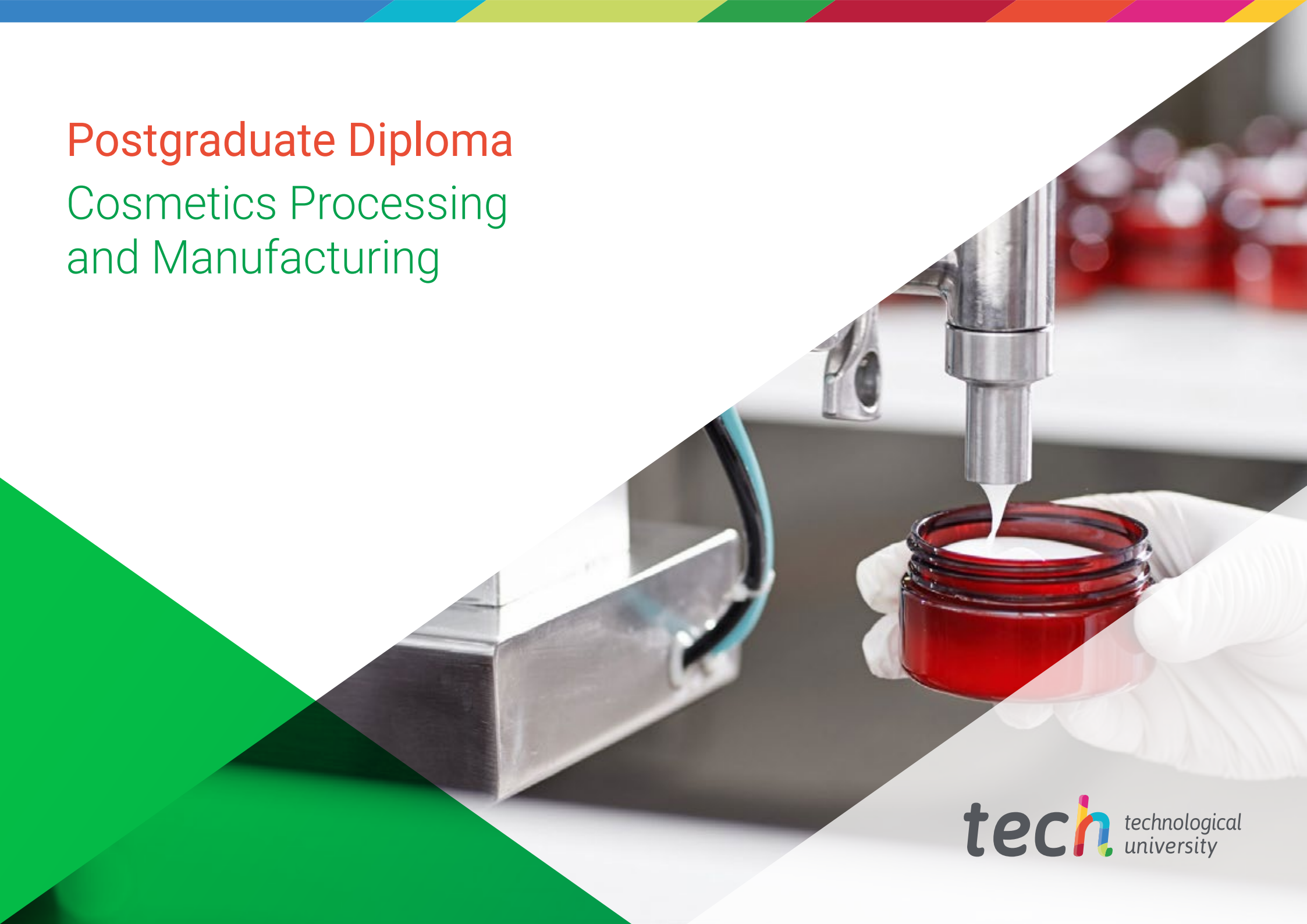
Postgraduate Diploma

Cosmetics Processing and Manufacturing



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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/us/pharmacy/postgraduate-diploma/postgraduate-diploma-cosmetics-processing-manufacturing**

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01

Introduction

Cosmetics Processing and Manufacturing are advancing at a dizzying pace. The population's growing demand for increasingly specialized and effective products means that research laboratories are trying to respond to all kinds of conditions. At this juncture, the quality and safety control protocols themselves cannot be forgotten either, which are essential when developing any type of cosmetic form. This program covers all these issues, under the prism of a teaching staff specialized in the subject, which has written all the contents with a powerful practical approach. All the contents are available in 100% online format, making it an ideal academic option to update your knowledge in this pharmaceutical branch without having to sacrifice any aspect of your professional or personal life.

Get updated in all the processes of Cosmetics Processing and Manufacturing, with specific topics covering natural and synthetic active ingredients, new cosmetic forms or the latest instrumental tests"

Given the more than relevant advances in the Cosmetics Processing and Manufacturing processes, it is a truism to mention that both community pharmacists and researchers and analysts have had to adapt to the new market realities. Patients' growing demand for treatments and products of all kinds has driven the cosmetics industry to an unprecedented evolution, multiplying the opportunities to develop innovative cosmetic forms.

Thus, in order to provide a comprehensive and complete academic option, TECH has assembled a veteran team of specialists and experts in the Cosmetics Processing and Manufacturing processes to put together this program. By reviewing all stages of creation, from ingredient selection to development and quality control, pharmacists undertaking this program will acquire an up-to-date view of the entire cosmetic industry.

The syllabus includes real and practical cases for each topic covered, in order to provide the pharmacist with an adequate contextualization on issues such as cosmetic biotechnology and nanotechnology, cosmetic packaging or different efficacy and skin compatibility studies. In addition, the entire syllabus is available for download and can be accessed from any device with an internet connection. This allows the pharmacist to combine this program with all kinds of responsibilities, both personal and professional.

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 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

Broaden your knowledge of raw materials, manufacturing processes and the elaboration of perfumes, among other highly demanded cosmetic products"

Get to know in depth the methodology of good practices in the manufacture of cosmetic products, as well as the most advanced sensory analysis and traceability studies"

Tailor all course content to your own schedule and interests, without the pressure of pre-set academic calendars or pre-established schedules.

You will be able to download all the available content directly to your tablet or smartphone of choice, being able to consult it wherever, whenever and however you want.

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.

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Objectives

The main objective of this Postgraduate Diploma is to offer the pharmacist a theoretical and practical perspective of everything involved in the Cosmetics Processing and Manufacturing today. To this end, it draws on the proven experience of a highly qualified teaching staff, which, together with TECH's refined teaching methodology, guarantees the achievement of academic objectives with a high impact on the pharmacist's daily practice, regardless of his or her field of action.

Incorporate into your daily practice the most important advances in vitamins, biological compounds and chemical and physical sunscreens, with a detailed classification of all of them"

General Objectives

- 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

You will gain access to an updated and specialized knowledge guide on Cosmetics Processing and Manufacturing, being a great bibliographic reference material for your daily work"

Specific Objectives

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

The teachers chosen to elaborate this University Expert have extensive experience in the various fields involved in the research, creation and manufacture of all kinds of cosmetic products. In this way, TECH guarantees that the didactic contents of the program are adapted to the current pharmaceutical reality, serving as a support for all professionals seeking a broader and updated vision in this specialty.

Lean on professionals who know the reality of the cosmetics industry firsthand, being able to consult all your doubts and interests directly with them"

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 y cofundador de 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

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
- Cosmetics Technical Expert at Bellssan Healthcare
- International Professional Master's Degree in Toxicology from the Official College of Chemists of Seville
- Degree in Chemistry from the University of Alcalá de Henares

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

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Structure and Content

The structure and contents of this Postgraduate Diploma follow TECH's most advanced pedagogical methodology, relearning. This implies that the most important concepts related to Cosmetics Processing and Manufacturing are reiterated throughout the syllabus, being their assimilation by the pharmacist much more natural and progressive. At the same time, the great support in high quality audiovisual content certifies a much more enriching and profitable academic experience.

All the video summaries, self-awareness exercises and real cases from the cosmetics industry will help you gain a much more comprehensive understanding of Cosmetics Processing and Manufacturing"

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

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 cosmetics 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 and Compatibility
- 3.1.2. Preservative efficacy
- 3.1.3. Controls in process

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

The virtual classroom will be available to you 24 hours a day, and you will be able to access the courseware from any device with an internet connection"

05

Methodology

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

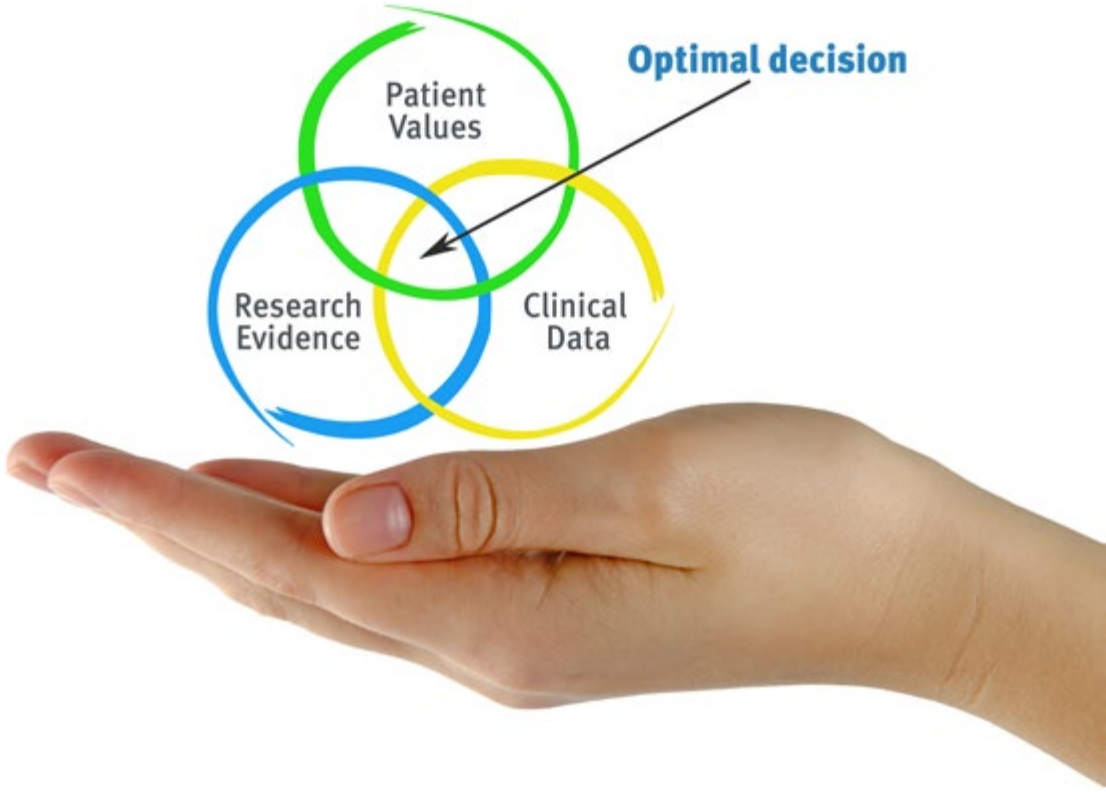
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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 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:

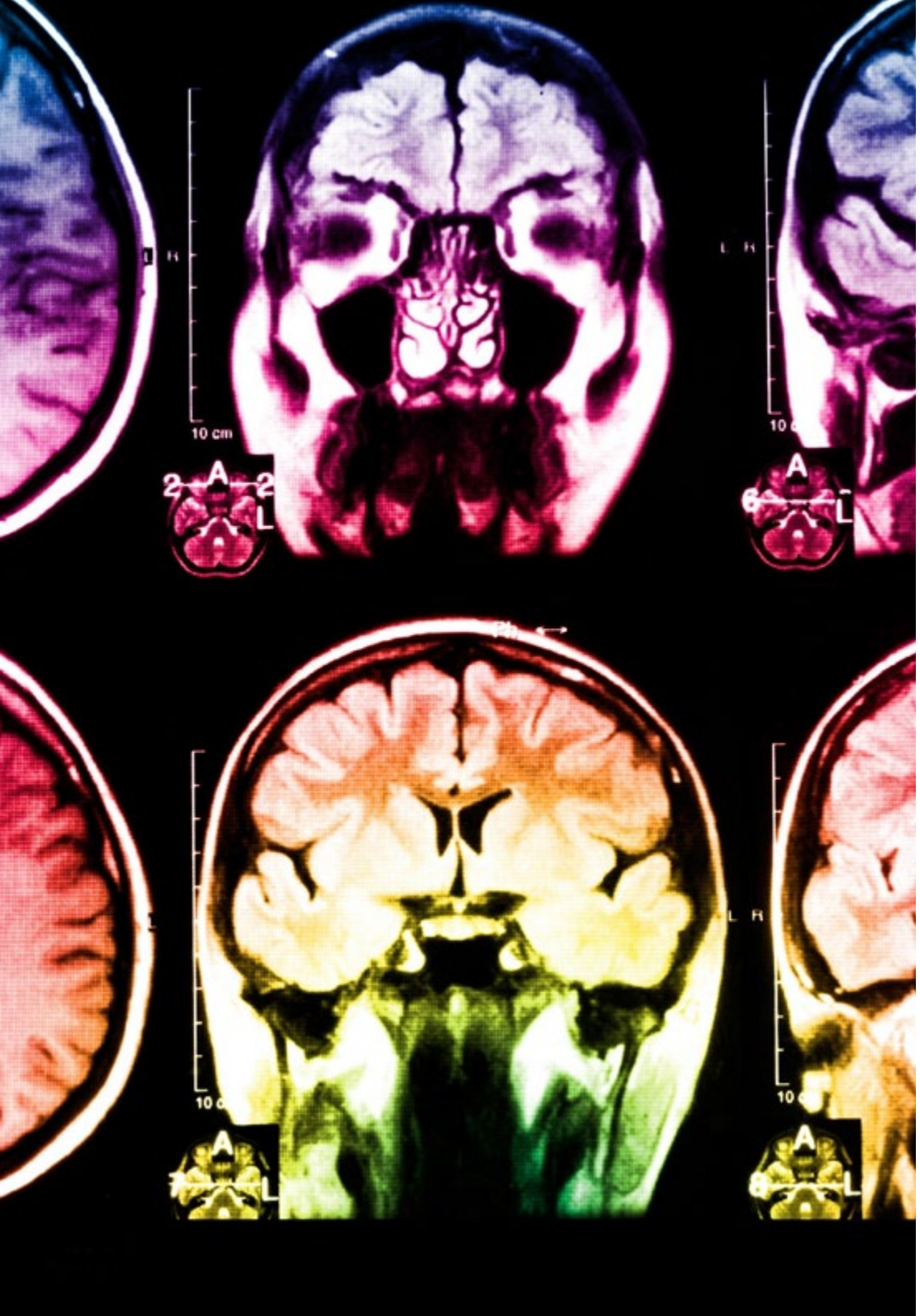
1. Pharmacists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts 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.

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.



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.

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.

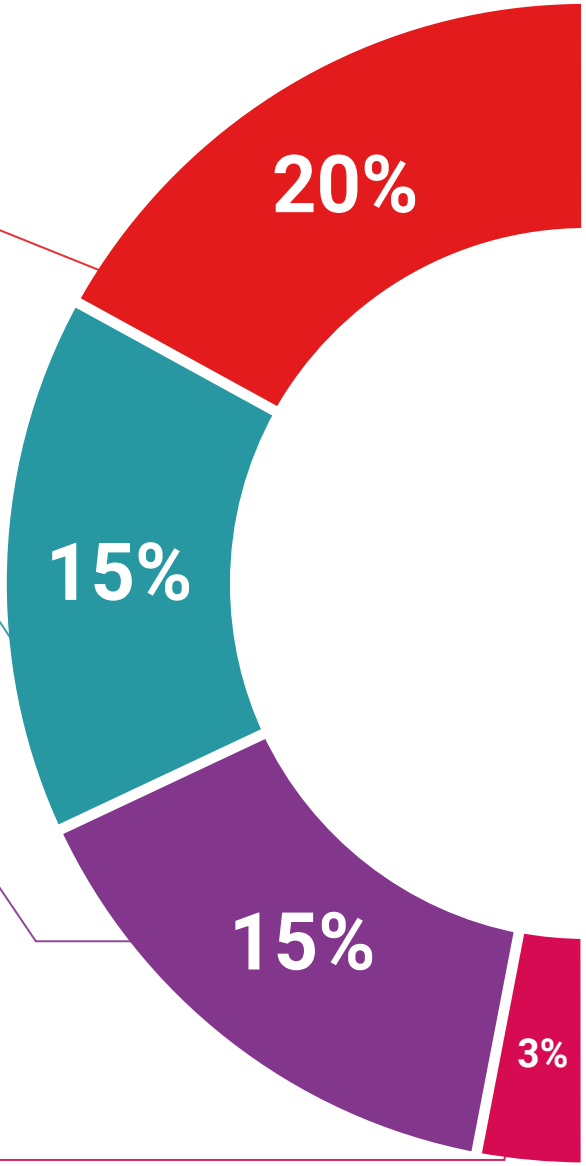
Interactive Summaries

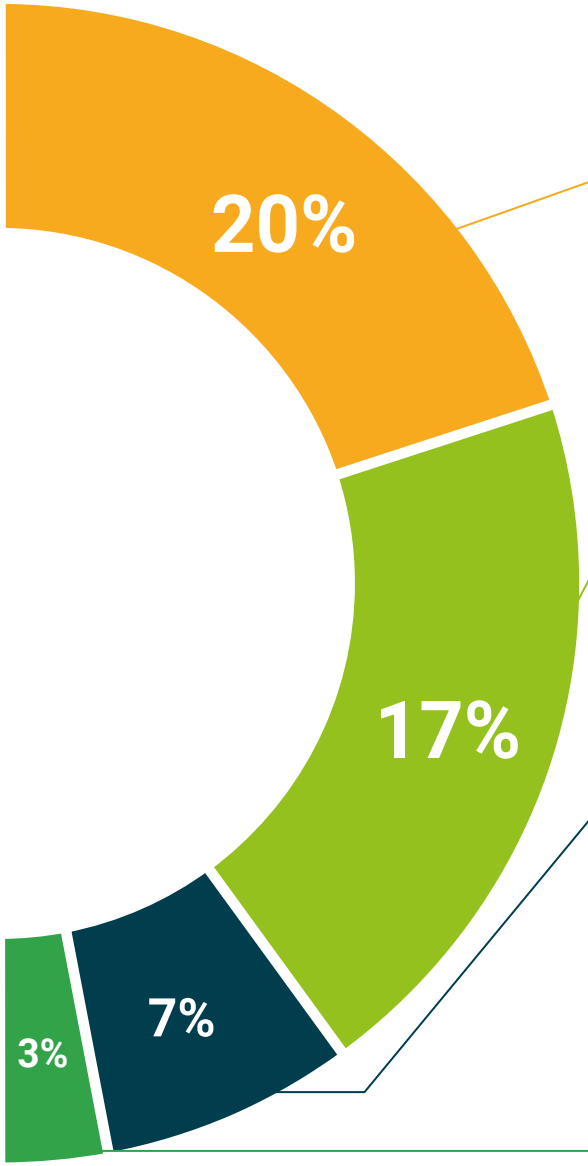
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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.

06

Certificate

The Postgraduate Diploma in Cosmetics Processing and Manufacturing guarantees, in addition to the most rigorous and updated training, access to a Postgraduate Diploma degree issued by TECH Technological University.

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 diploma 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 Nº of hours: **450 h.**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Awards the following

DIPLOMA

to

Mr./Ms. _____ with identification number _____.

For having passed and accredited the following program

POSTGRADUATE DIPLOMA

in

Cosmetics Processing and Manufacturing

This is a qualification awarded by this University, equivalent to 450 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*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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