CGC Orientation 2025-26

Biological and biophysical chemistry

Lang.	Code	Sect.	Teacher	Bachelor 5 C	E	L	T	P	I	Bachelor 6 C	E	L	T	P	I	Exam Session	Exam	Credit
	Chemical biology																	
E	CH-313	CGC	Jeschek	2h												Win	Written	2
	Drug discovery and development																	
E	CH-317	CGC	Heinis							2h						Sum	Written	2
	Dynamics of biomolecular processes																	
E	CH-312	CGC	Fierz							2h						Sum	Written	2
	Experimental biochemistry and biophysics																	
E	CH-319	CGC	Hovius										6h			Sum	During the semester	4
	Macromolecular structure and interactions																	
E	CH-311	CGC	Fierz	2h												Win	Written	2

Block 4

Lang.	Code	Sect.	Teacher	Bachelor 5 C	E	L	T	P	I	Bachelor 6 C	E	L	T	P	I	Exam Session	Exam	Credit
	Dynamics and kinetics																	
E	CH-310	CGC	Feldmann	2h	1h											Win	Written	3
	Experimental physical chemistry																	
E	CH-349	CGC	Emsley											4h		Sum	During the semester	4
	Modeling lab																	
E	CH-315	CGC	Smit				4h									Win	During the semester	3
	Organic functions and reactions II																	
E	CH-234	CGC	Cramer	2h												Win	Written	2
	Preparative chemistry I																	
F	CH-220	CGC	Cramer Dyson			8h										Win	During the semester	4
	Structural analysis																	
E	CH-314	CGC	Bostedt Emsley Miéville	3h	1h											Win	Written	4

Computational chemistry

Lang.	Code	Sect.	Teacher	Bachelor 5 C	E	L	T	P	I	Bachelor 6 C	E	L	T	P	I	Exam Session	Exam	Credit
	Introduction to cheminformatics																	
F	CH-352	CGC	Patiny							2h	1h					Sum	During the semester	3
	Introduction to electronic structure methods																	
E	CH-353	CGC	Röthlisberger	2h	2h											Win	During the semester	4
	Molecular dynamics and Monte-Carlo simulation																	
E	CH-351	CGC	Röthlisberger							1h	1h					Sum	During the semester	2

C : Course, E : Exercise, L : Lab, TP : Practical work, P : Course based project, I : Individual project, * : option course / F : French courses, D : Deutsch courses, E : English Courses / Sum : Summer, Win : Winter

Lang.	Code	Sect.	Teacher	Bachelor 5 C E L T P I	Bachelor 6 C E L T P I	Exam Session	Exam	Credit
	Project of Computational chemistry							
F	CH-359	CGC	Corminboeuf Röthlisberger Schwaller Smit Vanicek		4h	Sum	During the semester	3

Free module

Lang.	Code	Sect.	Teacher	Bachelor 5 C E L T P I	Bachelor 6 C E L T P I	Exam Session	Exam	Credit
	Algebra							
E	MATH-310	MA	Lachowska	2h 2h		Win	Written	4
	Analysis III							
F	MATH-203(b)	MA	Strütt	2h 2h		Win	Written	4
	Analysis IV							
E	MATH-207(d)	MA	Braun		2h 2h	Sum	Written	4
	Causal thinking							
E	MATH-352	MA	Stensrud	2h 2h		Win	Written	5
	Discrete optimization							
E	MATH-261	MA	Eisenbrand		2h 2h	Sum	Written	5
	Introduction to optimization and operations research							
E	MATH-265	GC	Bierlaire	2h 2h		Win	Written	4
	Numerical analysis							
E	MATH-251(b)	MA	Herbst		2h 2h	Sum	Written	4

Module 4 - Chimie physique

Lang.	Code	Sect.	Teacher	Bachelor 5 C E L T P I	Bachelor 6 C E L T P I	Exam Session	Exam	Credit
	Advanced nuclear magnetic resonance							
E	CH-401	CGC	Emsley		1h 1h	Sum	Written	3
	Electrochemistry of solutions							
F	CH-243	CGC	Roussel	2h 1h		Win	Written	3
	Methods in spectroscopy and dynamics							
E	CH-340	CGC	Osterwalder		2h 1h	Sum	During the semester	3
	Numerical methods							
E	ChE-312	CGC	Miskovic Sivula		2h 1h	Sum	During the semester	3

Synthetic chemistry

Lang.	Code	Sect.	Teacher	Bachelor 5 C E L T P I	Bachelor 6 C E L T P I	Exam Session	Exam	Credit
	Asymmetric synthesis and retrosynthesis							
E	CH-335	CGC	Gerber Nicolai		3h 1h	Sum	Oral	4
	Preparative chemistry II							
F	CH-329	CGC	Hu Severin		8h	Sum	During the semester	8