

# Postgraduate Certificate

## Cosmetic Formulation and Composition



## Postgraduate Certificate Cosmetic Formulation and Composition

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-certificate/cosmetic-formulation-composition](http://www.techtute.com/us/medicine/postgraduate-certificate/cosmetic-formulation-composition)

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# 01

# Introduction

The formulation and composition of cosmetics is of vital importance to respond to the different conditions and pathologies that affect the skin, as well as dermatological problems of great magnitude. This is because the effectiveness of a treatment is due to the conglomerate of materials that make up a product, being one of the most important fields of research in the area. Therefore, this program will provide updated information to medical professionals who wish to deepen their knowledge about the creation process, cosmetic forms and formulation criteria, since they vary with the passing of time. As a result, this program is 100% online, without pre-established schedules or cumbersome procedures and with 24-hour availability on the virtual campus.



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*You will not have to attend classes, nor will you have to keep a schedule. What are you waiting for to take this program? Exploit your potential and update your knowledge”*

Cosmetic products require an arduous process of collecting materials, studying them and their composition in order to obtain the expected result. It is for this reason that the medical professionals have to update their knowledge for a correct formulation of the product, in order to be effective in any dermatological treatment and to incorporate the pharmaceutical and technological advances in the industry.

Thus, TECH has created this program, where the professionals will deepen in new knowledge from the hand of professional experts in the field in order to know the latest procedures covering the formulation and composition. This is a 100% online program designed for the physician who wishes to identify new methods and techniques for the creation of cosmetics.

In addition, it is a program that guarantees accessibility through any device with Internet connection, which will allow physicians to access the Virtual Campus without time restrictions. Last but not least, all the material can be downloaded and reviewed at the professional's discretion, so that they can also draw their own conclusions from the latest developments in the medical field of skin care.

This **Postgraduate Certificate in Cosmetic Formulation and Composition** 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
- ♦ 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 self-assessment can be used to improve learning
- ♦ Its special 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



*Decide at what time you want to review the program material, study it and face it to solve your doubts regarding the latest updates"*

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*Get up to date with new information regarding Cosmetic Formulation and Composition, a sector in high demand in the medical field"*

The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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

The design of this program focuses on Problem-Based Learning, by means of which the professionals must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned experts.

*A 100% online program that will allow you to connect from anywhere and at any time. You will only need a mobile device and Internet connection.*

*You will be able to acquire the latest cosmetic updates and be the differential of your medical team.*



# 02 Objectives

Given the importance of formulation in pharmaceutical cosmetics and the amount of information that is constantly generated in relation to the advances that occur in this field, TECH has proposed to provide all the necessary information for the medical professional, thus facilitating the process of cosmetic composition for the different treatments performed. The disposition of this program will be found in the Virtual Campus, in this way it will facilitate the access to the professionals to follow the development of the Postgraduate Certificate and achieve their goals.







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*TECH's objective is to provide you with the necessary tools so that you can update your knowledge and deepen your knowledge"*



## General Objectives

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- ♦ Identify skin alterations affecting keratinization, sebaceous secretion, vascularization and pigmentation
- ♦ Identify the alterations produced by aging
- ♦ Identifying hair and scalp disorders
- ♦ Identify the alterations of the oral cavity

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*Deepen in the formulation and composition of cosmetics for the different cases that you may encounter in the laboratory or in your daily practice”*





## Specific Objectives

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### **Module 1. Cosmetic Forms and Formulation Criteria I. Face and Body Cosmetics**

- ♦ Analyze cosmetic forms and applications
- ♦ Evaluate the ingredients in skin hygiene
- ♦ Identify the importance of skin hydration, relevant factors and how to treat dehydration
- ♦ Determine action mechanisms in cosmetic ingredients used in skin disorder care and treatment
- ♦ Develop active ingredients and cosmetic forms in aging prevention and treatment products
- ♦ Establish action mechanisms in body treatment ingredients
- ♦ Compile market novelties in cosmetic ingredients
- ♦ Evaluate action mechanisms in active ingredients used in male skin care
- ♦ Generate specialized knowledge on the different aspects involved in hair care

### **Module 2. Cosmetic Forms and Formulation Criteria II. Solar, Decorative and Area Specific Cosmetics**

- ♦ Analyze the cosmetics used in each sector of the population and to each need
- ♦ Compile active ingredients and their uses in each product
- ♦ Analyze sun protection as the main factor in preventing skin aging and identify the different products on the market
- ♦ Examine market products that include chemical depilatory; advantages and disadvantages
- ♦ Evaluate active ingredients with specific activity and how to incorporate them into formulations
- ♦ Establish factors in choosing children's products
- ♦ Determine the different substances involved in elaborating a perfume and the different olfactory families on the market

# 03

## Course Management

One of TECH's priorities when designing its programs is the formation of a qualified faculty that provides quality and exigency to the development of the program. For this reason, for this Postgraduate Certificate, we have selected a group of experts in the dermatological sector, with deep knowledge in the field to accompany the health professionals in the development of the program with their knowledge. In addition, the teaching staff is made up of active specialists, which allows the physician to be in close contact with the different practical cases that are presented.





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*You will be able to express your doubts and these will be solved by the teaching staff, in this way nothing will be left in the air and your new knowledge will be optimal for the development of treatments”*

## 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
- ◆ Diploma in Nutrition and Dietetics, University of Granada

## Professors

### Dr. Abril González, Concepción

- ♦ Chemistry Specialist in Chromatography at 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
- ♦ Professional Master's Degree in Professional Specialization in Pharmacy: Pharmaceutical Industry, University of Seville
- ♦ Professional Master's Degree in Cosmetics and Dermopharmacy from the University of Seville
- ♦ Professional Master's Degree in Chemistry, University of Seville

### Ms. González Berdugo, Antonia María

- ♦ Responsable técnica de Cosmética en *Best Medical Diet*
- ♦ Head of Cosmetic R&D&I at *Best Medical Diet*
- ♦ R&D laboratory technician at The Colomer Group
- ♦ R&D Laboratory Technician at *Biomedal*
- ♦ Master's Degree in Biotechnology, Pablo de Olavide University
- ♦ Professional Master's Degree in Cosmetics and Dermopharmacy from the Centro de Estudios Superiores de Industria of the Pharmaceutical Industry

# 04

## Structure and Content

TECH has always been characterized by maintaining high quality standards, for this reason it has designed together with the teaching staff an agenda of high academic demand, but at the same time effective and accurate with the knowledge to be imparted. That is why this program aims to be one of the most competent worldwide, not only for its content, but for the material that develops it, being these audiovisuals, postulates and unpublished information.







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*A virtual campus with 24-hour  
accessibility, so you can consult  
the material at the time you want”*

## Module 1. Cosmetic Forms and Formulation Criteria I. Face and Body Cosmetics

- 1.1. Cosmetic Forms
  - 1.1.1. Cosmetic Forms. Chemical Basis
  - 1.1.2. Cosmetic Forms Classification
  - 1.1.3. Cosmetic Forms
    - 1.1.3.1. Features
    - 1.1.3.2. Components
    - 1.1.3.3. Applications
- 1.2. Facial Hygiene Cosmetics
  - 1.2.1. Facial Hygiene and Detoxification
  - 1.2.2. Facial Hygiene Cosmetics: Gels, Scrubs, Emulsions, Foams, Micellar Waters, Toners, Oils, etc
  - 1.2.3. Cosmetic Ingredients Used in Facial Hygiene
- 1.3. Facial Maintenance and Moisturizing Cosmetics
  - 1.3.1. Moisturizing and Skin Care
  - 1.3.2. Factors Leading to Skin Dehydration
  - 1.3.3. Cosmetic Textures according to Facial Application and Skin Type
  - 1.3.4. Novel Active Ingredients with Moisturizing Efficacy
- 1.4. Cosmetics for the Treatment of Facial Skin Alterations I. Acne, Atopy and Rosacea
  - 1.4.1. Cosmetics for Dermatological Alterations: Acne, Hyperseborrhea and Oily Skin
    - 1.4.1.1. Acne
    - 1.4.1.2. Hyperseborrhea
    - 1.4.1.3. Oily Skin
  - 1.4.2. Cosmetics for Dermatological Alterations: Atopic Skin and Atopic Dermatitis
    - 1.4.2.1. Atopic Skin
    - 1.4.2.2. Atopic Dermatitis
  - 1.4.3. Cosmetics for Dermatological Alterations: Couperose and Rosacea
    - 1.4.3.1. Couperosis
    - 1.4.3.2. Rosacea
- 1.5. Cosmetics for the Treatment of Facial Skin Alterations II. Hyperpigmentation
  - 1.5.1. Cosmetics for Dermatological Alterations
    - 1.5.1.1. Hyperpigmentation
    - 1.5.1.2. Skin Blemishes: Vitiligo
    - 1.5.1.3. Melasma
  - 1.5.2. Cosmetic Active Ingredients for Specific Alterations
  - 1.5.3. New Market Products for the Treatment of Skin Alterations
- 1.6. Anti-Aging Cosmetics
  - 1.6.1. Factors that Cause Skin Aging
  - 1.6.2. Premature Aging Prevention
  - 1.6.3. Novel Active Ingredients to Prevent and Treat Skin Aging
- 1.7. Body Cosmetics
  - 1.7.1. Body Hygiene and Treatment: Cosmetic Forms
  - 1.7.2. Body Alterations: Causes and Treatments
    - 1.7.2.1. Cellulite-Stretch Marks-Vascularization
    - 1.7.2.2. Active Ingredients and Cosmetic Forms
  - 1.7.3. Hand and Foot Care
  - 1.7.4. Prototype Formulations
    - 1.7.4.1. Active Ingredients - Mechanism of Action
- 1.8. Male Cosmetics
  - 1.8.1. Male Skin Physiology: Differential Aspects
  - 1.8.2. Shaving Cosmetics: Follicle Alterations
  - 1.8.3. Beard Care
    - 1.8.3.1. Cosmetic Forms Proposals
    - 1.8.3.2. New Products on the Market
- 1.9. Hair Cosmetics I. Hygiene, Moisturizing and Treating Alterations
  - 1.9.1. Hair and Scalp Alterations
  - 1.9.2. Cosmetics for Hair Fiber Hygiene and Care
  - 1.9.3. Cosmetics for the Treatment of Greasy Scalp
  - 1.9.4. Cosmetics for the Treatment of Pityriasis
  - 1.9.5. Cosmetics for the Prevention and Treatment of Hair Loss
  - 1.9.6. Novel Active Ingredients for Hair Care
- 1.10. Hair Cosmetics II. Cosmetics for Color Changes
  - 1.10.1. Undulating Cosmetics: Active Substances and Mechanisms of Action
  - 1.10.2. Types of Cosmetics for Color Changes: Bleaches and Dyes
  - 1.10.3. Vegetable Dyes and Metallic Dyes: Ingredients and Mechanisms of Action
  - 1.10.4. Permanent and Semi-Permanent Dyes
    - 1.10.4.1. Ingredients and Mechanisms of Action

**Module 2. Cosmetic Forms and Formulation Criteria II. Solar, Decorative and Area Specific Cosmetics**

- 2.1. Sun Protection I. Effects of Solar Radiation
  - 2.1.1. Solar Radiation
    - 2.1.1.1. UV Radiation, VIS Light and IR Radiation
      - 2.1.1.1.1. HEV Radiation or Blue Light
  - 2.1.2. Beneficial and Harmful Effects
  - 2.1.3. Sunscreen Formulation and Requirements
- 2.2. Solar Protection II. Sun Protection Cosmetics
  - 2.2.1. Sun Protection Cosmetics
  - 2.2.2. Self-Tanning Cosmetics
  - 2.2.3. Tanning Accelerator Cosmetics
- 2.3. Decorative Cosmetics I. Ingredients
  - 2.3.1. Ingredients and Cosmetic Forms
  - 2.3.2. Components of Cosmetic Makeups
  - 2.3.3. Natural and Synthetic Pigments
- 2.4. Decorative Cosmetics II. Types
  - 2.4.1. Facial Makeup
  - 2.4.2. Eye Makeup
  - 2.4.3. Lipstick
  - 2.4.4. Nail Varnishes: Features and Evaluation Methods Used
- 2.5. Cosmetics for Hair Treatment
  - 2.5.1. Depilatory Cosmetics
  - 2.5.2. Advantages and Disadvantages of Depilatory Cosmetics
  - 2.5.3. Waxes
    - 2.5.3.1. Cold Waxes
    - 2.5.3.2. Warm Waxes
    - 2.5.3.3. Hot Waxes
  - 2.5.4. Bleaching Agents
  - 2.5.5. Hair Growth Retardant Active Ingredients
- 2.6. Deodorants and Antiperspirants
  - 2.6.1. Sweat Physiology
  - 2.6.2. Deodorants and Antiperspirants
  - 2.6.3. Specific Active Ingredients

- 2.7. Children's Cosmetics
  - 2.7.1. Features of Children's Skin
  - 2.7.2. Possible Alterations in Children's Skin
  - 2.7.3. Children's Cosmetics
- 2.8. Oral Cavity Cosmetics
  - 2.8.1. Mouthwash Components
  - 2.8.2. Toothpaste Components
  - 2.8.3. Toothbrushes and Oral Irrigators
- 2.9. Intimate Hygiene Cosmetics
  - 2.9.1. General Aspects
  - 2.9.2. Active Ingredients and Uses
  - 2.9.3. Gels and Ointments
- 2.10. Perfumes
  - 2.10.1. Perfume
  - 2.10.2. Odoriferous Substances
    - 2.10.2.1. Essential Oils
    - 2.10.2.2. Extracts
    - 2.10.2.3. Pure Chemical Substances
    - 2.10.2.4. Synthetic Essences
  - 2.10.3. Olfactory Families



*Don't think twice and opt for a program that adapts to you and your academic and professional needs, and with which you will be able to improve your skills through a comprehensive update"*

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 Certificate in Cosmetic Formulation and Composition guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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 Certificate in Cosmetic Formulation and Composition** 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 Certificate** issued by **TECH Technological University** via tracked delivery\*.

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

Title: **Postgraduate Certificate in Cosmetic Formulation and Composition**

Official N° of Hours: **300 h.**



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



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- » Dedication: 16h/week
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