

# CHEMISTRY

(Classe LM-54)

## Piano di Studi Coorte A.A. 2022/2023

### Primo Anno

denominazione attività formativa/insegnamento	SSD	CFU	Ore	Sem.	TAF
Advanced Physical Chemistry I Course	CHIM/02	6	48	I	B
Advanced Inorganic Chemistry I Course	CHIM/03	6	48	I	B
Advanced Organic Chemistry I Course	CHIM/06	6	48Lect	I	B
Advanced Analytical Chemistry	CHIM/01	6	48	I	B
Course 1*		6	48	I	C
Health and Safety in the Working Environment**		1	16	I	F
Advanced Biological Chemistry	BIO/10	6	48	II	B
Advanced Physical Chemistry II Course	CHIM/02	6	48	II	B
Advanced Inorganic Chemistry II Course	CHIM/03	6	48	II	B
Advanced Organic Chemistry II Course	CHIM/06	6 (4Lect+2Lab)	32Lect 32Lab	II	B
Course 2*		6	48	II	C
Totale CFU dell'anno		<b>61</b>			

\*Courses 1, 2 to be selected among the following course sets

\*\* Students who had the Laurea Triennale in Italy and attended the equivalent course, can request CFU recognition from the teaching committee

### Chemistry for life

Denominazione attività formativa/insegnamento	SSD	CFU	Ore	Sem.	TAF
Surface chemistry and nanomaterials	CHIM/02	6	48	I	C
Biophysical Chemistry	CHIM02	6	48	I	C
Bioinformatics	BIO/10	6	48	I	C
Smart materials and nanocarriers	CHIM/03	6	48	II	C
Protein crystallography	CHIM/03	6	48	II	C
Retrosynthesis	CHIM/06	6	48	II	C
Elements of computational organic spectroscopy	CHIM/06	6	48	II	C
Quantum chemistry with application to thermal and photochemical organic reactions					
<i>Modulo I: Theory</i>	CHIM/06	3	24	II	C
<i>Modulo II: Applications</i>	CHIM/06	3 (1Fr+2Ese)	8Lect 24Ex	II	C

### Chemistry for a sustainable development

Denominazione attività formativa/insegnamento	SSD	CFU	Ore	Sem.	TAF
Environmental spectroscopy	CHIM/01	6	48	I	C
Nutraceutical and food chemistry	CHIM/02	6	48	II	C
Industrial biotechnology	CHIM/02	6	48	II	C

**Secondo Anno**

denominazione attività formativa/insegnamento	SSD	CFU	Ore	Sem.	TAF
Student's choice		6			D
Student's choice		6			D
Course 3*		6	48	I	C
Other training affairs		3			F
Internship in a Company/in a research lab		12		I	S
Experimental project for final dissertation		26		II	E
Totale CFU dell'anno		<b>59</b>			

\*Course 3 to be selected among the following course sets and those of the first year

**Chemistry for life**

Denominazione attività formativa/insegnamento	SSD	CFU	Ore	Sem.	TAF
NMR applications for Food Chemistry	CHIM/03	6	48	I	C

**Chemistry for a sustainable development**

Denominazione attività formativa/insegnamento	SSD	CFU	Ore	Sem.	TAF
Sustainable and efficient energy	CHIM/02	6	48	I	C
Green chemistry and Catalysis	CHIM/06	6	48	I	C
Remediation of contaminated sites	CHIM/02	6	48	I	C