Study Plan – Academic Year 2026–2027		ECTS	Semester
CORE COURSES (27 ECTS)			
Introduction to Molecular Spectroscopy		**6**	**1**
Advanced Analytical Methodologies in Mass Spectrometry [a]		**6**	**1**
Advanced Organic Chemistry [b]		**6**	**1**
Chemistry of the Transition Elements		**6**	**2**
English level B2 (qualification)		**3**	**1**
CURRICULUM-SPECIFIC COURSES (24 ECTS)			
Principi e Metodologie della Chimica	***Metodologie Chimiche per l'Ambiente e la Salute***		
Computational Chemistry	Sensing and Biosensing: Methodologies and Devices [a]	**6**	**1**
Solid State Chemistry	Bioinorganic Chemistry	**6**	**2**
Advanced Analytical Techniques for Chemical Characterization and Laboratory	Functional Molecular Materials for the Environment and Health	**6**	**2**
Advanced Synthetic Methodologies and Laboratory [b]	Organic Chemistry of Biomolecules	**6**	**2**
RESTRICTED ELECTIVE COURSES (24 ECTS)			
Structural Chemistry		**6**	**2**
Advanced Techniques in Spectroscopy and Microscopy		**6**	**2**
Analytical Methodologies and Environmental Monitoring		**6**	**2**
Principles and Applications of NMR Spectroscopy and Laboratory		**6**	**2**
Chemistry and Physics of Complex Systems		**6**	**3**
Analytical Methodologies for Diagnostics and Omics Sciences		**6**	**3**
Metalorganic Chemistry		**6**	**3**
Supramolecular Chemistry		**6**	**3**
FREE ELECTIVE COURSES (12 ECTS)			
Free Elective I		**6**	**2-4**
Free Elective II		**6**	**2-4**
Experimental Thesis		**33**	**4**
Total credits		**120 ECTS**	**4 semesters**

a For students enrolled in the curriculum of *Metodologie Chimiche per l'Ambiente e la Salute*, these two courses are combined into a single 12-ECTS course: **Analytical Methodologies in Mass Spectrometry and Sensing**.

b For students enrolled in the curriculum of *Principi e Metodologie della Chimica*, these two courses are combined into a single 12-ECTS course: **Metodologie Moderne in Chimica Organica e Lab.**