

# Postgraduate Diploma Cosmetics Processing and Manufacturing



## Postgraduate Diploma Cosmetics Processing and Manufacturing

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/in/medicine/postgraduate-diploma/postgraduate-diploma-cosmetics-processing-manufacturing](http://www.techtitute.com/in/medicine/postgraduate-diploma/postgraduate-diploma-cosmetics-processing-manufacturing)

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# 01

# Introduction

The increase in skin conditions, dermatological problems and complications has led to the emergence of new has meant the emergence of new updates, postulates and medications to counteract these medical As it is not only a banal issue, cosmetics, from its scientific advances, seeks to bring new products that provide solutions to dermatological complications. It is for this reason that for this degree, we will study in depth the manufacture and elaboration of cosmetic products, knowing beforehand their function and correct employability, starting from their chemical components, to the quality control and safety protocols that must be followed during the process. This 100% online program will provide the physician with information on the procedures and updates for the creation of cosmetic products, where the the creation of cosmetics, where the study material can be downloaded and without pre-established schedules without pre-established schedules so that the professional has total freedom to manage his time. to manage their time.



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*Analyzes the process of Cosmetics Processing and Manufacturing and identifies its natural and chemical compound according to its future use"*

Cosmetics are in constant evolution, with elaboration and manufacturing processes that require doctors and health specialists to carefully review their organic and chemical components. In this way, they apply to the manufacturing process the new updates and postulates that respond to dermatological complications in the field of medical cosmetics, a study characterized by bringing in recent years new concepts for the benefit and care of the skin.

In this way, the medical professional will be able to identify from this program the most relevant components in the manufacture of cosmetics, which will help him/her to deepen the dermatological improvement processes, as well as products that do not face their treatment that do not adequately address their treatment in the conditions.

This is a 6-month academic experience in which the graduate will be able to delve into the latest scientific advances related to the active ingredients of natural and synthetic origin used in this field, as well as the properties of each one of them. They will also be able to perfect their skills in the elaboration of products, and will be able to keep up to date with the quality, efficacy and safety requirements of the main quality control entities.

To this end, you will have 450 hours of the best theoretical, practical and additional material, the latter presented in different formats: detailed videos, research articles, further reading, self-awareness exercises and much more! But, without a doubt, the most significant feature of this program is its convenient, flexible and accessible 100% online presentation, thanks to which the medical specialist will be able to expand and update his or her knowledge in a way that is perfectly compatible with the activity of his or her practice.

This **Postgraduate Diploma in Cosmetics Processing and Manufacturing** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Practical cases presented by experts in Cosmetic Science and Technology
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where the self-assessment process can be carried out to improve learning
- ♦ Emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*You will identify the main natural and chemical components that have been used to manufacture new cosmetics that are more effective in the treatment of skin conditions"*



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*Know in detail the latest advances that have been made in the field of cosmetics development and manufacturing, from any mobile device with internet connection"*

The program includes, in its teaching staff, professionals from the sector who bring to this program the experience of their work, in addition to recognized specialists from prestigious reference societies and universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Learn about new advances in dermatological medicine and update your information on the latest treatments for the improvement of skin health.*

*Interpret from a medical point of view the use of drugs as an alternative to less effective cosmetic products in dermatology.*



# 02 Objectives

The main objective of this Postgraduate Diploma in Cosmetics Processing and Manufacturing is to provide information to the medical professional, so that he/she can identify, analyze and update new procedures and postulates. That is why this program will deepen in the mechanisms and processes of cosmetic creation for conditions and problems related to the skin over 6 weeks.







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*Incorporate new advances and updates  
in skin care and protection medicine  
into your professional career”*



## General Objectives

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- ◆ Become familiar with skin structure and features
- ◆ Analyze the main active ingredients according to their origin and nature
- ◆ Understand the action mechanisms in the most suitable cosmetic ingredients to prepare cosmetic formulations for different skin alterations
- ◆ Develop a global vision of the manufacturing process of a cosmetic product, from the initial idea to its launching on the market

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*You will have access to up-to-date material full of knowledge, since it is designed by a team of experts in the field”*





## Specific Objectives

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### Module 1. Cosmetic Ingredients

- ♦ Analyze the most commonly used natural and synthetic active ingredients and main properties
- ♦ Evaluate the role of vitamins and biological compounds in cosmetic products
- ♦ Examine the main types of sunscreens, properties and features
- ♦ Identify the main compounds in cosmetic formulations
- ♦ Determine new trends in cosmetic product formulation and their benefits
- ♦ Demonstrate how science has enhanced cosmetics

### Module 2. Cosmetics Development and Manufacturing

- ♦ Analyze the process that a product goes through from its small-scale creation in the laboratory to its production on an industrial scale
- ♦ Develop the different raw materials that make up the skeleton of a cosmetic product one at a time
- ♦ Examine the plastics or packaging used in the cosmetic industry
- ♦ Determine the different operations and basic manufacturing processes of the different cosmetic forms under the UNE-EN-ISO standard: 22716:2008
- ♦ Evaluate the different cosmetic forms on the market
- ♦ Establish the importance of R&D&I in cosmetic products development; innovation remains key to consumer requirements
- ♦ Compile the steps involved in perfume development, essence and subsequent applicability

### Module 3. Quality Control, Efficacy and Safety in Cosmetics

- ♦ Examine Quality Controls
- ♦ Analyze the importance of GMP in product traceability
- ♦ Perform CPNP discharge processes
- ♦ Perform Safety Assessment
- ♦ Determine the Studies for Safety Assessment
- ♦ Identify Studies for Efficacy Justification

03

# Course Management

In its mission to offer the best active teaching staff, TECH has selected an experienced group of professionals an experienced group of professionals knowledgeable in the medical sector, who will share their knowledge of the latest developments in the development and manufacture of cosmetics. Teachers committed to the dermatological field who seek from their human quality to share the latest updates on the composition of products for a correct medical supply.

Thus, the professional physician will find in this degree a teaching staff that will provide information and will try to respond to every concern that arises during the development of the program.



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*Specialized doctors who will help you during the program, to whom you will be able to turn to strengthen your knowledge and resolve your concerns”*

## Management



### **Dr. Mourelle Mosqueira, María Lourdes**

- ◆ Expert researcher in Cosmetic Science
- ◆ Technical Director at Balcare
- ◆ Researcher of the FA2 group of the Applied Physics Department of the University of Vigo
- ◆ Author of publications on Cosmetic Science
- ◆ Lecturer in undergraduate and graduate programs related to Cosmetic Science
- ◆ President of the Iberoamerican Society of Thalassotherapy
- ◆ Secretary of the Galician Society of Thermal Peloids
- ◆ PhD in Applied Physics, University of Vigo
- ◆ Degree in Pharmacy, University of Santiago de Compostela
- ◆ Certificate in Nutrition and Dietetics, University of Granada



## Professors

### Dr. Pando Rodríguez, Daniel

- ♦ CEO and co-founder of Nanovex Biotechnologies
- ♦ Director of INdermal
- ♦ Researcher in Biotechnology for Medicine and Cosmetics
- ♦ PhD in Chemical Engineering, University of Oviedo
- ♦ Degree in Chemical Engineering, University of Oviedo
- ♦ Master's Degree in Business Administration and Project Management, ENEB

### Dr. Abril González, Concepción

- ♦ Chemist Chromatography Specialist, Bordas S.A.
- ♦ Food Products Analyst for foreign trade at the Technical Inspection of Soivre in Seville
- ♦ Chromatography Analyst at Agrama Laboratories
- ♦ Researcher in the Analytical Chemistry Department at Anquimed
- ♦ PhD in Analytical Chemistry, University of Seville
- ♦ Master's Degree in Professional Specialization in Pharmacy: Pharmaceutical Industry, University of Seville
- ♦ Master's Degree in Cosmetics and Dermopharmacy from the University of Seville
- ♦ Degree in Chemistry, University of Seville

### Ms. Aguado Ruiz, Belén

- ♦ Cosmetic Safety Advisor at ABAR Cosmetics
- ♦ Technical Director at Larrosa Laboratorios
- ♦ Quality Department Director at Gaher Química
- ♦ Cosmetic Safety Supervisor at LAB&CLIN ALLIANCE
- ♦ Expert Cosmetics Technician at Bellssan Healthcare
- ♦ International Master's Degree in Toxicology, Official College of Chemists of Seville
- ♦ Degree in Chemistry from the University of Alcalá de Henares



*A unique, key, and decisive educational experience to boost your professional development"*

# 04

# Structure and Content

The content of this program has been designed under a rigorous process of medical update, since each of the topics of the modules to be studied comprises a series of specific knowledge and postulates Under the Relearning method, TECH seeks to strengthen the main concepts of the subject and its way of study.

With audiovisual material, specifically selected readings and practical workshops, the specialist will achieve his goal.



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*You will have access to all the audiovisual material from the virtual campus and you will be able to download it to any device with an internet connection"*

## Module 1. Cosmetic Ingredients

- 1.1. Active Ingredients of Natural Origin I: Plant Origin
  - 1.1.1. Plant-Derived Active Ingredients in Skin Care
  - 1.1.2. Plant-Derived Active Ingredients in Hair Care
  - 1.1.3. Other Applications of Plant-Derived Active Ingredients
- 1.2. Active Ingredients of Natural Origin II: Animal and Mineral Origin
  - 1.2.1. Animal and Mineral-Derived Active Ingredients in Skin Care
  - 1.2.2. Animal and Mineral-Derived Active Ingredients in Hair Care
  - 1.2.3. Other Applications of Animal and Mineral-Derived Active Ingredients
- 1.3. Synthetic Active Ingredients
  - 1.3.1. Synthetically Derived Active Ingredients in Skin Care
  - 1.3.2. Synthetically Derived Active Ingredients in Hair Care
  - 1.3.3. Other Applications of Synthetically-Derived Active Ingredients
- 1.4. Vitamins and Biological Compounds
  - 1.4.1. Vitamins in Cosmetics
  - 1.4.2. Proteins Peptides in Cosmetics
  - 1.4.3. Prebiotics and Probiotics in Cosmetics
  - 1.4.4. Other Biological Compounds in Cosmetics
- 1.5. Sunscreens
  - 1.5.1. Sunscreens in cosmetics: operation and classification
  - 1.5.2. Chemical Sunscreens
  - 1.5.3. Physical Sunscreens
- 1.6. Surfactants, Emulsifiers and Rheology Modifiers
  - 1.6.1. Surfactants and emulsifiers: structures, properties and types
  - 1.6.2. Use of Surfactants and Emulsifiers in Cosmetic Formulations
  - 1.6.3. Rheology Modifiers
- 1.7. Colorants and Pigments
  - 1.7.1. Natural and Synthetic Dyes
  - 1.7.2. Organic and Inorganic Pigments
  - 1.7.3. Formulations with Dyes and Pigments





- 1.8. Preservatives
  - 1.8.1. Uses of Preservatives in Cosmetics
  - 1.8.2. Preservatives of Natural Origin
  - 1.8.3. Preservatives of Synthetic Origin
- 1.9. Biotechnology in Cosmetics
  - 1.9.1. Biotechnology in Cosmetics
  - 1.9.2. Biotechnological Tools for Cosmetics
  - 1.9.3. Cosmetic Active Ingredients Derived from Biotechnology
- 1.10. Nanotechnology in Cosmetics
  - 1.10.1. Nanotechnology in Cosmetics
  - 1.10.2. Nanotechnological Tools and Systems in Cosmetics
  - 1.10.3. Uses of Nanotechnological Systems: Advantages and Benefits

## Module 2. Cosmetics Development and Manufacturing

- 2.1. The Cosmetic Industry
  - 2.1.1. The Cosmetic Industry Sector
  - 2.1.2. Briefing or Initial Idea
  - 2.1.3. Laboratory to Pilot Testing
- 2.2. Cosmetic Product Manufacturing Processes
  - 2.2.1. Manufacturing and Subsequent Quality Control
  - 2.2.2. Packaging, Conditioning and Labeling
  - 2.2.3. Storage and Distribution
- 2.3. Raw Materials for Cosmetics Manufacturing
  - 2.3.1. Water Used in the Cosmetic Industry
  - 2.3.2. Antioxidants and Preservatives
  - 2.3.3. Moisturizers, Emulsifiers, Silicones and Polymers
- 2.4. Cosmetic Packaging
  - 2.4.1. Materials
  - 2.4.2. Trends in Cosmetic Packaging
  - 2.4.3. Packaging for Children's Cosmetics



- 2.5. Manufacturing Operations and Processes in Different Cosmetic Forms
  - 2.5.1. Good Manufacturing Practices for Cosmetic Products UNE-EN-ISO: 22716:2008
  - 2.5.2. Formulations Prior to Cosmetic Development
  - 2.5.3. Prototypes Preparation and Formulation Examples
- 2.6. R&D in Cosmetic Product Development
  - 2.6.1. New Cosmetic Forms
  - 2.6.2. TOP Cosmetic Ingredients
  - 2.6.3. New Plant-Derived Ingredients
- 2.7. Solution, Suspension and Emulsion Preparation
  - 2.7.1. Textures
  - 2.7.2. Aqueous, Micellar and Oily Solutions
  - 2.7.3. Suspensions and Emulsions
  - 2.7.4. Gels and Cremigels
- 2.8. Solid and Semi-Solid Cosmetics Preparation
  - 2.8.1. Sustainability and Practicality
  - 2.8.2. Sensoriality and Efficiency: New Formats
    - 2.8.2.1. Soaps and Syndets
    - 2.8.2.2. Ointments and Salves
  - 2.8.3. Loose powder vs. Compacts: uses
- 2.9. Other Cosmetic Forms and Substrates
  - 2.9.1. Aerosols
  - 2.9.2. Foams
  - 2.9.3. Single Doses
    - 2.9.3.1. Mask Tissue
    - 2.9.3.2. Impregnated Wipes
- 2.10. Perfume Manufacturing
  - 2.10.1. Perfume: Background
  - 2.10.2. Raw Material Origin, Composition and Application
  - 2.10.3. Alcoholic Fine Perfumery
  - 2.10.4. IFRA Standards

### Module 3. Quality Control, Efficacy and Safety in Cosmetics

- 3.1. Quality Controls
  - 3.1.1. Stability- Compatibility
  - 3.1.2. Preservative efficacy
  - 3.1.3. Process Control
- 3.2. Article 19 Cosmetics Regulation Based on Study Results
  - 3.2.1. ISO Definitions for Products Susceptible of Microbiological Risk
  - 3.2.2. Shelf Life and ODP Calculation
  - 3.2.3. Labeling Analysis
- 3.3. Good Manufacturing Practices
  - 3.3.1. Standard Operating Procedures: Manufacturing and Packaging
  - 3.3.2. Third Party Contracts
  - 3.3.3. Hygiene and Personnel Training
- 3.4. Traceability
  - 3.4.1. Standard Operating Procedures: Off-Spec Products
  - 3.4.2. Cosmetovigilance
  - 3.4.3. Product Recalls
- 3.5. European Portal Registration Procedures
  - 3.5.1. Registering the Person in Charge
  - 3.5.2. Cosmetic Product Registration
  - 3.5.3. Framework Formula
- 3.6. Cosmetic Product Safety Report
  - 3.6.1. Regulation 1223/2009: Annex I
  - 3.6.2. Product Dossier
  - 3.6.3. Safety Assessment: Toxicological Profile
- 3.7. Skin Compatibility Studies
  - 3.7.1. Skin, Ocular and Mucosal Compatibility Studies
  - 3.7.2. Labeling Claims
  - 3.7.3. SPF Studies



- 3.8. Cosmetic Efficacy Studies
  - 3.8.1. Studies on Efficacy
  - 3.8.2. In vitro-In vivo
  - 3.8.3. Ex Vivo – In Silico
- 3.9. Sensory Analysis
  - 3.9.1. Sensory Analysis Studies
  - 3.9.2. Instrumental Tests
  - 3.9.3. Questionnaires and Assessment Criteria
- 3.10. Claims Regulation
  - 3.10.1. Regulation 655/2013: Common Criteria
  - 3.10.2. Guidelines to Substantiate Claims
  - 3.10.3. "Free" Labeling Claims

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*The virtual campus will be available 24 hours a day, so you can combine this program with your work shifts”*



05

# Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





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*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.*



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional practice.



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*Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”*

The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



## Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

*Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.*





At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

*Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



#### Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



#### Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



#### Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





**Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



**Testing & Retesting**

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



**Classes**

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



**Quick Action Guides**

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.





# 06 Certificate

The Postgraduate Diploma in Cosmetics Processing and Manufacturing guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.



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*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"*

This **Postgraduate Diploma in Cosmetics Processing and Manufacturing** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Cosmetics Processing and Manufacturing**

Official N° of hours: **450 h.**



\*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.



future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present  
online training  
development language  
virtual classroom



**Postgraduate Diploma**  
Cosmetics Processing  
and Manufacturing

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

# Postgraduate Diploma

## Cosmetics Processing and Manufacturing

