



### Postgraduate Certificate

### Cosmetic Ingredients

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/pharmacy/postgraduate-certificate/cosmetic-ingredients

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### tech 06 | Introduction

The field of cosmetics has undergone a revolution in the last decade with the increasingly frequent use of ingredients with various healing and repairing properties. Continuous research has resulted in the discovery of the benefits of, for example, centella asiatica, neem oil or beta hydroxy acids, important components that are used today to promote healing, the cure of certain skin pathologies such as acne or exfoliation and, in general, skin care.

The amount of information that exists on the subject and the data that is continually being added, makes it difficult for many professionals in the pharmaceutical sector to keep up to date, which is why TECH has considered it necessary to launch this postgraduate certificate. It is a 100% online program that includes the most up-to-date and exhaustive content, selected by a team of experts in cosmetic science and technology and developed based on the best pedagogical methodology currently available: Relearning.

The program, distributed over 6 weeks and presented in a convenient and accessible 100% online format, includes 180 hours of high-quality additional material, an intensive and austere syllabus and case studies based on real situations. It is, therefore, a unique educational opportunity that the specialist should not miss if he/she is looking to update his/her knowledge and perfect his/her professional skills in the use of the latest and most effective cosmetic ingredients.

This **Postgraduate Certificate in Cosmetic Ingredients** 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



TECH provides you with the most up-to-date information on the different natural active ingredients (vegetable, animal and mineral): their characteristics, advantages, applications..."



You will work on the specifications of the latest surfactants, emulsifiers and rheology modifiers discovered and their use in cosmetic formulation"

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.

The design of this program focuses on problem-based learning, through which 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 have 6 weeks to pass the Postgraduate Certificate and you will be able to organize the certificate in a totally personalized way and adapted to your availability.

As long as you have an internet connection, you will be able to access the content of this postgraduate certificate from any device.



# 02 Objectives

The dizzying pace at which the cosmetics industry is advancing and the new developments that arise from it has led TECH to assess the need for a program that will help pharmacists to keep up to date. This postgraduate certificate is a comprehensive and multidisciplinary teaching experience whose objective is to guide you in updating your knowledge through the latest topics and the best teaching tools.

### tech 10 | Objectives



### **General Objectives**

- Analyze the main active ingredients according to their origin and nature
- Compile all compounds needed to formulate cosmetic products
- Determine the different types of Cosmetic Product according to their Composition
- Evaluate the benefits of nanotechnology and biotechnology in cosmetics



If you are looking to update your knowledge in the operation and classification of chemical and physical sunscreens, this program will exceed even your most demanding expectations"





### Objectives | 11 tech



### **Specific Objectives**

- 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





### 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. Pando Rodríguez, Daniel

- CEO Cofounder 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







### tech 18 | Structure and Content

#### Module 1. Cosmetic Ingredients

- 1.1. Active Ingredients of Natural Origin I: Vegetable 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





### Structure and Content | 19 tech

- 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



An advanced program with a view to the future: you will be able to delve into the use of nanotechnology in the cosmetic field and the possibilities of these techniques for the effective and optimal elaboration of products"

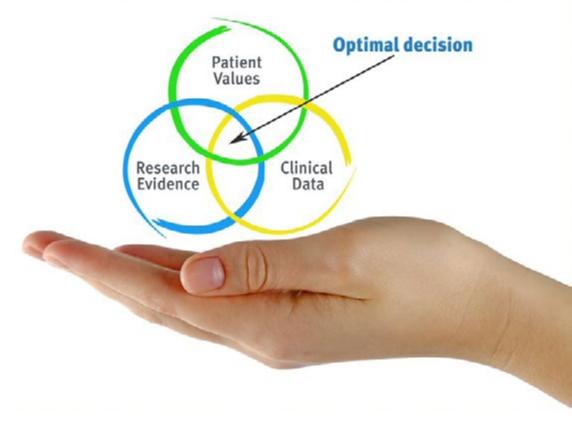


### tech 22 | Methodology

#### 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**

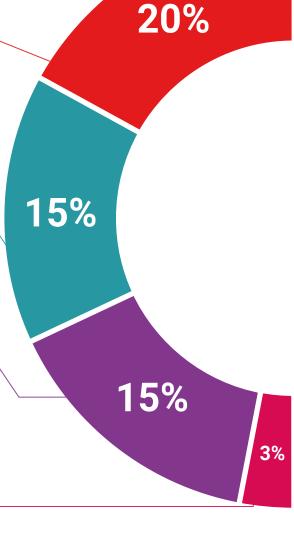
TECH introduces students to the latest techniques, to the latest educational advances, to the forefront of current pharmaceutical care procedures. All of this, first hand, and explained and detailed with precision to contribute to assimilation and a better understanding. And best of all, you can watch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

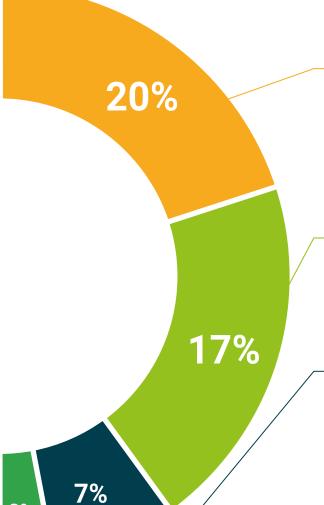
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **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 program will allow you to obtain your **Postgraduate Certificate in Cosmetic Ingredients** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Certificate in Cosmetic Ingredients

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### **Postgraduate Certificate in Cosmetic Ingredients**

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



tech global university

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