



UNIVERSITÀ
DEGLI STUDI
DI MILANO

Master's degree programme in
Cosmetic industrial science

FACOLTÀ DI

Scienze del Farmaco

Applications and admissions

Open, subject to entry requirements.

Admission requirements

Eligible for admission

1. Graduates

- in the following classes, as well as in the corresponding classes related to DM 509/99: Chemical Sciences and Technologies (L-27), Pharmaceutical Sciences and Technologies (L-29);
- in other classes, as well as graduates in master's, specialist and four-year degree programmes allowed by a resolution of the competent boards, provided they meet the following minimum requirements: at least 35 ects earned in chemical and biological disciplines, of which a minimum of 12 ects acquired in the CHIM01 to CHIM09 disciplinary fields and a minimum of 6 ects in the BIO10, BIO11 and BIO19 disciplinary fields;
- in possession of a degree obtained abroad recognized as eligible, provided that the acquisition of the minimum 35 ects and their correspondence with the above-mentioned chemical and biological disciplines is verified.

2. Students with proven language skills in English, at least at level B2 (Common European Framework of Reference). These will be ascertained by the University Language Centre (SLAM) upon admission as follows:

- language certificate of B2 or higher level issued no more than three years before the date of admission application;
- English level achieved during a University of Milan degree programme and certified by the University Language Centre (SLAM) no more than four years before the date of admission application. In this case the process is automatic, the applicant does not have to attach any certificates to the application;
- placement test administered by the University Language Centre (SLAM).

Will be **verified** by the Committee for admittance appointed by the Teaching Board:

- possession of the pre-established curricular requirements for the admission;
- personal preparation of candidates. This verification will be based on the examination of the documents presented in the application for admission and, when deemed necessary, on the outcome of an interview aimed at verifying the candidates' skills required for admission. The interview is mandatory for students with a degree obtained abroad. It may be held remotely through a videoconferencing platform and will take place according to a schedule proposed to the candidates.

Objectives

The Master's degree programme in Cosmetic Industrial Science aims to train a graduate with advanced skills in the research, development, industrial production, quality control and marketing of cosmetic products. This graduate will be immediately ready for placement in qualified positions, at different levels within cosmetic companies.

The skills and the competencies necessary for the achievement of such goals are acquired through:

- theoretical lectures
- laboratory activities
- an internship, lasting at least 6 months, to be carried out preferably in cosmetic companies, in Italy or abroad.

The Master's degree programme provides students with knowledge of:

- key formulation ingredients, i.e., inorganic, organic or polymeric ingredients, of cosmetic products and functional ingredients, with their specific activity;
- physiology and specific functions of the skin and its annexes;
- formulation of semisolid, liquid and solid preparations for the development of skincare, hygiene and make-up products;
- technologies applied to the manufacturing and packaging of cosmetic products;
- regulatory provisions and skills for placing a new cosmetic product on the market, according to the European guidelines;
- microbiological risk assessment and alternative protocols for the relevant toxicological characterization;
- quality assessment and stability monitoring of cosmetic products;
- marketing and communication, business plan and project financial evaluation relevant to cosmetic products.

Career prospects

Graduate students in Cosmetic industrial science will reach a high degree of autonomy in the work environment, allowing them to hold positions of high responsibility in companies focused on the synthesis/production/marketing of cosmetic raw materials and on the formulation/development of skincare, hygiene and make-up products, their packaging, related sales, and control/safety. They may also assume responsibilities as project or lab leaders in academic research laboratories or find employment in agencies responsible for the development of technical regulations and quality certification of cosmetic products. Studies conducted in English will enable graduates to meet the challenges of the global economy, facilitating their immediate entry into the job market.

The specific career outlets within the cosmetics industry are:

1. Research and development (R&D) and production specialist
He/She defines development issues and research programs, in tune with company strategies; designs/formulates new small-scale products studying their tech-transfer and industrialization, proposing the necessary technical resources, budget and investment for project.

2. Quality specialist

He/She supervises the quality assurance system in the cosmetic company, i.e., he/she develops protocols for analyzing and controlling the quality of processes, coordinates the departments involved in the manufacture of the product to ensure that the quality system is efficiently organized and documented, ensures that inspections are periodically planned and properly performed to evaluate the effectiveness and applicability of the quality assurance system.

3. Regulatory specialist

He/She is responsible for the collection, processing, updating and reporting-disclosure, as required by the relevant regulations, of all information relating to the safety of cosmetic ingredients and products, including post-marketing. He/she is an expert in the authorization procedures for the marketing of products, and sets up and maintains documentation in support of the application, interfacing, when necessary, with the in charge regulatory bodies.

4. Specialist in cosmetics market relations (cosmetic informant)

He/She conveys scientific knowledge about cosmetic ingredients and products in the areas of the cosmetics company more specifically dedicated to sales. In this respect, he/she is the reference person from which marketers learn the essential technical information for a correct promotion of the products. He/she fosters dialogue and synergy between different areas such as research and development, production, and marketing.

Degree syllabus

I year

COMPULSORY LEARNING ACTIVITIES	ECTS
I semester	
Inorganic ingredients	6
Organic ingredients	7
Polymeric ingredients	6
II semester	
Decorative cosmetics development	6
Functional ingredients	6
Skincare and personal hygiene products development	7
Toxicology and risk assessment	6
Annual	
Physiology and biochemistry of skin and skin annexes (I semester) + Microbiological contamination and controls (II semester)	9

II year

(to be made available as of academic year 2024/2025)

COMPULSORY LEARNING ACTIVITIES	ECTS
I semester	
Analysis of cosmetic ingredients and products	7
Marketing and communication + Business plan and project financial evaluation	6
Technologies for manufacturing and packaging (materials and processes)	6
Optional courses	8
Other training activities	3
Final examination	3
Thesis work	34

INFO

🎓 **Disciplinary classification:** Industrial chemistry (LM-71)

🕒 **Duration:** 2 years (120 ects)

📅 **Attendance:** strongly recommended to the course, mandatory for individual laboratories experiences

📍 **Location:**

- via Colombo, 25 – Milan (headquarters of the Department of Pharmaceutical Sciences)

🌐 **Websites:**

cosmis.cdl.unimi.it

www.unimi.it/en



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