

# M Sc Molecular Life Sciences

## Special qualification **Cell and Molecular Biology**

### Program for spring semester

Please always check CTS (KSL) for details and actual dates!

<b>KSL Nr.</b>	<b>Eligible for special qualification module CMB (or for general module)</b>	<b>ECTS</b>
2221	Colloquium on host-pathogen interactions, Fri 16.30-18.30, monthly (year course, begin either in fall or spring semester), ICB Prof. C. Faso et al.	4 (2 sem.)
2226	Membrane biochemistry, Wed 16-18, IBMM PD Dr. M. Lochner et al.	3
4537	Molecular biology of inflammation, Thu 14-16, DCBP Prof. B. Engelhardt et al.	3
4540	Selected topics in clinical immunology, Thu 16-18, ICB Prof. S. von Gunten et al.	3
4544	Molecular pathology, Fri 9-11, Institute of Pathology Prof. E. Vassella et al.	3
11470	Cellular and Genetic Networks (BEFRI), Tue 17-19, UniFR and UniBE Prof. P. Meister, Dr. B. Egger	3
11474	Stem cells and regenerative medicine, Tue 16-17.30, DBMR Prof. V. Enzmann et al.	2
25847 25848 25849	Colloquium in Cell and Developmental Biology, module A and B (each 1.5 ECTS); Retreat module C (1 ECTS) Prof. P. Meister, Dr. B. Egger	1.5 1.5 1
405520	Genomics of microorganisms, Tue 16-18, week 8-14, DCBP Prof. N. Polacek	1.5
415819	Cell and gene therapy, Wed 14-16, ICB PD Dr. A. Marti	1.5
430236	Bioenergetics – from archaean sorcery to human diseases, Tue 10-12, week 1-7, DCBP Prof. Ch. von Ballmoos	1.5
<b>KSL Nr.</b>	<b>Eligible for general module only</b>	<b>ECTS</b>
2228	* Plant metabolism, lectures: Thu 10-12, practicals: Thu 13-17, IPS Profs. U. Feller, J. Fuhrer, D. Rentsch.	5
2806	Molecular Parasitology, Fri 11-13, ICB Prof. C. Faso et al.	3
3456	Advanced medicinal chemistry - from target to drug, Fri 10-12, DCBP PD Dr. J. Hunziker	1.5
3457	Nucleic acid analogues, DCBP, see CTS for schedule PD Dr. M. Hollenstein	1.5
27339	Beyond genetic inheritance: epigenetic gene regulation, chromatin structure and nuclear organization, Tue 10-12, ICB Prof. P. Meister	3
406196	Applied MS spectroscopy, Thu 13-15, weeks 8-14, DCBP PD S. Schürch	1.5
436479	Solving Current Challenges in Plant-Herbivore Interactions, block course, IPS Prof. M. Erb, Prof. C. Robert	5
464918	Numerical Analysis of High Dimensional Data: From Simple Statistics to Multifactorial Data Integration, Mon 15-17, IFIK PD Dr. Alban Ramette	3
468463	Enzymes in Catalysis, various weekdays, DCBP Prof. F. Paradisi	1.5
468464	Drug Delivery and Drug Targeting, Thu 15-17, week 1-7, DCBP Prof. P. Luciani, Dr. S. Aleandri	1.5
476763	Pasteur to today: managing biorisks and the broad spectrum of biosafety and biosecurity, Wed 16-18, IPS Dr. K. Summermatter, Prof. D. Rentsch et al.	3

The special qualification module (**SPQ-CMB**) must comprise 15 ECTS points from the learning units shown in boldface.

For the general module (**GEN**), additional credits can be accumulated from master courses of all five specialisations. This module may also contain up to 10 ECTS points in learning units from the BSc programs in Biology, Biochemistry and Molecular Biology, or Chemistry and Molecular Sciences. If a learning unit is not already programmed in KSL, students should ask the head of studies for approval. On request, learning units from outside institutions and other programs (e.g., UniFR or the Swiss Institute for Bioinformatics) may also be included.

The total number of credits of both modules must be at least 30 ECTS points.

Additionally, while the students are enrolled in the program, they must follow two hours per week of **seminar series** according to recommendations made by the prospective MSc supervisor.