**Postgraduate Diploma** Phytotherapy of Endocrine, Metabolic and Digestive System Disorders

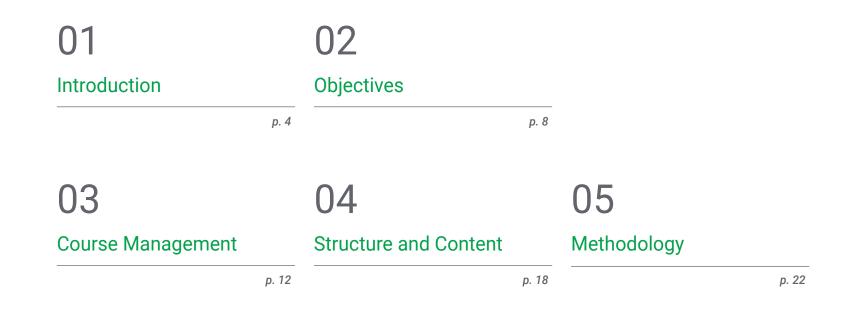




**Postgraduate Diploma** Phytotherapy of Endocrine, Metabolic and Digestive System Disorders

Course Modality: Online Duration: 6 months. Certificate: TECH - Technological University 19 ECTS Credits Teaching Hours: 475 hours. Website: www.techtitute.com/us/pharmacy/postgraduate-diploma/postgraduate-diploma-phytotherapy-endocrine-metabolic-digestive-system-disorders

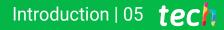
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06 Certificate

# 01 Introduction

Disorders of the endocrine, metabolic and digestive systems find in phytotherapyderived products a useful and simple therapeutic form that the general population values very positively. However, avoiding misuse or possible toxicity requires extensive and specific knowledge of its use. This comprehensive expert has been created to offer you the possibility to act as a specialist in this field, making you a reference for patients who come to the pharmacy.



Act with the security of the training of a specialist in phytotherapy and its use in pathologies and disorders of the endocrine, metabolic and digestive system and be at the forefront of your profession"

# tech 06 | Introduction

There is now a scientific basis supporting the efficacy of many phytotherapeutic products for certain indications. The place that phytotherapy should occupy in therapeutics should be that for which it has demonstrated its usefulness and safety.

Efficacy is achieved only with the proper use of phytotherapeutic preparations, 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 involved in the Expert, since in one way or another they all work in the field of phytotherapy or are related to it. 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. On the one hand, the different university training programs generally suffer from a deep and profound lack of

continuously updated training in Phytotherapy, and on the other hand that current health trends are leaning towards the use of safe and effective natural remedies, it is necessary to be able to offer the student the possibility of expanding their knowledge

and therapeutic skills with a greater specialization in the use of medicinal plants, from the professional and academic perspective necessary to adequately face their future in this field. This ONLINE EXPERT offers you the characteristics of a high level scientific, teaching and technological course. These are some of its most notable features:

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

An Expert that will allow you to combine your training with other occupations and access from anywhere with total flexibility"

Introduction | 07 tech

With a methodological design based on proven teaching techniques, this Expert will take you through different teaching approaches to allow you to learn in a dynamic and effective way" Our innovative telepractice concept will give you the opportunity to learn through an immersive experience, which will provide you with a faster integration and a much more realistic view of the contents: "learning from an expert.

Our teaching staff is made up of practicing specialists. In this way, we ensure that we provide you with the training update we are aiming for. 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 put at the service of the course the practical knowledge derived from their own experience: one of the differential qualities of this training.

This mastery of the subject matter is complemented by the effectiveness of this expert's methodological design. 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, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

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

# 02 **Objectives**

This Expert will allow you to define the limits of the use of phytotherapy to be able to manage it safely with the patient, so that you can make the appropriate decisions to use it preventively and therapeutically.

Objectives | 09 tech

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This refresher program will provide you with a sense of confidence in your professional work, which will help you grow both personally and professionally"

# tech 10 | Objectives



### **General Objectives**

- Define the therapeutic limits of phytotherapy and recognize 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 medicinal plants, evaluating the expected benefits and associated risks.
- Apply theoretical knowledge to practice.



## Specific Objectives

- 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.
- Define the main chemical groups of active ingredients, which are responsible for the activity of drugs and by extension of plants.
- Define the therapeutic application of phenols, flavonoids, tannins, isoprenoids, resins, alkaloids and other products.
- Describe the pharmaceutical forms used in Phytotherapy.
- Elaborate and select the most appropriate form according to the condition and treatment.
- Define the usefulness of Phytotherapy in the treatment of gastritis and ulcers.

- Define the usefulness of Phytotherapy in the treatment of obesity and overweight.
- Define the usefulness of Phytotherapy in the treatment of diabetes.
- Define the usefulness of Phytotherapy in patients with inflammatory bowel disease.
- Explain the Phytotherapeutic treatments and the therapeutic limits in the most frequent digestive tract disorders.
- Describe Phytotherapeutic treatments and therapeutic limits in endocrine and metabolic disorders.



Phytotherapy. in pharmacy: the basis of health that only the most updated professional will be able to offer to his patients"

# 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.

With the direct experience of professionals who will teach you based on the reality of the sector in a contextual and realistic learning"

# tech 14 | Course Management

#### Professors

#### Dr. Jaime Güemes Heras

- Degree in Biology.
- Doctor of Biology (PhD).
- University of Valencia.
- Curator of the Botanical Garden, Cavanilles Institute of Biodiversity and Evolutionary and
  Biology

#### Dr. Pilar Soriano

- Degree in Pharmacy.
- Doctor in Pharmacy (PhD).
- Faculty of Pharmacy. University of Valencia.
- Professor of the Department

#### Degree in Rosa Izquierdo

- Degree in Pharmacy.
- Drug Information Center.
- Illustrious Official College of Pharmacists of Castellón.

#### Dr. Esmeralda Buendía

Technical Pharmaceutical Director. Arkopharma Laboratories.

#### Dr. OLGA MARIA PALOMINO RUIZ-POVEDA

- Degree in Pharmacy.
- Doctor in Pharmacy (PhD).
- Faculty of Pharmacy, Complutense University, Madrid.
- Associate Professor of the Department of Pharmacology.

#### Sra. Ana Ibars

• University of Valencia. Botany Teaching Unit.

#### Dr. Gema Alejandra García-Fontestad

- Doctor of Pharmacy.
- Pharmacist in pharmacy office.

#### Dr. María Bejarano

- Doctor of Pharmacy.
- Pharmacist in pharmacy office.
   MÓDULO Business School 2

#### Dr. Nuria Acero de Mesa

- Degree in Pharmacy.
- Doctor in Pharmacy (PhD).
- Faculty of Pharmacy.

#### Dr. Dolores Muñoz-Mingarro

- Degree in Biology.
- Ph.D. in Biological Sciences.
- Faculty of Pharmacy.
- CEU San Pablo University.
- Professor of the Department

### Course Management | 15 tech

#### Dr. Eugenia González Rosende

- Degree in Pharmacy.
- Doctor in Pharmacy (PhD).
- Facultad de Ciencias de la Salud, Universidad CEU Cardenal Herrera.
- Full Professor, Department of Pharmacy.

#### Dr. Alicia López

- Degree in Pharmacy.
- Doctor in Pharmacy (PhD).
- Dean of the Faculty of Health Sciences.
- CEU Cardenal Herrera University.
- Professor at Private University, Department of Pharmacy.

#### **Dr. Cristina Balaguer**

- Degree in Pharmacy.
- Doctor in Pharmacy (PhD).
- Facultad de Ciencias de la Salud, Universidad CEU Cardenal Herrera.
- Assistant Professor of the Department of Pharmacy.

#### Dr. Aracely Calatayud

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• Technical Pharmaceutical Director. Arkopharma Laboratories.

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# tech 16 | Course Management

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- Doctor in Pharmacy (PhD).
- Faculty of Pharmacy. Complutense University of Madrid.
- Full Professor, Department of from Pharmacology.

#### Dr. Teresa Ortega Hernández-Agero.

- Degree in Pharmacy.
- Doctor in Pharmacy (PhD).
- Faculty of Pharmacy, Complutense University, from Madrid.
- Full Professor, Department of from Pharmacology.

#### Dr. María Bejarano

- Doctor of Pharmacy.
- Pharmacist in pharmacy office.

#### Dr. Víctor López Ramos

- Graduate in Pharmacy.
- Doctor in Pharmacy (PhD).
- Faculty of Health Sciences, San Jorge University of Zaragoza.
- Professor of Pharmacy Department.

#### Dr. Francisco Les Parellada

- Doctor of Pharmacy.
- Research teaching staff of the San Jorge University.
- Member of the research group Plant Bioactive Principles.

#### Degree in Inés Reigada Ocaña

- Degree in Pharmacy.
- Researcher at the University of Helsinki.



### Course Management | 17 tech



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An impressive teaching staff, made up of professionals from different areas of expertise, will be your teachers during your training: a unique opportunity not to be missed"

# 04 Structure and Content

The contents of this Expert have been developed by the different experts of this course, 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.

A complete and concrete development of knowledge and techniques, created for the pharmacist in order to train him/her for a total quality intervention in phytotherapy"

### tech 20 | Structure and Content

#### Module 1. Phytotherapy and Herbal Medicines

- 1.1. Phytotherapy: Definition and Scope of Application.
- 1.2. Botanical Nomenclature and the Citation of Species in Phytotherapy.
- 1.3. Current Classification of Plant Groups.
- 1.4. Legislation and Registration of Herbal Medicines in Spain.
- 1.5. Regulation of the European Market for Medicinal Herbal Preparations: Legal Regulations and Scope of Application.
- 1.6. Cultivation, Collection, Processing and Preservation of Medicinal Plants.
- 1.7. Plant-Based Drugs: Impact of Drug Recognition on the Quality of Phytotherapeutic Products.
- 1.8. Mushrooms with Medicinal Utility.

# **Module 2.** Active principles of plants, pharmaceutical forms and galenic preparations

- 2.1. Active Ingredients: Main Groups and Properties, as a Basis that Justifies the use of Phytotherapy.
- 2.2. Carbohydrates, Lipids, Proteins, and Sulfocyanogenetic Heterosides and their Therapeutic Application.
- 2.3. Simple Phenols, Coumarins and Lignans and their therapeutic application.
- 2.4. Flavonoids and their Therapeutic Application.
- 2.5. Tannins and Quinones and their Application.
- 2.6. Isoprenoids, Saponins and Cardiotonic Heterosides and their Application.
- 2.7. Resins and their Application.
- 2.8. Alkaloids and their Application.
- 2.9. Magistral Formulation in Phytotherapy.
- 2.10. Other Pharmaceutical Forms in Phytotherapy.
- 2.11. Industrial Processing of Herbal Medicines.



### Structure and Content | 21 tech

# **Module 3**. Phytotherapy of Endocrine, Metabolic and Digestive System Disorders

- 3.1. Phytotherapy in the Treatment of Obesity and Overweight.
- 3.2. Medicinal Plants that Stimulate Appetite.
- 3.3. Phytotherapy and Diabetes.
- 3.4. Phytotherapy in the Treatment of Dyspepsia.
- 3.5. Phytotherapy for the Treatment of Flatulence. Carminative Medicinal Plants.
- 3.6. Phytotherapy for the Treatment of Gastritis and Ulcers.
- 3.7. Phytotherapy for Hepatic Affections and Biliary Dysfunctions.
- 3.8. Phytotherapy for the Treatment of Diarrhea.
- 3.9. Phytotherapy for the Treatment of Constipation.
- 3.10. Phytotherapy in the Treatment of Vomiting.
- 3.11. Phytotherapy in Patients with Inflammatory Bowel Disease.



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

# 05 **Methodology**

This training provides you with a different way of learning. Our methodology uses a cyclical learning approach: *Re-learning*.

This teaching system is used 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 Re-learning, 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".

### tech 24 | Methodology

#### At TECH we use the Case Method

In a given clinical situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Pharmacists learn better, more quickly and more sustainably over time.

> With TECH you can 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 potential 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 achieve the assimilation of concepts, but also develop their mental capacity through exercises to evaluate real situations and apply their knowledge.

2. The learning process has a clear focus on 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.

 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 26 | Methodology

#### **Re-Learning Methodology**

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

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-ofthe-art software to facilitate immersive learning.



### Methodology | 27 tech

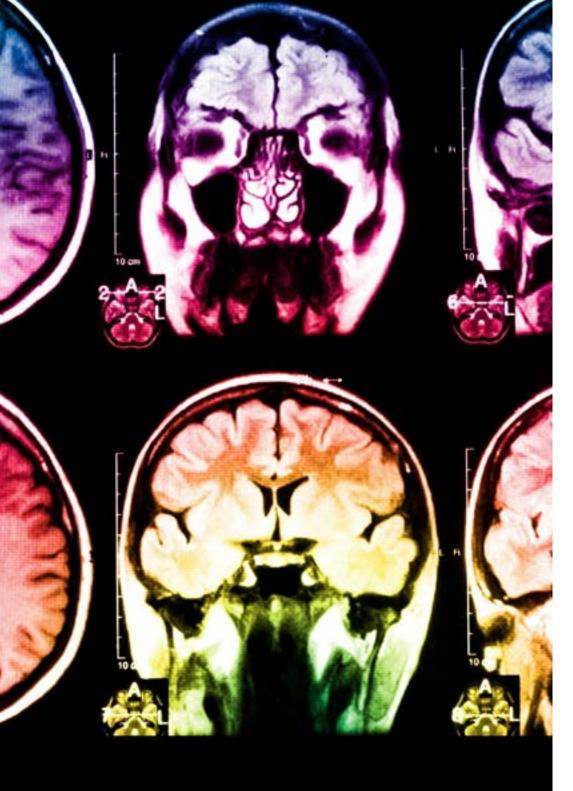
At the forefront of world teaching, the Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 115,000 pharmacists with unprecedented success, in all clinical specialties. Our 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 old.

Re-learning 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 (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards.



## tech 28 | Methodology

In this program you will have access to the best educational material, prepared with you 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.

20%

15%

3%

15%

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



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

We bring you closer to the latest techniques, to the newest educational advances, to the forefront of current pharmaceutical care procedures. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **Interactive Summaries**

We present 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, international guides. in our virtual library you will have access to everything you need to complete your training.



#### **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.

20%

3%

7%

17%



#### **Testing & Re-testing**

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your 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 our future difficult decisions.



#### Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.

# 06 **Certificate**

This **Postgraduate Diploma in Phytotherapy of Endocrine, Metabolic and Digestive System Disorders** guarantees you, in addition to the most rigorous and up-to-date training, access to a Postgraduate Diploma issued by **TECH - Technological University**.



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Successfully complete this training and receive your university degree without travel or laborious paperwork".

# tech 32 | Certificate

This **Postgraduate Diploma in Phytotherapy of Endocrine, Metabolic and Digestive System Disorders** 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 certificate issued by **TECH** - **Technological University** will specify the qualification obtained though the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

# Title: Postgraduate Diploma in Phytotherapy of Endocrine, Metabolic and Digestive System Disorders

ECTS: 19 Official Number of Hours: 475



technological university Postgraduate Diploma Phytotherapy of Endocrine, Metabolic and Digestive System Disorders Course Modality: Online Duration: 6 months. Certificate: TECH - Technological University **19 ECTS Credits** Teaching Hours: 475 hours.

**Postgraduate Diploma** Phytotherapy of Endocrine, Metabolic and Digestive System Disorders

