

Cycle view of the study programme

B1 Or Th Pr Au Cr

THIS MASTER IS ONLY ACCESSIBLE TO STUDENTS ENROLLED BEFORE THE 2022-2023 ACADEMIC YEAR.

Compulsory courses (B1 : 51Cr)

CHIM0724-1	<i>Organic chemistry</i> (english language) - Thibault GENDRON, 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) - Thibault GENDRON	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	B1	Q2	-	25	-	3
LANG2971-2	<i>Academic English Writing</i> (english language) - Clara BRERETON, Véronique DOPPAGNE	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
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> - N...	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	<i>Chemistry of materials and sustainable development - Catherine HENRIST - [0,5d Vis., 10h Mon. WS]</i>	B1	Q1	15	-	[+]	3
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Techniques of characterization and analysis

BIOL0114-4	<i>Electronic microscopies, Part A - Philippe COMPÈRE</i>	B1	Q2	15	-	-	3
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CHIM9236-2	<i>Microstructure of materials : characterization techniques</i>	B1	Q2				3
	- Part A - Catherine HENRIST			15	-	-	
	- Part B - Catherine HENRIST			10	-	-	

CHIM9264-1	<i>Electrical and magnetic properties of materials - Bénédicte VERTRUYEN</i>	B1	Q1	15	10	-	3
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CHIM0732-1	<i>Characterisation of surfaces and interfaces - AnneSophie DUWEZ, Damien SLUYSMANS</i>	B1	Q1	25	-	-	3
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CHIM0220-1	<i>Recent nuclear magnetic resonance (NMR) methods in chemistry - Christian DAMBLON</i>	B1	Q1	25	-	-	3
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CHIM9257-2	<i>Introduction to solid state NMR (english language)</i>	B1	Q1				3
	- Part A - Christian DAMBLON, Philippe LECOMTE			15	-	-	
	- Part B - Christian DAMBLON, Philippe LECOMTE			10	-	-	

CHIM9221-1	<i>Advanced techniques in nuclear magnetic resonance of biomolecules - Christian DAMBLON</i>	B1	Q1	25	-	-	3
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CHIM0653-1	<i>Imaging and marking techniques - Thibault GENDRON</i>	B1	Q2	25	-	-	3
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CHIM0657-1	<i>Emerging techniques in the science of separation - JeanFrançois FOCANT, PierreHugues STEFANUTO</i>	B1	Q2	10	15	-	3
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CHIM9259-2	<i>Analytical techniques in forensic chemistry - JeanFrançois FOCANT, PierreHugues STEFANUTO</i>	B1	Q2	15	10	-	3
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CRIS0204-1	<i>Complement of crystallography - Frédéric HATERT</i>	B1	Q2	15	10	-	3
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CHIM9310-1	<i>Advanced spectroscopic analysis methods - Gauthier EPPE, Cédric MALHERBE</i>	B1	Q2	20	5	-	3
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CHIM0743-1	<i>Introduction to data handling with MetaboAnalyst (english language) - PierreHugues STEFANUTO</i>	B1	Q1	15	10	-	3
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CHIM0744-1	<i>Introduction to quality assurance - JeanFrançois FOCANT</i>	B1	Q2	15	-	-	3
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Biological chemistry

BIOC0232-1	<i>Macromolecular biochemistry (english language) - Moreno GALLEN</i>	B1	Q1	25	-	-	3
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CHIM9221-1	<i>Advanced techniques in nuclear magnetic resonance of biomolecules - Christian DAMBLON</i>	B1	Q1	25	-	-	3
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CHIM9262-1	<i>Biomimetic chemistry : when the Man is inspired by nature - Loïc QUINTON</i>	B1	Q2	25	-	-	3
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CHIM0731-1	<i>Chemistry and physical-chemistry of peptide and protein assemblies - JeanChristophe MONBALIU, Loïc QUINTON</i>	B1	Q1	25	-	-	3
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BIOC0719-1	<i>Enzymology - André MATAGNE - [10h SEM]</i>	B1	Q2	15	-	[+]	3
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CHIM0218-1	<i>Elements of medicinal chemistry - Bernard PIROTTE - [5h SEM]</i>	B1	Q2	20	-	[+]	3
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CHIM0683-2	<i>Green chemistry - Aurore RICHEL</i>	B1	Q2	5	20	-	3
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Modelling and molecular dynamics

CHIM0707-1	<i>Physical organic chemistry - JeanChristophe MONBALIU</i>	B1	Q2	25	-	-	3
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CHIM0734-1	<i>Photochemistry - Bernard LEYH</i>	B1	Q1	15	10	-	3
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CHIM9233-1	<i>Molecular logic (english language) - Françoise REMACLE</i>	B1	Q2	25	-	-	3
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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	20	[+]	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> - Gauthier EPPE			15	-	-	
	- <i>Electrochemical methods of analysis</i> - Gauthier EPPE			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	B0	Q2	-	100	-	6
CHIM9294-1	<i>Bibliographic research, research project</i> - Caroline COLLETTE, JeanChristophe MONBALIU - [30h Internship]	B0	Q2	5	-	[+]	2
LANG0076-1	<i>English 1</i> (english language) - Daphné BUI, Véronique DOPPAGNE	B0	TA	45	-	-	4
LANG0077-1	<i>English 2</i> (english language) - Clara BRERETON, Véronique DOPPAGNE	B0	TA	45	-	-	4