

UNIVERSITY OF SIENA – MASTER PROGRAMME IN CHEMISTRY*

1° Semester 15 October – 15 February (1° Year)	2° Semester 15 March – 15 June (1° Year)	3° Semester 15 October – 15 February (2° Year)	4° Semester 15 March – 15 June (2° Year)
ADVANCED ORGANIC CHEMISTRY I (AOC I) <i>Physical And Computational Organic Chemistry</i> (6 CFU) Prof. Massimo Olivucci	ADVANCED ORGANIC CHEMISTRY II (AOC II) <i>Organocatalysis And Biocatalysis</i> (6 CFU) Prof. Maurizio Taddei	3° Elective Course (6 CFU)	Experimental Project for final dissertation (30 CFU)
ADVANCED PHYSICAL CHEMISTRY I (APC I) <i>Statistical Thermodynamics</i> (6 CFU) Prof. Rebecca Pogni	ADVANCED PHYSICAL CHEMISTRY II (APC II) <i>Advanced NMR Spectroscopy</i> (6 CFU) Prof. Alessandro Donati	Free Course*** (6 CFU)	
ADVANCED INORGANIC CHEMISTRY I (AIC I) <i>Biological Inorganic Chemistry</i> (6 CFU) Prof. Stefano Mangani	ADVANCED INORGANIC CHEMISTRY II (AIC II) <i>Metabolomics</i> (6 CFU) Prof. Daniela Valensin	Free Course (6 CFU)	
ADVANCED BIOLOGICAL CHEMISTRY (ABC) <i>Bioinformatics</i> (6 CFU) Prof Neri Niccolai	1° Elective Course** (6 CFU)	Healthy and Safety in the Working Environment (1 CFU)	
ADVANCED ANALYTICAL CHEMISTRY (AAC) <i>Chemometrics</i> (6 CFU) Prof. Steven Loiselle	2° Elective Course (6 CFU)	Internship (11 CFU)	

*Valid for both 2015/16 and 2016/17.

**Elective Courses can be chosen from the two study tracks suggested in the table below.

***Free Courses can be chosen from all the active courses of the University of Siena.

MASTER PROGRAMME IN CHEMISTRY - Elective Courses

study track A

study track B

CHEMISTRY FOR A SUSTAINABLE DEVELOPMENT

CHEMISTRY FOR LIFE

2° Semester

3° Semester

2° Semester

3° Semester

15 March – 15 June (1° Year)

15 October – 15 February (2° Year)

15 March – 15 June (1° Year)

15 October – 15 February (2° Year)

NUTRACEUTICAL AND FOOD CHEMISTRY

SUSTAINABLE AND EFFICIENT ENERGY

METABOLOMICS

METAL-BASED DRUGS

Prof. Claudio Rossi

Prof. Riccardo Basosi

Prof. Daniela Valensin

Prof. Daniela Valensin

ENVIRONMENTAL SPECTROSCOPY

GREEN CHEMISTRY AND CATALYSIS

PROTEIN CRYSTALLOGRAPHY

INFORMATICS FOR CHEMISTRY AND
BIOLOGY

Prof. Steven Loisel

Prof. Elena Petricci

Prof. Stefano Mangani

Prof. Claudio Saccà

INDUSTRIAL BIOTECHNOLOGY

REMEDICATION OF CONTAMINATED
SITES

SURFACE CHEMISTRY AND
NANOMATERIALS

BIOPHYSICAL CHEMISTRY

Prof. Rebecca Pogni

Prof. Alessandro Donati

Prof. Andrea Atrei

Prof. Camilla Baratto

ELEMENTS OF COMPUTATIONAL
ORGANIC SPECTROSCOPY

Prof. Adalgisa Sinicropi