

# Postgraduate Certificate

Active Ingredients in Plants,  
Pharmaceutical Forms and  
Galenic Preparations



## Postgraduate Certificate Active Ingredients in Plants, Pharmaceutical Forms and and Galenic Preparations

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

Website: [www.techtute.com/us/nursing/postgraduate-certificate/active-ingredients-plants-pharmaceutical-forms-galenic-preparations](http://www.techtute.com/us/nursing/postgraduate-certificate/active-ingredients-plants-pharmaceutical-forms-galenic-preparations)

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# 01

# Introduction

Offering patients phytotherapy support requires specific training in the active ingredients; specifically and practically, it requires knowing the existing pharmaceutical forms and galenic preparations. Nursing personnel will find in this program all the keys to act safely with expert skills in this area.



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*Know the active ingredients used in phytotherapy, their pharmaceutical forms and galenic preparations is essential for nurses. This Postgraduate Certificate is the key to the best training in this area of intervention”*



At present, there is a scientific basis that supports the efficacy of many phytotherapeutic products for certain conditions. Phytotherapy should be used in therapeutics to deal with the situations it has proven to be useful and safe.

For phytotherapeutics to be effective, the proper preparations must be made, both in terms of indications and form of administration.

This program offers a current vision of Phytotherapy and its application in the health field, including the latest contributions and advances. The contents are guaranteed by the teaching staff on the program, since they have all worked in the field of Phytotherapy, or in a related one, in some way, shape or form. Thus, the student will learn based on the experience of the teachers and experience evidence-based medicine, which results in training the student to be more effective and accurate. Given, on the one hand, that different university programs generally lack a deep and continuous updated Training in Phytotherapy; and, on other other, that current health trends lean toward safe and effective natural remedies, students must be offered the possibility of expanding their knowledge and therapeutic skills with greater training in the use of medical plants, both from a professional and academic perspective so as to prepare themselves for the future in the field.



*Get up to date in all the latest developments in the field of Phytotherapy by completing the most effective program on the field and the academic market”*

This **Postgraduate Certificate in Active Ingredients in Plants, Pharmaceutical Forms and Galenic Preparations** contains the most complete and up to date scientific program on the market. The most important features of the program include:

- ◆ Latest technology in online teaching software
- ◆ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- ◆ Practical cases presented by practicing experts
- ◆ State-of-the-art interactive video systems
- ◆ Teaching supported by telepractice
- ◆ Continuous updating and recycling systems
- ◆ Autonomous learning: full compatibility with other occupations
- ◆ Practical exercises for self-assessment and learning verification
- ◆ Support groups and educational synergies: questions to the expert, debate and
- ◆ knowledge forums
- ◆ Communication with the professors and individual reflection work
- ◆ Content is available from any fixed or portable device with an Internet connection
- ◆ Supplementary documentation databases are permanently available, even after students complete the program

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*Include in your practice the mastery of Phytotherapy and improve patient care with new alternative methods in treatment and prevention”*

Our teaching staff is composed of medical professionals, practicing specialists. That way we can be sure to offer you the training update we aim to provide. A multidisciplinary team of doctors trained and experienced in different environments, who will develop the theoretical knowledge in an efficient way, but, above all, will bring their practical knowledge derived from their own experience to the course: one of the differential qualities of this training.

This mastery of the subject is complemented by the effectiveness of the methodology used in the design of this course. Developed by a multidisciplinary team of e-learning experts, it integrates the latest advances in educational technology. This way, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in your training.

The design of this program is based on Problem-Based Learning: an approach that conceives learning as a highly practical process. To achieve this remotely, we will use telepractice: With the help of an innovative, interactive video system, and learning from an expert, students will be able to acquire the knowledge as if they were dealing with the case they are studying in real time. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

*With a methodological design based on proven teaching techniques, this Postgraduate Certificate will take you through different teaching approaches to allow you to learn in a dynamic and effective way.*

*It includes clinical cases to bring the program as close as possible to the reality of health care practice.*



# 02 Objectives

This Postgraduate Certificate will allow students to define the limits of use in Phytotherapy so as to manage it safely with patients by making the appropriate decisions to use it in a preventive and therapeutic way.







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*With an objective focused on practice, this Postgraduate Certificate will allow you to act with the solvency of an expert in the management Phytotherapy resources”*



## General Objectives

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- Define the therapeutic limits of Phytotherapy and identify the cases in which it can be used safely
- Describe the use of Phytotherapy oriented to the satisfaction of the needs derived from the patient's health problems and the prevention of complications, guaranteeing a safe and quality practice
- Solve cases related to the field of phytotherapy
- Explain the use and indication of medical devices, food supplements and/or drugs, assessing the expected benefits and associated risks.
- Apply theoretical knowledge in daily practice



*Get trained in Phytotherapy in just a few months and give a boost to your qualifications as a nurse with a high quality Postgraduate Certificate”*







## Specific Objectives

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- ◆ Define what a drug is and distinguish it from an active ingredient
- ◆ Explain the protocols for drug recognition
- ◆ Explain techniques for the cultivation, collection, processing and conservation of medicinal plants
- ◆ Identify botanical nomenclature and species citation
- ◆ Classify plant groups according to phylogenetic systematics (APG, 2009)
- ◆ Define the medicinal utility of mushrooms.
- ◆ Explain the legislation and regulation in relation to Phytotherapy
- ◆ Explain the application of the magistral formulation in Phytotherapy
- ◆ Explain the industrial processing of herbal medicines



03

# Course Management

For our course to be of the highest quality, we are proud to work with a teaching staff of the highest level, chosen for their proven track record. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.







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*With the expertise of industry professionals who will teach you based on the reality of the sector in a contextual and realistic learning”*

## Management



### Dr. Martínez Solís, Isabel

- ♦ Degree in Pharmacy
- ♦ Doctor in Pharmacy (PhD)
- ♦ Professor of the Department of Pharmacy at CEU Cardenal Herrera University.
- ♦ Coordinator of a multidisciplinary and interuniversity research team on quality control of medicinal and toxic plants and plant foods; and study of psychoactive substances (drugs) consumed in leisure areas, and the line of toxi-epidemiology that is part of the Observatory of Drug Addictions of the Valencian Community (Conselleria de Sanitat).
- ♦ More than 30 research publications in national and international journals and book chapters, as well as communications to national and international congresses (more than 70 communications).
- ♦ She has held positions as assistant to the vice-rectorate for Academic Planning and Teaching Staff, secretary of the Department of Physiology, Pharmacology and Toxicology, coordinator of the "Health Sciences" Doctoral Program (RD 1393) and of the Health Sciences Doctoral Program (RD 778).



### Dr. Castillo García, Encarnación

- ♦ Graduate in Pharmacy, extraordinary graduate award
- ♦ Doctor in Chemical Sciences (PhD)
- ♦ Doctor in Pharmacy (PhD)
- ♦ Associate Professor of the Department of Pharmacy at the Cardenal Herrera CEU University, of the subject of Pharmacognosy in the degree of Pharmacy and Pharmacology in the degrees of Nursing and Medicine.
- ♦ Director of several doctoral theses
- ♦ Principal investigator in nationally competitive research projects.
- ♦ She has published numerous articles in scientific journals specialized in his area of knowledge, most of them international, indexed in the JCR.
- ♦ Editor of the book "Manual de Advances in fitoterapia" published by Elsevier-Masson and co-author of chapters in the book "Manual de Farmacología". "Guía para el uso racional del medicamento" by Elsevier Publishing.

## Professors

### Dr. Bejarano, María

- ◆ Doctor of Pharmacy
- ◆ Pharmacist in pharmacy office

### Dr. García-Fontestad, Gema Alejandra

- ◆ Doctor of Pharmacy
- ◆ Pharmacist in pharmacy office

### Dr. Güemes Heras, Jaime

- ◆ PhD in Biology
- ◆ Curator of the Botanical Garden, Cavanilles Institute of Biodiversity and Evolutionary Biology
- ◆ University of Valencia

### Ms. Ibars Almonacil, Ana

- ◆ Botany Teaching Unit
- ◆ University of Valencia

### Ms. Izquierdo Palomares, Rosa

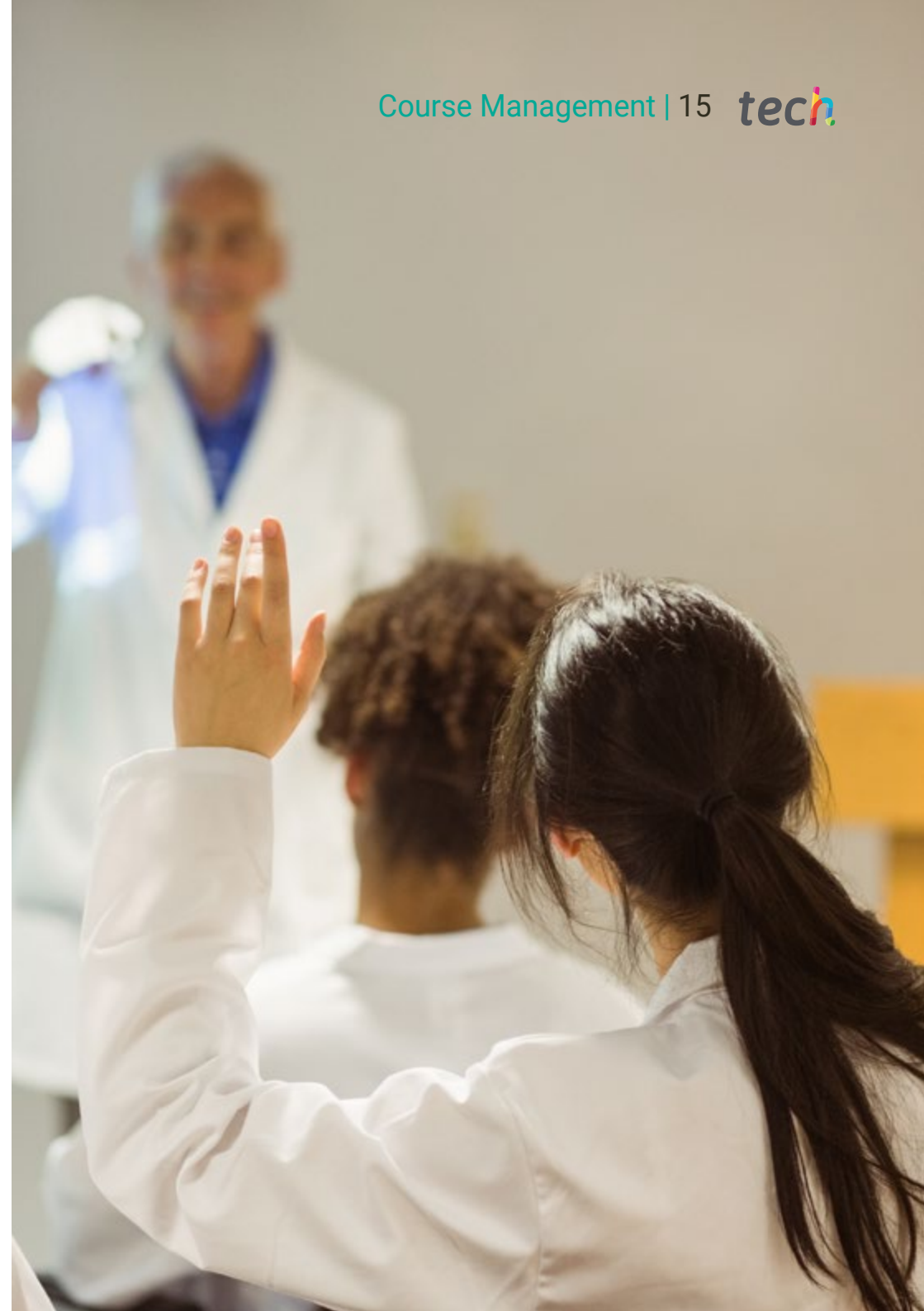
- ◆ Graduate in Pharmacy Community

### Dr. Soriano Guarinos, Pilar

- ◆ Doctor of Pharmacy
- ◆ Full Professor, Department of Botany
- ◆ Faculty of Pharmacy University of Valencia

### Dr. Palomino Ruiz-Poveda, Olga

- ◆ Doctor of Pharmacy
- ◆ Associate Professor. Department of Pharmacology
- ◆ Faculty of Pharmacy Complutense University Madrid



04

# Structure and Content

The contents of this program have been developed by the different professors with with a clear purpose: to ensure that our students acquire each and every one of the necessary skills to become true experts in this field.







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*A highly scientific training program created to teach you how to safely incorporate Phytotherapy into your daily praxis”*

## Module 1. Active Plant Ingredients, Pharmaceutical Forms and Galenic Preparations

- 1.1. Active Ingredients: Main Groups and Properties, as a Basis that Justifies the use of Phytotherapy
- 1.2. Carbohydrates, Lipids, Proteins, and Sulfo cyanogenetic Heterosides and their Therapeutic Application
- 1.3. Simple Phenols, Coumarins and Lignans and their therapeutic application
- 1.4. Flavonoids and their Therapeutic Application
- 1.5. Tannins and Quinones and their Application
- 1.6. Isoprenoids, Saponins and Cardiotonic Heterosides and their Application
- 1.7. Resins and their Application
- 1.8. Alkaloids and their Application
- 1.9. Magistral Formulation in Phytotherapy
- 1.10. Other Pharmaceutical Forms in Phytotherapy
- 1.11. Industrial Processing of Herbal Medicines





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*A comprehensive teaching program, structured in well-developed units, oriented toward a high impact learning and training experience”*



# 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 Nursing School we use the Case Method

In a given situation, what should a professional do? 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. Nurses learn better, faster, and more sustainably over time.

*With TECH, nurses can experience a learning methodology that is shaking the foundations of traditional universities around the world.*



According to Dr. Gervas, 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, in an attempt to recreate the real conditions in professional nursing 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. Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
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 case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.



*The nurse 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 we have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. 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 really 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.



### Nursing Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, 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 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 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 suggesting that observing third-party experts can be useful.

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 Active Ingredients in Plants, Pharmaceutical Forms and Galenic Preparations 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 Active Ingredients in Plants, Pharmaceutical Forms and Galenic Preparations** contains the most complete and up-to-date scientific program on the market.

After the student has passed the evaluations, 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 Active Plant Ingredients, Pharmaceutical Forms and Galenic Preparations**

Official N° of hours: **150 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.

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



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

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