

## Why ENROLL ?

Because Industrial Chemistry is cool!

Because the docents/students ratio is the optimum.

You will enjoy a versatile educational training articulated over three curricula, that can be tackled also transversely.

The lab-courses are equipped with advanced instrumentation to acquire chemistry knowledge in the respect of sustainability, health and environment.

You will learn chemical/methodological/practical approaches to tackle the scale-up from Lab to Industrial production.

The course is well integrated with collaboration activities with prestigious Industrial Companies from Italy and abroad.

You can carry out internships at intra- and extra-moenia structures in Italy and abroad through International agreements.

You will enter rapidly in the world of work through multiple employment opportunities.

### Coordinator of the Study Course

Professor Finizia Auriemma  
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*Il Campus di Monte Sant'Angelo*



#### Useful Links

##### **Polytechnic and Basic Sciences School**

<http://www.scuolapsb.unina.it>

##### **Department of Chemical Sciences**

<http://www.scienzechimiche.unina.it>

##### **Master Degree in Sciences and Technologies of Industrial Chemistry**

<http://www.scienzechimiche.unina.it/laurea-magistrale-in-scienze-e-tecnologie-della-chimica-industriale>

##### **Student Educational Office**

Centri Comuni Complesso Universitario di Monte S. Angelo  
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UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II  
SCUOLA POLITECNICA E DELLE SCIENZE DI BASE

COLLEGIO  
DEGLI STUDI DI  
**SCIENZE**

# MASTER DEGREE SCIENCES AND TECHNOLOGIES OF INDUSTRIAL CHEMISTRY



**Dipartimento di  
Scienze Chimiche**

## EDUCATIONAL OBJECTIVES

The degree Course provides advanced knowledge of fundamental principles of Chemistry in numerous fields of Industry, related to chemical industrial processes, the structure/properties relationships of traditional and advanced materials, the production techniques of materials as a function of end properties, the analysis and chemical-physical characterization techniques of the materials and polymers in particular, the complex problems related to safety, security and quality control.

Achieving a Master Degree in Sciences and Technologies of Industrial Chemistry means to reach a solid theoretical and experimental knowledge, that allows mastering the scientific methods of research, with specific reference to connections between product-process, molecular structure-material properties, industrial scale-up, sustainable development.

The graduate in the Master Course achieves deep knowledge perfectly fitting the industrial needs and organization managements skills allowing to assume responsibility roles in the production, manipulation and quality control of chemicals and materials.



## REQUIREMENT FOR THE ACCESS

Information on the admission protocol to the Study Course are available on the Website:

<http://www.scuolapsb.unina.it/index.php/studiare-al-napoli/ammissione-ai-corsi>

## TRAINING OBJECTIVES

The Degree Course has the tag "Chemistry Euromaster Label", which allows for achieving the "Diploma Supplement" recognized from the European Chemistry Thematic Network Association (ECTNA) and that can be spent abroad within the European Community.



### EDUCATIONAL PATH (120 CFU)

	CFU
<b>I ANNO</b> Organic Analysis and Synthesis	6
Chemical Plants	8
Industrial Chemistry I	10
English (Master Course)	4
Industrial Chemistry II (2 modules)	10
Industrial Physical Chemistry	6
Elements of Inorganic Chemistry (in English)	6
<b>II ANNO "Products, Processes and Environmental Production" Curriculum</b>	
Advanced Technologies in Industrial Chemical Processes	6
Processes and Plants for Wastewater Treatment	6
Analytical Methods for the Quality Control and Processes	6
Quality, Safety and Patent Protection	6
<b>"Polymer Science" Curriculum</b>	
Chemistry and Technology of Polymers	6
Properties and Structure of Polymers	6
Characterization Methods of Polymeric Materials	6
Chemistry of Advanced Materials	6
<b>"Industrial Formulations" Curriculum</b>	
Physical Chemistry of Formulations	6
Industrial Formulations	6
Polymer Formulations	6
Rheology	6
Free Choice Courses (in Italian or English)	12
Further Knowledge and Internship	4
Thesis work and Final Exam	30

## JOB OPPORTUNITIES

The graduate in the Master Course Sciences and Technologies of Industrial Chemistry can carry out activities within the following professional fields:

- Research, Development and Analysis of Products, Materials, Processes and Formulations;
- Management, Design and Functioning of Production Plants;
- Management of Quality Safety System.

Employment opportunities range from traditional chemical industries to formulations, energy production, materials and nanomaterials industries, and includes activities related to health, environment, cultural heritage protection and food industry.

He/She can work in public and/or private Labs of analysis and/or research or as freelance upon achievement the title of "Chemist" after passing the corresponding State Examination.

## CONTINUATION OF STUDIES

The Master Degree gives access to Masters Courses of the II level, Specialization Schools or PhD Courses in Italy and abroad.

## WHERE WE ARE

The educational and science activities are carried out at Complesso Universitario di Monte S. Angelo Via Cintia, Napoli

## HOW TO JOIN US

- By car: exit of the ring road of Fuorigrotta
- Train: Metropolitana Linea 2 (Campi Flegrei Station); Circumflegrea (Mostra Station)
- Bus: From Piazzale Tecchio-MSA: 615; 180; R6. From Piazza Leonardo (Vomero)-MSA: C33
- Connections with private bus-lines coming from all over the Campania Region are also active.

## Services

Punto Adisu | Centro Sinapsi | Cafeterias | Bar  
Copy Service | Bancomat