



## Specialized M.Sc. in Chemical and Molecular Sciences

The program is based on the idea that the Chemical and Molecular Sciences have matured to the point where a core of chemical design and synthesis principles can enable researchers to tailor molecules for the study of trans-disciplinary problems.

Key features of the program:

- Open to students with a B.Sc. in science.
- Support of a CMS advisor required for admission.
- 90 ECTS program; 60 ECTS M.Sc. research, 30 ECTS coursework (including 8 ECTS MolSci core courses) and seminars.
- Active research during all 3 semesters of study.
- Specific coursework plan based on the student's individual background and research plan.
- Intended continuation from M.Sc. study directly into a Ph.D. program.

The program is conceived as being a joint endeavor by faculty from multiple Institutes and Departments. As the project initiator, and in keeping with chemistry as a centrally enabling discipline in the CMS effort, the Chemistry Institutes will play a dominant administrative role, although all involved Institutes/Departments will participate. The program will be administered through a Steering Committee, overseen by a committee chair from Chemistry. This committee will include a Studienberater, who will share with the research advisor the responsibility for designing an appropriate study curriculum for each individual student.

In broad terms, the CMS Program is expected to operate as follows. Admission can be granted to applicants who have completed a B.Sc. in the physical or natural sciences. Admission will be contingent upon the support of a CMS research advisor, with a well-defined research project. In conjunction with a secondary advisor, an optimal schedule of coursework will be devised, tailored to the student's experience and objectives. These courses will be drawn from the core CMS curriculum and existing graduate offerings in one or more MNF Departments. The student will become involved in research from the beginning of the (approximately) 3-semester M.Sc. training program, and will prepare and defend a M.Sc. Thesis. It is anticipated that the CMS M.Sc. will serve as a transitional degree, not an academic endpoint, and that CMS graduates will enter an appropriate Ph.D. program upon completion of their M.Sc. degree.

The program shares common features with other M. Sc. Programs. It involves a total of 90 ECTS of work over a 3 semester period, and requires a research Master's Thesis to be prepared and defended. The distribution of the 90 ECTS are 60 ECTS of research (20 ECTS per semester, including presentation and defense of the M.Sc. thesis) and 30 ECTS of courses and



seminars. The 30 ECTS are divided into 9 ECTS of Pflichtmodule, 9 ECTS of Wahlpflichtmodule and 12 ECTS of Wahlmodule.

The 9 ECTS of Pflichtmodule are accounted for by two core CMS classes: Introduction to Molecular Design and Synthesis (4 ECTS) and Medicinal Chemistry (5 ECTS). The 9 ECTS of Wahlpflichtmodule must be selected from the Wahlpflichtmodule associated with the existing Chemistry M.Sc. programs. The 12 ECTS of Wahlmodule may be selected from courses in any relevant MNF M.Sc. program, as well as Special Topics offerings.

The Wahlpflicht and Wahl courses will be selected in consultation with the M.Sc. research advisors, with approval of the CMS Studienberater (Prof. Dr. Bernhard Spingler) and at least one additional faculty member participating in the CMS program.

For more information: [www.ms-cms.uzh.ch](http://www.ms-cms.uzh.ch)