

# Postgraduate Certificate Structure of the Pharmaceutical Industry



## Postgraduate Certificate

### Structure of the Pharmaceutical Industry

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

Website: [www.techtute.com/us/pharmacy/postgraduate-certificate/structure-pharmaceutica-industry](http://www.techtute.com/us/pharmacy/postgraduate-certificate/structure-pharmaceutica-industry)

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# 01

# Introduction

The Pharmaceutical Industry has achieved a solid structure that has demonstrated a great capacity to protect people's health and well-being. By guaranteeing the quality and safety of medicines, it provides patients with confidence, while at the same time seeking to incorporate technological advances to offer increasingly individualized treatments. Faced with this reality, the pharmaceutical professional is obliged to keep up to date with the development of patents, R&D projects, as well as risk management in the sector. For this reason, this 100% online program was created, which provides a complete update through one of the most innovative academic methodologies: the Relearning method.



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*You will get an update on the Structure of the Pharmaceutical Industry with an avant-garde pedagogical methodology”*

The incursion into the pharmaceutical sector implies being at the forefront in a field of great relevance in people's health. A complex environment that requires mastery of its operation, evolution and latest trends. Therefore, pharmacists work in this scenario of continuous transformation.

In this sense, it is essential for these professionals to be up to date on the process of pharmacological development and manufacturing, the incorporation of software for stock control or methods of analyzing the profitability of the discounts made on products. This is the line of thought of this 6-week Postgraduate Certificate in the Structure of the Pharmaceutical Industry.

A program with an exhaustive and advanced syllabus that will allow students to update their knowledge on the management of relations with other actors in the sector, ethical and strategic decision making, as well as the promotion of safe practices in laboratories.

To guarantee this updating process, TECH provides innovative pedagogical tools, accessible 24 hours a day, 7 days a week. Therefore, with no classroom attendance or pre-established class schedules, the graduate will have greater flexibility to self-manage his or her study time and reconcile his or her daily professional activities.

This **Postgraduate Certificate in Structure of the Pharmaceutical Industry** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ◆ The development of practical cases presented by experts in Pharmacy
- ◆ 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



*An academic option that will bring you up to date on the best practices used by pharmaceutical laboratories"*

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*Search from your cell phone with Internet connection for the most rigorous information on patent protection lines”*

The program's teaching staff includes professionals from the field 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 during the academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*From the comfort of your home, you will delve into the fundamentals of intellectual property, patent ability analysis and protection strategies.*

*In 150 teaching hours you will learn about therapeutic equivalence, bioequivalence, the development and manufacturing process of generic drugs.*



02

# Objectives

The purpose of this Postgraduate Certificate is to provide a complete update on the Pharmaceutical Industry. From advances in pharmacological development, R&D advances, patents to regulatory agencies. Thanks to this, the graduate will have greater competences to face challenges in each of the areas of the environment in which they work, to recognize commercial possibilities and to make strategic decisions. For this purpose, case study simulations are also available to provide a much more direct vision.







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*With this university degree you will be up to date with the most effective strategies in the current marketing of pharmacological products”*



## General Objectives

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- ◆ Acquire specialized knowledge in the Pharmaceutical Industry
- ◆ Deepen in the Pharmaceutical industry
- ◆ Delve into the latest developments in the Pharmaceutical Industry
- ◆ Understand the structure and function of the pharmaceutical industry
- ◆ Understand the competitive environment of the Pharmaceutical Industry
- ◆ Understand market research concepts and methodologies
- ◆ Use market research technologies and tools
- ◆ Develop sales skills specific to the Pharmaceutical Industry
- ◆ Understand the sales cycle in the Pharmaceutical Industry
- ◆ Analyze customer behavior and market needs
- ◆ Develop leadership skills
- ◆ Understand the specifics of management in the Pharmaceutical industry
- ◆ Apply project management techniques
- ◆ Understand the principles and fundamentals of marketing in the pharmaceutical industry





## Specific Objectives

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- ◆ Delve into the structure and functioning of the pharmaceutical industry
- ◆ Investigate the supply chain, the main actors and their interaction
- ◆ Understand the competitive environment of the pharmaceutical industry

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*In just 6 weeks you will be up to date with the stock management software used by the pharmaceutical industry”*

03

# Course Management

In order to provide a first class update, TECH has brought together an outstanding group of professors with solid experience in the Pharmaceutical Industry and some Marketing fields. Their vast mastery of the sector will allow the pharmacist to enhance their skills with the different actors that make up this environment. In addition, thanks to the proximity of the faculty, you will be able to resolve any questions you may have about the content of this university program.



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*With the help of experts in the Pharmaceutical Industry, you will receive a complete update on the main trends in the sector”*

## Management



### Mr. Calderón, Carlos

- ♦ Director of Marketing and Advertising at Industrias Farmacéuticas Puerto Galiano S.A
- ♦ Marketing and Advertising Consultant at Experiencia MKT
- ♦ Director of Marketing and Advertising at Marco Aldany
- ♦ CEO and creative director at C&C Advertising
- ♦ Director of Marketing and Advertising at Elsevier
- ♦ Creative Director at CPM Advertising and Marketing Consultants
- ♦ Advertising Technician by the CEV of Madrid



### Mr. Expósito Esteban, Alejandro

- ♦ Director Digital de Innovation and Business Operation en Merck Group
- ♦ Digital and New Technologies Director at McDonalds Spain
- ♦ Director of Alliances and Channels at Microma The Service Group
- ♦ Director of After Sales Services at Pc City Spain S.A.U

## Professors

### D. García-Valdecasas Rodríguez de Rivera, Jesús

- ◆ Technical Pharmaceutical Director Arkopharma in Laboratories
- ◆ Technician Responsible for the Biocides and Cosmetics Area at Laboratorios Bohm
- ◆ Quality and Records Coordinator at Bohm Laboratories
- ◆ Director quality, developing and Regulatory Matters at Industrias Farmacéuticas Puerto Galiano S.A
- ◆ Responsible for Records/Technical Services at Arafarma Group S.A
- ◆ Degree in Pharmacy from the University of Alcalá
- ◆ Professional Master's Degree in Pharmaceutical and Parapharmaceutical Industry from the Center for Higher Studies in the Pharmaceutical Industry (CESIF)

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*Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice”*

# 04

# Structure and Content

This Postgraduate Certificate in Structure of the Pharmaceutical Industry brings together the most cutting-edge concepts so that the pharmacist has an update on the various agencies involved in this sector, strategic alliances, advances in both drug development and pharmaceutical laboratories. All this, complemented with a series of didactic resources such as video summaries, videos in detail, hosted in a virtual library with unlimited access.







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*With the Relearning method you will optimize your study time and consolidate the information in a faster and more effective way”*

## Module 1. Structure of the Pharmacist Industry

- 1.1. Pharmacological development
  - 1.1.1. Drug discovery
  - 1.1.2. Pharmacokinetics
  - 1.1.3. Pharmacodynamics
  - 1.1.4. Pre-clinical trials
- 1.2. Pharmaceutical laboratory
  - 1.2.1. Good Laboratory Practices
  - 1.2.2. Laboratory equipment
  - 1.2.3. Laboratory instrumentation
  - 1.2.4. Microbiological Analysis
- 1.3. R&D&I:
  - 1.3.1. Screening techniques
  - 1.3.2. Validation techniques
  - 1.3.3. Rational design
  - 1.3.4. Medicinal chemistry
- 1.4. Patents
  - 1.4.1. Intellectual Property Fundamentals
  - 1.4.2. Patent application procedure
  - 1.4.3. Patentability analysis
  - 1.4.4. Protection strategies
- 1.5. Generics
  - 1.5.1. Therapeutic equivalence
  - 1.5.2. Bioequivalence
  - 1.5.3. Development Process
  - 1.5.4. Manufacture Process
- 1.6. Stock management
  - 1.6.1. Stock Control
  - 1.6.2. Inventory Management
  - 1.6.3. Demand forecasting methods
  - 1.6.4. Stock management software
- 1.7. Discounts
  - 1.7.1. Volume discounts
  - 1.7.2. Cash discounts
  - 1.7.3. Loyalty discounts
  - 1.7.4. Profitability analysis on discounts



- 1.8. Pharmaceutical industry value chain
  - 1.8.1. Risk Management
  - 1.8.2. Information technology
  - 1.8.3. Sustainability
  - 1.8.4. Social Responsibility
- 1.9. Strategic Partnerships
  - 1.9.1. Collaborations
  - 1.9.2. License agreements
  - 1.9.3. *Joint Ventures*
  - 1.9.4. Negotiation of strategic alliances
- 1.10. Regulatory agencies
  - 1.10.1. Post-marketing surveillance
  - 1.10.2. Regulatory audits
  - 1.10.3. Regulatory harmonization
  - 1.10.4. Mutual recognition of records

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*With this academic proposal you will be aware of the most successful collaborations, joint ventures and strategic alliances in the Pharmaceutical Industry”*



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# 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.



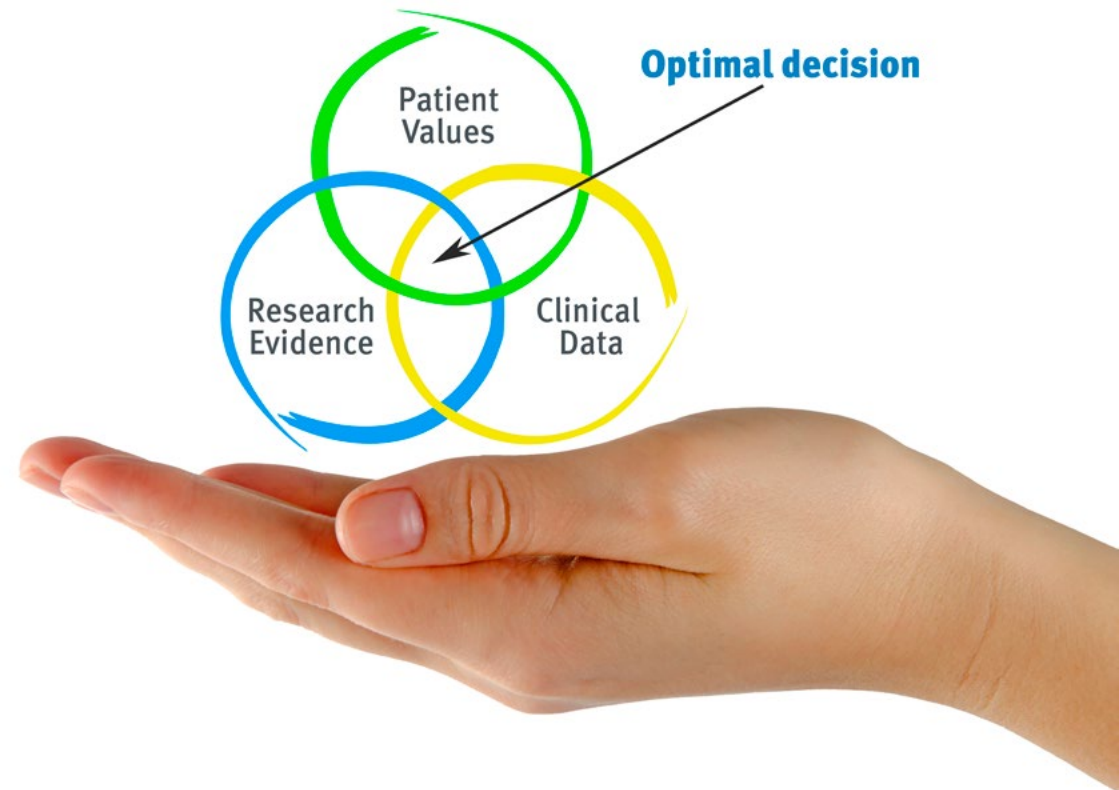


*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## 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. 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, attempting to recreate the actual conditions in a pharmacist's professional 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. 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

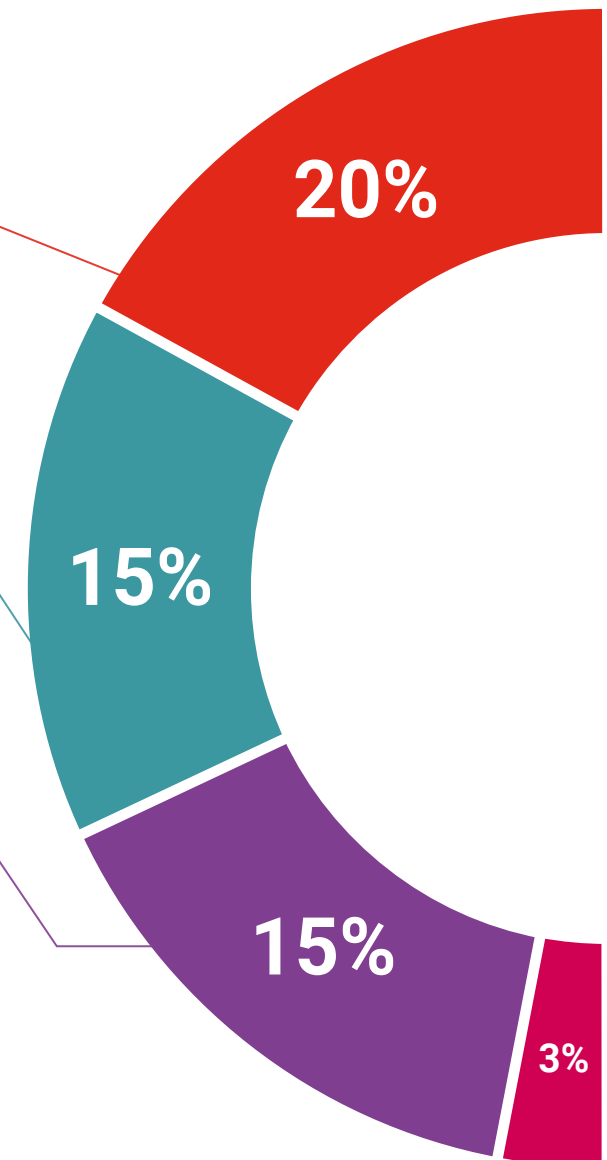
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

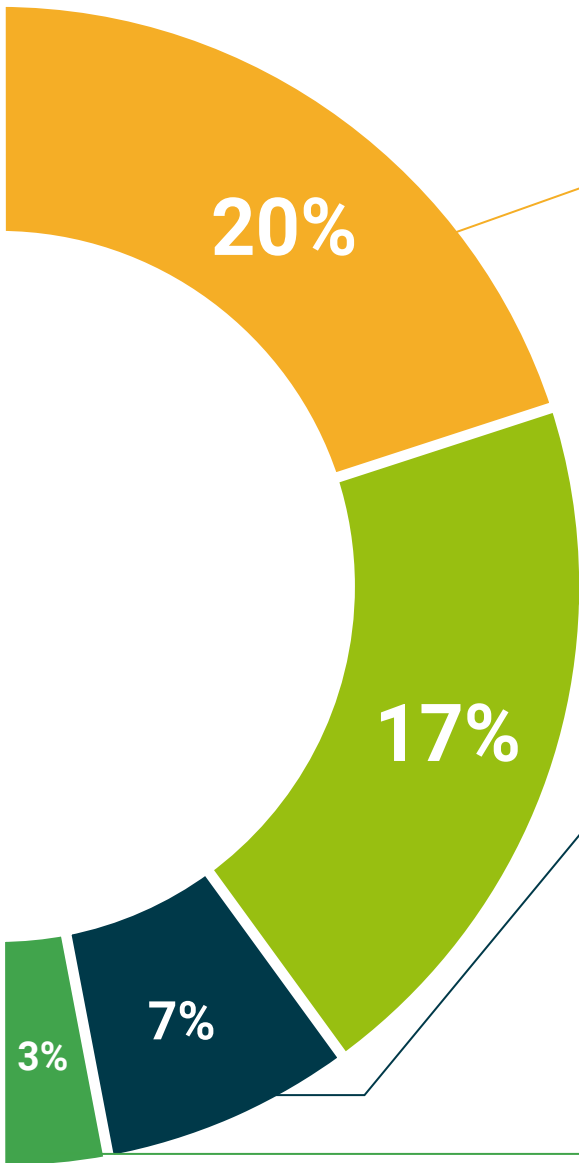
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



### 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 Certificate in Structure of the Pharmaceutical Industry 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 Structure of the Pharmaceutical Industry** 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 Structure of the Pharmaceutical Industry**

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.



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