Cycle view of the study programme

		Bl	Or	Th	Pr	Au	Cr
Compulsory courses (B1 : 51Cr)							
CHIM0724-1	*Organic chemistry* (english language) - André LUXEN, JeanChristophe MONBALIU	B1	Q1	50	-	-	**5**
CHIM0725-1	*Modelling molecules and extended systems* (english language) - Bernard LEYH, Françoise REMACLE	B1	Q1	50	-	-	**5**
CHIM0726-1	*Emerging analytical approaches* - Christian DAMBLON, AnneSophie DUWEZ, Gauthier EPPE, JeanFrançois FOCANT, Loïc QUINTON	B1	Q1	50	-	-	**5**
CHIM0727-1	*Macromolecular and materials chemistry* (english language) - Christine JÉRÔME, Bénédicte VERTRUYEN	B1	Q1	50	-	-	**5**
CHIM0728-1	*Design, structure and reactivity of chemical architectures* - Lionel DELAUDE, AnneSophie DUWEZ	B1	Q1	50	-	-	**5**
CHIM0729-1	*Biological chemistry* - Christian DAMBLON, Loïc QUINTON	B1	Q1	50	-	-	**5**
CHIM0096-1	*Nuclear chemistry* (english language) - André LUXEN	B1	Q2	25	-	-	**3**
SMEM0015-1	*Final thesis* - 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	*English - oral expression* (english language) - Véronique DOPPAGNE, ISLV	B1	Q2	-	25	-	**3**
LANG2971-2	*Academic English Writing* (english language) - Clara BRERETON, Véronique DOPPAGNE, ISLV	B1	Q1	25	-	-	**3**
Industrial chemistry							
CHIM0081-3	*Industrial Chemistry Processes, structure of chemical industry* - Angélique LÉONARD - [1d FW]	B1	Q1	30	-	[+]	**3**
CHIM0022-3	*Transport phenomena, Part A* (english language) - Andreas PFENNIG	B1	Q2	30	-	-	**3**
CHIM0683-2	*Green chemistry* - Aurore RICHEL	B1	Q2	5	20	-	**3**
Synthesis and materials							
CHIM0707-1	*Physical organic chemistry* - JeanChristophe MONBALIU	B1	Q2	25	-	-	**3**
CHIM9265-1	*Introduction to continuous flow organic synthesis* (english language) - JeanChristophe MONBALIU - [1d Vis.]	B1	Q1	15	10	[+]	**3**
CHIM0731-1	(pas organisé en 2018-2019) *Chemistry and physical-chemistry of peptide and protein assemblies* - JeanChristophe MONBALIU, Loïc QUINTON	B1	Q1	25	-	-	**3**
CHIM0656-1	*Organometallic catalysis* - Lionel DELAUDE	B1	Q1	25	-	-	**3**
CHIM0219-1	*Industrial polymers* - Christine JÉRÔME	B1	Q2	25	-	-	**3**
CHIM9234-2	*Polymers and environment* (english language) - *Part A* - Philippe LECOMTE - *Part B* - Philippe LECOMTE	B1	Q1 15 10	 - -	 - -		**3**
CHIM9260-1	*Properties and applications of surfactants* - Guy BROZE, Antoine DEBUIGNE	B1	Q2	25	-	-	**3**
CHIM0248-1	*Advanced ceramic materials : from design to use* - Rudi CLOOTS	B1	Q2	25	-	-	**3**
CHIM9230-1	*Nanomaterials, (electro)synthesis and applications* (english language) - Christophe DETREMBLEUR, Christine JÉRÔME	B1	Q1	25	-	-	**3**
Techniques of characterization and analysis							

BIOL0114-4	*Electronic microscopies, Part A* - Philippe COMPÈRE	B1	Q2	15	-	-	**3**
CHIM9236-2	*Microstructure of materials : characterization techniques* - *Part A* - Catherine HENRIST - *Part B* - Catherine HENRIST	B1	Q2 15 10	 - -	 - -		**3**
CHIM9264-1	*Electrical and magnetic properties of materials* - Bénédicte VERTRUYEN	B1	Q1	15	10	-	**3**
CHIM0732-1	*Characterisation of surfaces and interfaces* - AnneSophie DUWEZ	B1	Q1	25	-	-	**3**
CHIM0220-1	*Recent nuclear magnetic resonance (NMR) methods in chemistry* - Christian DAMBLON	B1	Q1	25	-	-	**3**
CHIM9257-2	*Introduction to solid state NMR* (english language) - *Part A* - Christian DAMBLON, Philippe LECOMTE - *Part B* - Christian DAMBLON, Philippe LECOMTE	B1	Q1 15 10	 - -	 - -		**3**
CHIM9221-1	*Advanced techniques in nuclear magnetic resonance of biomolecules* - Christian DAMBLON	B1	Q1	25	-	-	**3**
CHIM0653-1	*Imaging and marking techniques* - André LUXEN	B1	Q2	25	-	-	**3**
CHIM0655-1	*Advanced mass spectrometry methods* - Gauthier EPPE, JeanFrançois FOCANT, Loïc QUINTON	B1	Q1	25	-	-	**3**
CHIM0657-1	*Emerging techniques in the science of separation* - JeanFrançois FOCANT, PierreHugues STEFANUTO	B1	Q2	25	-	-	**3**
CHIM9259-2	*Analytical techniques in forensic chemistry* - JeanFrançois FOCANT, PierreHugues STEFANUTO	B1	Q2	15	10	-	**3**
CHIM0248-1	*Advanced ceramic materials : from design to use* - Rudi CLOOTS	B1	Q2	25	-	-	**3**
CRIS0204-1	*Complement of crystallography* - Frédéric HATERT	B1	Q2	15	10	-	**3**
CHIM9310-1	*Advanced spectroscopic analysis methods* - Gauthier EPPE, Cédric MALHERBE	B1	Q2	20	5	-	**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* - Christian DAMBLON	B1	Q1	25	-	-	**3**
CHIM0655-1	*Advanced mass spectrometry methods* - Gauthier EPPE, JeanFrançois FOCANT, Loïc QUINTON	B1	Q1	25	-	-	**3**
CHIM9262-1	*Biomimetic chemistry : when the Man is inspired by nature* - Loïc QUINTON	B1	Q2	25	-	-	**3**
CHIM0731-1	(pas organisé en 2018-2019) *Chemistry and physical-chemistry of peptide and protein assemblies* - JeanChristophe MONBALIU, Loïc QUINTON	B1	Q1	25	-	-	**3**
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**
CHIM0733-1	*Molecular dynamics* - Benoît MIGNOLET	B1	Q2	25	-	-	**3**
CHIM0734-1	*Photochemistry* - Bernard LEYH	B1	Q1	15	10	-	**3**
CHIM9233-1	*Molecular logic* (english language) - Françoise REMACLE	B1	Q1	25	-	-	**3**
SPAT0054-1	*Astrophysics and astrochemistry* - Michaël DE BECKER	B1	Q2	15	5	-	**3**
Didactics of science							

CHIM0735-1	*Sciences and chemistry history* - Bernard LEYH	B1	Q2	15	10	-	**3**
CHIM0736-1	*Conceptual approach to basic chemistry* - Bernard LEYH	B1	Q1	15	10	-	**3**
PHIL0040-1	*Introduction to the philosophy of sciences* - Laurence BOUQUIAUX	B1	Q1	30	-	-	**3**
DOCU0455-1	*Introduction to critical thinking* - Yaël NAZÉ	B1	Q2	10	5	-	**3**

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