

Cycle view of the study programme

		B1	Or	Th	Pr	Au	Cr
Compulsory courses (B1 : 51Cr)							
CHIM0724-1	<i>Organic chemistry</i> (english language) - JeanChristophe MONBALIU	B1	Q1	50	-	-	5
CHIM0725-1	<i>Modelling molecules and extended systems</i> (english language) - <i>Partim A</i> - Bernard LEYH, Françoise REMACLE - <i>Partim B</i> - Bernard LEYH, Françoise REMACLE	B1	Q1	30	-	-	5
CHIM0726-1	<i>Emerging analytical approaches</i> - Christian DAMBLON, AnneSophie DUWEZ, Gauthier EPPE, JeanFrançois FOCANT, Loïc QUINTON	B1	Q1	50	-	-	5
CHIM0727-1	<i>Macromolecular and materials chemistry</i> (english language) - Christine JÉRÔME, Bénédicte VERTRUYEN	B1	Q1	50	-	-	5
CHIM0728-1	<i>Design, structure and reactivity of chemical architectures</i> - Lionel DELAUDE, AnneSophie DUWEZ	B1	Q1	50	-	-	5
CHIM0729-1	<i>Biological chemistry</i> - Christian DAMBLON, Loïc QUINTON	B1	Q1	50	-	-	5
CHIM0096-1	<i>Nuclear chemistry</i> (english language)	B1	Q2	25	-	-	3
SMEM0015-1	<i>Final thesis</i> - COLLÉGIALITÉ	B1	TA	-	-	-	18
Optional courses (B1 : 9Cr)							
In agreement with the jury, chose courses for a total of 9 credits from among: (B1 : 9Cr)							
Languages							
LANG4007-1	<i>English - oral expression</i> (english language) - Clara BRERETON, Véronique DOPPAGNE, ISLV	B1	Q2	-	25	-	3
LANG2971-2	<i>Academic English Writing</i> (english language) - Clara BRERETON, Véronique DOPPAGNE, ISLV	B1	Q1	25	-	-	3
Industrial chemistry							
CHIM0074-2	<i>Seminars on industrial security</i> - JeanLuc BOZET, Angélique LÉONARD, Dominique TOYE - [2d FW]	B1	Q1	15	-	[+]	3
CHIM0081-3	<i>Industrial Chemistry Processes, structure of chemical industry</i> - Angélique LÉONARD - [1d FW]	B1	Q1	30	-	[+]	3
CHIM0022-3	<i>Transport phenomena, Part A</i> (english language) - Andreas PFENNIG	B1	Q2	30	-	-	3
CHIM0683-2	<i>Green chemistry</i> - Aurore RICHEL	B1	Q2	5	20	-	3
CHIM0699-2	<i>Life cycle assessment - Ecodesign</i> (english language) - Angélique LÉONARD	B1	Q1	10	30	-	3
Synthesis and materials							
CHIM0707-1	<i>Physical organic chemistry</i> - JeanChristophe MONBALIU	B1	Q2	25	-	-	3
CHIM9265-1	<i>Introduction to continuous flow organic synthesis</i> (english language) - JeanChristophe MONBALIU - [1d Vis.]	B1	Q1	15	10	[+]	3
CHIM0731-1	<i>Chemistry and physical-chemistry of peptide and protein assemblies</i> - JeanChristophe MONBALIU, Loïc QUINTON	B1	Q1	25	-	-	3
CHIM0656-1	<i>Organometallic catalysis</i> - Lionel DELAUDE	B1	Q1	25	-	-	3
CHIM0219-1	<i>Industrial polymers</i> - Christine JÉRÔME	B1	Q2	25	-	-	3
CHIM9234-2	<i>Polymers and environment</i> (english language) - <i>Part A</i> - Philippe LECOMTE - <i>Part B</i> - Philippe LECOMTE	B1	Q1	15	-	-	3
CHIM9260-1	<i>Properties and applications of surfactants</i> - Guy BROZE, Antoine DEBUIGNE	B1	Q2	25	-	-	3
CHIM9230-1	<i>Nanomaterials: synthesis, properties and applications</i> (english)	B1	Q1	25	-	-	3

language) - AnneSophie DUWEZ, Christine JÉRÔME,
Damien SLUYSMANS

CHIM0742-1 *Chemistry of materials and sustainable development -* B1 Q1 15 - [+] 3
Catherine HENRIST - [0,5d Vis., 10h Mon. WS]

Techniques of characterization and analysis

BIOL0114-4 *Electronic microscopies, Part A* - Philippe COMPÈRE B1 Q2 15 - - 3

CHIM9236-2 *Microstructure of materials : characterization techniques* B1 Q2 3
- Part A - Catherine HENRIST 15 - -
- Part B - Catherine HENRIST 10 - -

CHIM9264-1 *Electrical and magnetic properties of materials -* B1 Q1 15 10 - 3
Bénédicte VERTRUYEN

CHIM0732-1 *Characterisation of surfaces and interfaces* - AnneSophie DUWEZ, B1 Q1 25 - - 3
Damien SLUYSMANS

CHIM0220-1 *Recent nuclear magnetic resonance (NMR) methods in chemistry -* B1 Q1 25 - - 3
Christian DAMBLON

CHIM9257-2 *Introduction to solid state NMR (english language)* B1 Q1 3
- Part A - Christian DAMBLON, Philippe LECOMTE 15 - -
- Part B - Christian DAMBLON, Philippe LECOMTE 10 - -

CHIM9221-1 *Advanced techniques in nuclear magnetic resonance of biomolecules* B1 Q1 25 - - 3
- Christian DAMBLON

CHIM0653-1 *Imaging and marking techniques - - Suppl : Mohamed Ali BAHRI,* B1 Q2 25 - - 3
Sylvestre DAMMICCO

CHIM0657-1 *Emerging techniques in the science of separation -* B1 Q2 10 15 - 3
JeanFrançois FOCANT, PierreHugues STEFANUTO

CHIM9259-2 *Analytical techniques in forensic chemistry* - JeanFrançois FOCANT, B1 Q2 15 10 - 3
PierreHugues STEFANUTO

CRIS0204-1 *Complement of crystallography* - Frédéric HATERT B1 Q2 15 10 - 3

CHIM9310-1 *Advanced spectroscopic analysis methods* - Gauthier EPPE, B1 Q2 20 5 - 3
Cédric MALHERBE

CHIM0743-1 *Introduction to data handling with MetaboAnalyst (english* B1 Q1 15 10 - 3
language) - PierreHugues STEFANUTO

CHIM0744-1 *Introduction to quality assurance* - JeanFrançois FOCANT B1 Q1 15 - - 3

Biological chemistry

BIOC0232-1 *Macromolecular biochemistry (english language)* - Moreno GALLENI B1 Q1 25 - - 3

CHIM9221-1 *Advanced techniques in nuclear magnetic resonance of biomolecules* B1 Q1 25 - - 3
- Christian DAMBLON

CHIM9262-1 *Biomimetic chemistry : when the Man is inspired by nature -* B1 Q2 25 - - 3
Loïc QUINTON

CHIM0731-1 *Chemistry and physical-chemistry of peptide and protein assemblies* B1 Q1 25 - - 3
- JeanChristophe MONBALIU, Loïc QUINTON

BIOC0719-1 *Enzymology* - André MATAGNE - [10h SEM] B1 Q2 15 - [+] 3

CHIM0218-1 *Elements of medicinal chemistry* - Bernard PIROTTE - [5h SEM] B1 Q2 20 - [+] 3

CHIM0683-2 *Green chemistry* - Aurore RICHEL B1 Q2 5 20 - 3

Modelling and molecular dynamics

CHIM0707-1 *Physical organic chemistry* - JeanChristophe MONBALIU B1 Q2 25 - - 3

CHIM0734-1 *Photochemistry* - Bernard LEYH B1 Q2 15 10 - 3

CHIM9233-1 *Molecular logic (english language)* - Françoise REMACLE B1 Q2 25 - - 3

SPAT0054-1	<i>Astrophysics and astrochemistry</i> - Michaël DE BECKER	B1	Q2	20	-	-	3
Sciences teaching							
CHIM0735-1	<i>Sciences and chemistry history</i> - Bernard LEYH	B1	Q1	15	10	-	3
CHIM0736-1	<i>Conceptual approach to basic chemistry</i> - Bernard LEYH	B1	Q2	15	10	-	3
PHIL0040-1	<i>Introduction to the philosophy of sciences</i> - Laurence BOUQUIAUX	B1	Q1	30	-	-	3
DOCU0455-1	<i>Introduction to critical thinking</i>	B1	Q2				3
	- <i>Theory</i> - Yaël NAZÉ		10	-	-		
	- <i>Practice</i> - Yaël NAZÉ		-	6	-		

Additional ECTS Master in chemistry (60 ECTS)

Optional courses (B0 : 60Cr)

Students will follow a study programme worth 15 to 60 ECTS selected from the courses below. The programme will be established by the master's jury for each student according to their qualifications. (B0 : 60Cr)

CHIM0704-1	<i>Theoretical chemistry</i> - Françoise REMACLE - [15h QA Sess.]	B0	Q1	25	-	[+]	4
CHIM9287-1	<i>Theoretical and quantum chemistry</i> - Françoise REMACLE - [15h QA Sess.]	B0	Q1	30	10	[+]	4
CHIM9288-1	<i>Spectroscopy and statistical thermodynamics elements</i> - Bernard LEYH - [20h QA Sess.]	B0	Q1	30	-	[+]	4
CHIM0278-1	<i>Organic chemistry III</i> - Lionel DELAUDE - [15h QA Sess.]	B0	Q1	30	55	[+]	7
CHIM9289-1	<i>Analytical chemistry III - Physical methods</i>	B0	Q1				8
	- <i>Physico-chemical methods of analysis</i>		15	-	-		
	- <i>Electrochemical methods of analysis</i>		15	-	-		
	- <i>Travaux pratiques et répétitions</i> - Gauthier EPPE - [15h QA Sess.]		-	65	[+]		
CHIM0678-1	<i>Biochemistry</i> - André MATAGNE	B0	Q1	30	-	-	3
INFO0202-1	<i>Programming Methods Applied to Chemistry</i> - Peter SCHLAGHECK	B0	Q2	15	15	-	2
PHYS0968-1	<i>Signal processing</i> - Alejandro SILHANEK	B0	Q2	25	20	-	4
CHIM9285-1	<i>Chemical Kinetics, Introduction to Spectroscopy and Group Theory</i> - Bernard LEYH - [20h QA Sess.]	B0	Q2	35	-	[+]	6
CHIM9291-1	<i>Structural analysis</i> - Christian DAMBLON, Loïc QUINTON	B0	Q2	20	25	-	4
CHIM0209-2	<i>Inorganic chemistry</i> - Bénédicte VERTRUYEN - [8h QA Sess.]	B0	Q2	30	70	[+]	8
CHIM0283-4	<i>Chemistry of the macromolecules</i> - Christine JÉRÔME	B0	Q2	20	20	-	4
PHIL0201-1	<i>Elements of sciences philosophy</i> - Julien PIERON	B0	Q2	15	-	-	2
CHIM9292-1	<i>chemical Kinetics</i> - Bernard LEYH - [10h QA Sess.]	B0	Q2	20	-	[+]	3
CHIM9293-1	<i>spectroscopy Integrated laboratory</i> - Christian DAMBLON, Gauthier EPPE, Bernard LEYH, JeanChristophe MONBALIU, Loïc QUINTON, Françoise REMACLE	B0	Q2	-	105	-	6
CHIM9294-1	<i>Bibliographic research, research project</i> - Caroline COLLETTE, JeanChristophe MONBALIU - [30h Internship]	B0	Q2	5	-	[+]	2
LANG0076-1	<i>English 1 (english language)</i> - Véronique DOPPAGNE, ISLV	B0	TA	45	-	-	4
LANG0077-1	<i>English 2 (english language)</i> - Clara BRERETON, Véronique DOPPAGNE, ISLV	B0	TA	45	-	-	4