



### 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

 $We bsite: {\color{blue} www.techtitute.com/us/pharmacy/postgraduate-certificate/cosmetic-formulation-composition} \\$ 

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### tech 06 | Introduction

Pharmaceutical cosmetics is one of the most in-demand fields for customers today. For this reason, it is a field in constant study and evolution, which seeks to achieve increasingly specific results adapted to the needs of each person. For this reason, specialized knowledge of the formulation strategies and composition of skin care and maintenance products becomes a priority for all those professionals who wish to be able to offer the best service at all times.

In order to bring them up to date with the advances that have been made in this field and to facilitate this task, TECH and its team of experts have developed this complete, dynamic and austere program. It is a qualification that includes the latest developments in facial, body and decorative solar cosmetics, as well as those focused on specific areas, in 300 hours of theoretical, practical and additional material.

In addition, it is a program that guarantees accessibility through any device with internet connection, which will allow specialists to access the Global Campus from anywhere and with a schedule fully adapted to their availability. Finally, all the content will be available from the beginning of the program and can be downloaded for offline consultation, even once the educational experience is over.

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
- 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 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



You will set the pace. TECH, in turn, will provide you with all the material you need to get the most out of this educational experience"

### Introduction | 07 tech



Its convenient 100% online format will allow you to connect from anywhere and at any time. You will only need a device and an internet connection"

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.

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 throughout the program. This will be done with the help of an innovative system of interactive videos made by renowned experts.

You will be able to delve into the advances in solar, decorative and area-specific cosmetics through a module dedicated to these areas.

An academic option with which you can work on perfecting your professional skin care skills.



# 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 developed this Postgraduate Certificate with the objective of making it easier for graduates to update their knowledge In addition, in order to maintain the prestige that characterizes this university, it also aims to exceed even the most demanding expectations of specialists through the provision of the best academic tools and the most austere and innovative syllabus.



### tech 10 | Objectives



### **General Objectives**

- 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



You will be able to delve into the latest hair loss treatments and hair color change, being able to offer your clients the most effective alternatives of the moment"





### **Specific Objectives**

### 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





### tech 14 | Course Management

### 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 Chemisty, University of Seville

#### Ms. González Berdugo, Antonia María

- Technical Cosmetic Supervisor at 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





### tech 18 | Structure and Content

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

- 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
- Cosmetics for the treatment of facial skin alterations I. Acne, atopy and rosacea
  - 1.4.1. Cosmetics for Dermatological Alterations: Acne, Hyperseborrhea and Oily Skins
    - 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: Couperosis 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. Anit-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
- .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 and 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 and 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 Changes in Color
  - 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. Sun 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

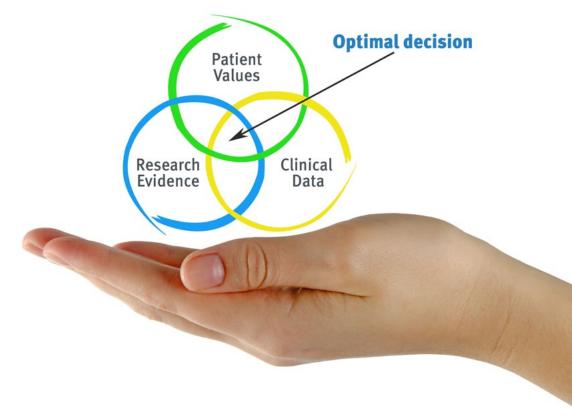


### tech 22 | Methodology

#### At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will be confronted with multiple simulated clinical cases based on real patients, in which they will have to investigate, establish hypotheses and ultimately, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Pharmacists learn better, more quickly 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, attempting to recreate the actual conditions in a pharmacist's professional practice.



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. Pharmacists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their 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.



### tech 24 | Methodology

#### Relearning Methodology

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

Our 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, which represent a real revolution with respect to simply studying and analyzing cases.

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



### Methodology | 25 tech

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 115,000 pharmacists have been trained with unprecedented success in all clinical specialties, regardless of the surgical load. This pedagogical methodology is developed in a highly demanding environment, with a university student body with a high socioeconomic profile and an average age of 43.5 years.

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.

### tech 26 | Methodology

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



#### **Study Material**

All teaching material is created specifically for the course by specialist pharmacists who will be teaching the course, so that the didactic development is highly specific and accurate.

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.



#### **Video Techniques and Procedures**

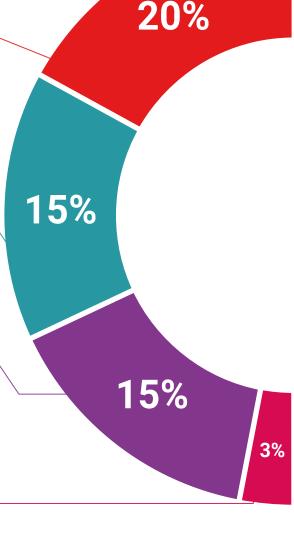
TECH introduces students to the latest techniques, to the latest educational advances, to the forefront of current pharmaceutical care procedures. All of this, first hand, and explained and detailed with precision to contribute to assimilation and a better understanding. And best of all, you can watch them as many times as you want.



#### **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.

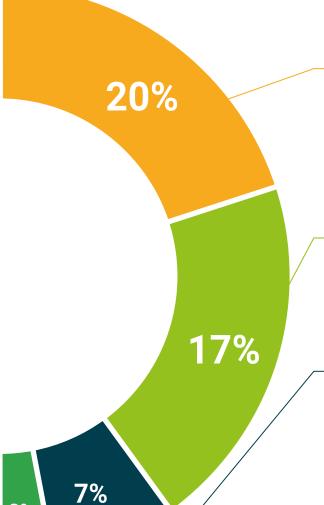
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **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, we will present you with real case developments in which the expert will guide you through 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.







### tech 30 | Certificate

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.** 



<sup>\*</sup>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.

technological university Postgraduate Certificate

Cosmetic Formulation and Composition

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