passed. Upon application by the student the Master's title is awarded when a total of 120 credits is reached.

3 Performance assessments

3.1 General

Credits are allocated after the performance assessment has been passed. A performance assessment not passed can be repeated once. Exams and the Master's thesis are rated with a grade between one (lowest) and six (highest). In order to pass, a grade of four must be achieved. Other performance assessments may also be rated with passed/not passed.

3.2 Forms of performance assessments

Performance assessments are in the form of exams, or of a semester performance. The course catalogue lists for each course the form and mode of the performance assessment. Exams are usually held in examination sessions during the last weeks of the semester breaks.

3.3 Admission to performance assessments

Admission to the performance assessments normally requires that the Bachelor's studies are completed. Exceptions are specified individually for the various categories below.

3.4 Core subjects

- Performance assessments in this category are in the form of exams...
- Students who do not pass an exam in one of the core subjects in two attempts get one further chance with a compensatory subject offered in the same area.
- Students enrolled in both the Bachelor's and Master's degree programme in BCB of ETH are admitted to examinations in core and compensatory subjects of the Master's degree programme on condition that they have to acquire no more than 11 credits in the category 'elective subjects' for their Bachelor's

diploma.

 Students who were admitted to the Master's degree programme with the requirement to acquire credits from the ETH Bachelor's degree programme are admitted to examinations in core and compensatory subjects on condition that they have to acquire no more than 11 of the additional required credits.

3.5 Elective subjects

- Performance assessments in this category are in the form of exams.
- Students enrolled in both the Bachelor's and Master's degree programme in BCB of ETH are admitted to examinations in elective subjects of the Master's degree programme on condition that they have passed the examination block I and the compulsory lab courses of the ETH Bachelor's degree programme's second year.
- Students who were admitted to the Master's degree programme with the requirement to acquire credits from the corresponding ETH Bachelor's degree programme are admitted to examinations in elective subjects on condition that they have to acquire no more than 11 of the additional required credits.

3.6 Semester projects

- Performance assessments in these categories are based on semester performance.
- Students enrolled in both the Bachelor's degree and Master's degree programme in BCB of ETH are admitted to the semester projects of the Master's degree programme on condition that they have to acquire less than 60 credits for their Bachelor's diploma.

3.7 Master's thesis

Details on the Master's thesis are documented in the «Directives for Master's Theses». The Master's thesis cannot be started before the Bachelor's degree programme is completed.

4 Request for degree conferral

When the number of credits in the individual categories as defined in section 3.4 to 3.7 has been acquired students can submit a request for degree conferral via their student portale («myStudies») and the student administration. This has to be done no later than four years after the start of the Master's degree programme. The request must itemize the study achievements which should be listed in the final academic record. The maximum number of credits that can be taken into account is 130. More credits can be listed in an addendum.

5 Mobility

Students with an ETH Zurich Bachelor's Degree may spend one semester during their Master's degree programme at another university. A study programme for this semester abroad has to be compiled in advance in cooperation with the mobility advisor of the Department. Credits can be obtained externally in the categories semester projects and elective subjects up to a total maximum of 30 credits.

Students without an ETH Zurich Bachelor's Degree are not allowed to participate in exchange programmes of ETH Zurich. Individual mobility is possible but credits do not count towards the Master's degree.

A Master's thesis external to D-CHAB / D-BIOL must be carried out under the supervision of an ETH professor and would therefore neither run under the mobility programme nor count toward the maximum mobility credits allowed.

6 Academic year

Teaching is organised in two semesters of 14 weeks each. The Autumn semester lasts approximately from mid-September until Christmas, the Spring semester approximately from mid-February to the end of May. The academic year begins with the fall semester.

With the consent of the respective supervisors semester projects may also be available during semester breaks.

7 Documentation

- Study regulation (in German only: Studienreglement 2023, Ausgabe 05.07.2022, für den Master-Studiengang BCB)
- General Regulations on Performance Assessments at ETH Zurich (in German only: Leistungskontrollenverordnung ETH Zürich)
- Directives concerning compulsory electives in science in perspective (Directive "Science in Perspective" (SiP) programme of the Department of Humanities, Social and Political Sciences (D-GESS))

8 Websites

- Info on the programme: www.chab.ethz.ch/en/studies/master/msc-biochemistry-chemical-biology.html
- Department: www.chab.ethz.ch
- ETH Student portal: www.ethz.ch/students/en.html
- Website for students: www.ethz.ch/en/studies.html
- Admissions Office: www.admission.ethz.ch
- Course catalogue: www.vvz.ethz.ch

For detailed information on admission requirements, application and registration procedures and deadlines consult the website of the ETH Admissions Office.

Director of studies

Prof. Dr. Jeffrey Bode, HCI F 315 bode@org.chem.ethz.ch Consultation upon appointment

Coordinator teaching

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Student administration

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Exchange programme

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Student association

Association of students of chemical study programmes at ETH Zurich (VCS) www.vcs.ethz.ch

Editor: Dr. Regula Merz. Illustration: Active site of chorismate mutase with bound inhibitor;

Protein Data Bank ID 2W1A (courtesy Dr. Kathrin Würth und Prof. Dr. Peter Kast)

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