

# MASTER'S DEGREE PROGRAMME IN SCIENCE AND TECHNOLOGY OF BIO AND NANOMATERIALS

outline 2026  
regulation 2026

## RECOMMENDED CAREER PLAN

Mandatory activities						
Recomm. year	Semester	Code	Sector	Course	CFU	subtot. CFU
1°	I	CM1500	CHEM-06/A	Chemistry for Nanotechnology	6	51
1°	I	CM1407	IMAT-01/A	Fundamentals of Nanotechnology	9	
1°	I	CM1311	PHYS-02/A	Mathematical Methods for Physics	9	
1°	II	CM1401	BIOS-07/A	Biomacromolecular Engineering	6	
1°	II	CM1304	CHEM-02/A	Fundamentals of Spectroscopy	6	
1°	II	CM1312	CHEM-06/A	Introduction to Nanosynthesis, Nanomaterials and Oxide-based Biomaterials	6	
1°	II	CM1408	CHEM-02/A	Microscopy and structural characterization techniques	9	
2°	I	CM1313	CHEM-05/A	Colloids and interfaces	9	15
2°	I	CM1335	PHYS-03/A	Condensed Matter Physics	6	
Optional activities (12 CFU)						
Recomm. year	Semester	Code	Sector	Course	CFU	subtot. CFU
1°	I	CM1425	BIOS-15/A	Microbiology	6	12
1°	I	CM0590	CHEM-02/A	Quantum Chemistry	6	
1°	II	CM1301	BIOS-08/A	Applications of Nano and Biotechnology	6	
1°	II	CM1501	CHEM-03/A	Nanomaterials for energy and environment	6	
1°	II	CM0616	CHEM-03/A	Neurochemistry	6	
1°	II	CM1503	CHEM-03/A	Photo(bio)chemistry	6	
2°	I	CM1509	CHEM-01/A	Analytical Techniques for Biomolecules	6	
2°	I	CM1302	STAT-01/A	Applied Statistics for Biology and Biotechnology	6	
2°	I	CM1511	BIOS-07/A	Bionanotechnology	6	
2°	I	CM0598	CHEM-02/A	Methods for Molecular Dynamics Simulation	6	
2°	I	CM0597	BIOS-08/A	Tissue engineering and drug testing	6	
2°	II	CM1391	PHYS-03/A	Physics of Soft Matter	6	
Other activities						
Recomm. year	Semester	Code	Sector	Course	CFU	subtot. CFU
				12 elective CFU (*)	12	12
1°	I	ITA-B2		Italian for foreigners (*)	3	9
2°	II	CMST03		Internship		
2°	II	CMST06		Internship	6	
2°	II	CMTH21		Thesis	21	21

**tot. CFU 120**

### (\*) Elective CFU

12 credits to choose among the interdisciplinary courses of this programme (not chosen beforehand) and/or among those offered for all the other postgraduate programmes of the University.

(\*) The course 'Italian for Foreigners' (ITA-B2, 3 CFU) is aimed at those who do not have a certified B2 level of Italian language proficiency. Those who have already certified their proficiency may complete the programme with a further 3 CFU of internship (CMST03).