

#Driving Careers Forward

LIFELONG LEARNING MASTER'S DEGREE IN Cosmetic Science and Engineering



Universitat Internacional de Catalunya Faculty of Medicine and Health Sciences



The Master in Cosmetic Science and Engineering is a unique programme that blends traditional cosmetics with more advanced cosmetic engineering, offering a comprehensive perspective that stand out from other similar programmes. It explores a wide range of disciplines, from materials science to 3D printing, genetic engineering and artificial intelligence, all applied to the cosmetic industry.

With the exponential growth of the cosmetics sector, it focuses on **key trends such as sustainability, emerging technology and personalisation,** using natural ingredients. Our curriculum addresses these demands with a balanced combination of traditional and 2.0 cosmetics, highlighting how cosmetic engineering adapts to new technologies.

Over 50% of the programme is dedicated to internships, where you can apply your theoretical knowledge. From micro- and nanometric particle handling to product customisation, every technology you learn equips you to create innovative, personalised solutions. **Are you ready to immerse yourself in the dynamic world of cosmetic science and engineering?**



MANAGEMENT AND ACADEMIC COORDINATION

Course Directors

Dr Román Pérez Antoñanzas

Degree in Chemistry and Doctor in Materials Science. Director of the Institute of Technological Bioengineering, director of the bachelor's degree in Bioengineering and lecturer at the Universitat Internacional de Catalunya (UIC Barcelona).

Dr Begoña María Bosch Canals

Bachelor's degree in Pharmacy, master's degree in Bioethics and PhD in Health Sciences. Assistant Director of Academic Affairs and lecturer in the bachelor's degree in Bioengineering at UIC BCN.

Coordinator

Dr Jenifer Olmos Buitrago

Bachelor's degree in Biology, master's degree and PhD in Tissue Regeneration Engineering. Assistant Director of Academic Affairs and lecturer in the bachelor's degree in Bioengineering at UIC BCN.

Intended for

Graduates or postgraduates in the fields of Biology, Pharmacy, Chemistry, Biomedical Sciences, Bioengineering, Materials Engineering, Chemical Engineering, Biochemistry, Biotechnology and Biomedical Engineering.

It is also aimed at professionals who are already working in the cosmetics industry with sufficient knowledge.

Reasons to take this Master's Degree

- Unique approach: Traditional cosmetics and engineering.
- Practical: over 50% of the programme is practical work experience.
- Advanced equipment for real experience.
- Expert teachers in technology and cosmetics.

Job Opportunities

- Professional training in research and development centres for cosmetics
- Professional work experience with companies in the sector
- Consultancy on R+D+i projects in the cosmetics industry
- Consultancy on marketing and sales in the cosmetics industry
- Consultancy and support in formulating and developing cosmetic products
- Consultancy and participation in quality, efficacy and safety testing for cosmetic products.
- Consultancy and support in cosmetovigilance and pharmacovigilance

CURRICULUM - 60 ECTS

MODULE 1

Fundamentals of Traditional Cosmetics

- Introduction to Cosmetics
- Ingredients and Chemistry of Cosmetics
- $-\!-\!$ Formulation in Traditional Cosmetics
- Physiology and Structure of Areas of Application of Cosmetic Products
- Application of Cosmetics
- Manufacturing Processes and Quality Control in Cosmetics
- Legislation and Regulations in the Cosmetics Industry
- Creation and Management of Businesses in the Cosmetics Sector
- Business Plan and Financing
- Intellectual Property and Patents in the Cosmetics Industry
- Marketing Strategies in the Cosmetics Industry

MODULE 2

Cosmetics 2.0

- Materials Applied in Modern Cosmetics
- Nanotechnology and its Application in Cosmetics
- 3D Printing Applied to Cosmetics
- Biotechnology and the Innovative Production of Ingredient Release Systems
- Green and Sustainable Cosmetics
- Al Application in the Formulation of Cosmetic Products
- Microbiology Applications in the Formulation and Conservation of Cosmetic Products
- Genetic Engineering Applied to the Production of Innovative Ingredients in Cosmetics

MODULE 3

Final Master's Degree Project and Company Work Placements

- Development of an innovative cosmetics project
- Applied research in the cosmetics sector
- $-\!-\!$ Presentation of the project and panel defence
- Professional work experience with companies in the sector



UNIVERSITY UIC Barcelona Sant Cugat Campus

Schedule and Timetable:

- October to June
- On-campus classes
- Monday to Friday

Language: English

Information and Admissions: Carolina Cortés ccortes@uic.es T. 651 826 010



STUDYING IN BARCELONA

Start the most important learning experience of your life in one of the main European cities. Barcelona is a cultural and financial role model and a city where your knowledge can adapt to multiple professional opportunities.



UIC BARCELONA, OUR CAMPUSES

Classes are held on our Barcelona campus and also our Sant Cugat campus, which has a total area of more than 52.000 m². Each Faculty has the best facilities and latest generation equipment for both theoretical and practical classes.

Find out more about the admissions procedure, reserving a place and enrolment here **<u>uic.es/masters</u>**. Click on **<u>uic.es/grants</u>** for information about financial aid, discounts and grants.

RANKINGSThe main rankings in which
the Universitat Internacional
de Catalunya has been classified.Image: transform of the construction of the cons

Universitat Internacional de Catalunya

Sant Cugat Campus Josep Trueta, s/n Hospital Universitari General de Catalunya Building 08195 Sant Cugat del Vallès T. +34 935 042 000



