

# Postgraduate Diploma

## Pharmacology and Toxicology





## Postgraduate Diploma Pharmacology and Toxicology

- » 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-pharmacology-toxicology](http://www.techtitute.com/us/pharmacy/postgraduate-diploma/postgraduate-diploma-pharmacology-toxicology)

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# 01

# Introduction

Research in Toxicology, together with the specialization of professionals in the pharmacological field, has led to an improvement in the management of the potential toxicity of existing drugs and of the most frequent pathologies treated in hospitals. In this sense, the continuous updating of pharmacists in the approach to patients with stroke, agitation or liver pathologies, among others. In order to promote this update in this context, TECH has developed this 100% online program, which offers the graduates the opportunity to make a complete update on the advances in this field through innovative multimedia teaching material and accessible 24 hours a day, from any electronic device with internet connection.





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*Get updated on the advances in  
Pharmacology and Toxicology through this  
Postgraduate Diploma in only 6 months”*

Infectious diseases and intoxications are frequent in the hospital environment, for this reason the progress in the study of antibiotics, the management through the most effective pharmacological treatments has improved patient management. In this sense, the figure of the pharmacist is key when it comes to providing the most accurate pharmacology according to the characteristics of each clinical case.

In view of this reality, the constant evolution in the pharmacological field has led professionals to continuously update their skills. Thus, this Postgraduate Diploma in Pharmacology and Toxicology was created by an excellent team of experts, brought together by TECH.

It is an intensive 6-month program that is distinguished by offering students advanced content on Pharmacology in the Central Nervous System, the Gastrointestinal System and diseases, infections and intoxications. All this, from a theoretical-practical approach that will be supported by clinical case studies, video summaries of each topic, videos in detail and essential readings.

Also, thanks to the *Relearning* method, based on the continuous reiteration of key content, the graduates will have the opportunity to keep abreast of developments in this field, without the need to invest long hours of study and memorization.

An ideal opportunity to study a quality program in a methodology that provides the flexibility required by students to reconcile their daily activities with an academic proposal that is at the forefront.

This **Postgraduate Diploma in Pharmacology and Toxicology** 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, Hospital Management, among others
- ♦ 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



*You will be up to date on the refinement of antibiotic use in patients with skin infections”*

“

*The specialized literature in this program will allow you to further extend the information on the Pharmacology of the Gastrointestinal System”*

*Thanks to this qualification you will be up to date with the pharmacology used to treat substance abuse disorders.*

*Update yourself at your own pace and from the comfort of your home with TECH's 100% online methodology.*

The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will provide the professionals with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professionals must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned experts.



# 02 Objectives

This Postgraduate Diploma has been designed to offer the professionals the latest scientific evidence on Pharmacology and Toxicology and the management of patients with neurological, gastrointestinal or infectious diseases. A goal that will be achieved after 450 teaching hours and with the best content, prepared by pharmacists with extensive experience in hospitals and aware of the progress in this field. In addition, given the proximity of the teaching team, the graduates will be able to resolve any doubts they may have about the content of this program.







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*Deepen from the comfort of your home  
in the rational management of antibiotics  
in patients with infectious diseases”*



## General Objectives

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- ◆ Identify management of a wide variety of clinical situations, using available patient-specific information (e.g., age-related, risk factors, relevant acuity indices, prehospital providers)
- ◆ Develop therapeutic and monitoring plans based on medication-related problems, patient- and disease-specific information, and laboratory data
- ◆ Summarize strategies for the procurement, preparation, and administration of time-sensitive therapies
- ◆ Evaluate the applicability and limitations of published data and reports to patient care
- ◆ Modify the treatment plan based on monitoring the patient's response to initial therapy



*The case studies in this program will provide you with a theoretical and practical insight into the pharmacological mechanisms for treating liver pathologies”*





## Specific Objectives

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### Module 1. Pharmacology of the Central Nervous System

- ♦ Explore the initial evaluation, imaging tests, multidisciplinary team, time-dependent pharmacology, endovascular therapy, antithrombotic treatment of ischemic stroke
- ♦ Delve into the management of hypertension in acute ischemic stroke: treatment selection, goals, objectives
- ♦ Describe the incidence, clinical presentation, mechanism and risk factors, management of oropharyngeal angioedema due to Alteplase
- ♦ Delve into the incidence, definition and clinical presentation, risk factors, initial management of hemorrhagic stroke - intracerebral hemorrhage (ICH)
- ♦ Be updated on diagnosis, initial emergency management, pharmacological and non-pharmacological measures in cerebral edema
- ♦ Delving into opioid overdose
- ♦ Be up to date on the management of the agitated patient (clinical presentation, initial management, first and second line therapies)
- ♦ Update knowledge on acute pain management in the substance abuse patient: general principles, multimodal analgesia
- ♦ Deepen in alcohol withdrawal syndrome: incidence, pathophysiology, signs and symptoms, severity of withdrawal, pharmacology and supportive therapies

### Module 2. Pharmacology of the Gastrointestinal System

- ♦ Update knowledge on chronic liver disease, its definition and causes of cirrhosis, diagnosis and initial evaluation, pathophysiology, severity, pharmacology
- ♦ Deepen in upper gastrointestinal bleeding (UGH)
- ♦ Be aware of spontaneous bacterial peritonitis (SBP), its pathophysiology, incidence and management
- ♦ Deepen in the hydroelectrolytic alterations and hyperelectrolytemias, its physiopathology, clinical presentation and treatment
- ♦ Investigate the pathophysiology, risk factors, diagnosis, severity and pharmacological treatment of Clostridium Difficile Infection (CDI)
- ♦ Delve into the pathophysiology, microbiology, diagnosis, risk stratification, and treatment of complicated intra-abdominal infection (Clabc)
- ♦ Be updated on the classification, symptoms, precipitating factors, diagnosis, treatment of Pancreatitis

### Module 3. Pharmacology of infectious diseases and intoxications

- ♦ Delve into the rational use of antibiotics, developing a complete analysis of their definitions and the most common infections to be treated with them
- ♦ Develop the pharmacological management of diseases such as skin and soft tissue infections
- ♦ Define the most complex pharmacological treatments for the treatment of Pneumonia, Meningitis, Sepsis, among other infectious diseases present in the hospital context

03

# Course Management

In its maxim to offer a high quality program, TECH carries out a rigorous selection process of each and every one of the teachers that make up its programs. Thus, the graduates who accesses this Postgraduate Diploma has the guarantee of accessing a syllabus prepared by professionals with extensive experience in hospital pharmacy, especially in the care of patients in the Emergency Department. A unique opportunity to update through the largest digital university in the world.





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*Consolidated professional pharmacists with experience in clinical settings are responsible for the high quality content of this Postgraduate Diploma”*

## Management



### Mr. Ramos Rodríguez, Javier

- ♦ Pharmacist at Hospital Corporación Sanitaria Parc Taulí, Sabadell, Spain
- ♦ Coordinating member of the working group of pharmacists specializing in the Emergency Department (RedFaster)
- ♦ Pharmacist specializing in Hospital Pharmacy at Hospital Mútua de Terrassa
- ♦ Pharmacist specializing in Hospital Pharmacy at Consorci Sanitari Integral
- ♦ Resident Pharmacist at Servicio Canario de la Salud (Canary Health Service)
- ♦ Assistant Pharmacist in Pharmacy María Concepción Gutiérrez
- ♦ Assistant Pharmacist in Pharmacy Marina López González
- ♦ Master in Pharmacotherapeutic Follow-up of HIV/AIDS patients by the University of Granada

## Professors

### Dr. Fendián, Ángel Marcos

- ♦ Assistant Pharmacist at Hospital de la Santa Creu i Sant Joan de Déu
- ♦ Hospital Pharmacist in Intensive Care Unit at Hospital Clinic of Barcelona
- ♦ Assistant pharmacist at Hospital Universitari Joan XXIII
- ♦ Assistant pharmacist at Hospital Pius de Valls
- ♦ PhD in Pharmacy from the Université of Montpellier
- ♦ Master's Degree in Pharmaceutical Oncology by the University of Valencia



# 04

# Structure and Content

Thanks to the multimedia didactic material and the numerous additional tools, the graduates who enters this university program will be able to update their knowledge in an effective and dynamic way. Thus, they will go through the 3 modules that make up this university program and will deepen in the Pharmacology used to address pathologies of the Central Nervous System, the Gastrointestinal System and the one used for infectious diseases and intoxications. All this, in addition, from a virtual library, accessible 24 hours a day, from any digital device with Internet connection.







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*Extend even further the information provided in this program thanks to the scientific literature you will find in the virtual library”*

## Module 1. Pharmacology of the Central Nervous System

- 1.1. Ischemic Strokes
  - 1.1.1. Advances in the early diagnosis of ischemic stroke
  - 1.1.2. Evaluation and classification of the risk of ischemic stroke in asymptomatic patients
  - 1.1.3. Thrombolytic treatment strategies in the acute phase of ischemic stroke
  - 1.1.4. Biomarkers in Ischemic Stroke
- 1.2. Management of hypertension in acute ischemic stroke
  - 1.2.1. Current guidelines and protocols for the management of hypertension in acute ischemic stroke
  - 1.2.2. Pharmacologic treatment of hypertension in the acute phase of ischemic stroke
  - 1.2.3. Blood pressure control strategies in ischemic stroke with thrombolytic therapy
  - 1.2.4. Endovascular therapy and blood pressure control in acute ischemic stroke
- 1.3. Oropharyngeal angioedema due to Alteplase
  - 1.3.1. Risk factors for the development of oropharyngeal angioedema after Alteplase administration
  - 1.3.2. Clinical and differential diagnosis of oropharyngeal angioedema in patients treated with Aateplase
  - 1.3.3. Management and treatment of acute oropharyngeal angioedema by Alteplase
  - 1.3.4. Evaluation and follow-up of patients with a history of oropharyngeal angioedema prior to administration of Alteplase
- 1.4. Hemorrhagic stroke: intracerebral hemorrhage (ICH)
  - 1.4.1. Diagnosis and classification of intracerebral hemorrhage in hemorrhagic stroke
  - 1.4.2. Medical and pharmacological treatment of acute intracerebral hemorrhage
  - 1.4.3. Neurosurgical and endovascular management of intracerebral hemorrhage
  - 1.4.4. Multidisciplinary approach in the care of the patient with intracerebral hemorrhage
- 1.5. Cerebral edema
  - 1.5.1. Cytotoxic versus vasogenic cerebral edema
  - 1.5.2. Clinical evaluation and imaging of cerebral edema
  - 1.5.3. Pharmacological strategies for the reduction of cerebral edema in specific pathologies
  - 1.5.4. Effect of cerebral edema
- 1.6. Opioid overdose
  - 1.6.1. Pharmacokinetics and pharmacodynamics of opioids involved in overdose
  - 1.6.2. Role of the hospital pharmacist in opioid overdose prevention and education
  - 1.6.3. Management of opioid withdrawal in the hospital setting
  - 1.6.4. Naloxone and its use as an antidote in opioid overdose reversal
- 1.7. Opioid Withdrawal Syndrome
  - 1.7.1. Epidemiology and risk factors for the development of Opioid Withdrawal Syndrome
  - 1.7.2. Clinical evaluation and diagnosis of Opioid Withdrawal Syndrome in hospitalized patients
  - 1.7.3. Pharmacological management of Opioid Withdrawal Syndrome in the hospital setting
  - 1.7.4. Use of opioid agonist and antagonist drugs in the treatment of withdrawal syndrome
- 1.8. Agitated Patient Management
  - 1.8.1. Epidemiology and risk factors associated with agitation in hospitalized patients
  - 1.8.2. Pharmacotherapy for the management of acute agitation in inpatients
  - 1.8.3. Use of antipsychotics and benzodiazepines in the treatment of agitation
  - 1.8.4. Safety and prevention of complications in the management of the agitated patient
- 1.9. Acute pain management in the patient with substance abuse
  - 1.9.1. Pharmacological interactions between analgesics and substances of abuse
  - 1.9.2. Pharmacological strategies for acute pain management in patients with opioid abuse
  - 1.9.3. Acute pain Treatment in patient with Alcohol abuse
  - 1.9.4. Assessment and management of addiction risk in patients with substance abuse requiring analgesia

- 1.10. Alcohol Withdrawal Syndrome
  - 1.10.1. Clinical evaluation and diagnosis of Alcohol Withdrawal Syndrome in hospitalized patients
  - 1.10.2. Pharmacotherapy for the management of Alcohol Withdrawal Syndrome in the inpatient setting
  - 1.10.3. Use of benzodiazepines and other drugs in the treatment of Alcohol Withdrawal Syndrome
  - 1.10.4. Role of the hospital pharmacist in the management of Alcohol Withdrawal Syndrome

## Module 2. Pharmacology of the Gastrointestinal System

- 2.1. Chronic Hepatic Disease
  - 2.1.1. Diagnosis and classification of chronic liver diseases
  - 2.1.2. Biomarkers and liver function tests in diagnosis and follow-up
  - 2.1.3. Strategies for management and prevention of disease progression
  - 2.1.4. Pharmacological treatment of chronic liver disease
- 2.2. Upper gastrointestinal bleeding (UGH)
  - 2.2.1. Epidemiology and risk factors associated to Upper Gastrointestinal Bleeding
  - 2.2.2. Classification and Etiology of Upper Gastrointestinal Bleeding
  - 2.2.3. Diagnosis and early detection methods of HDA
  - 2.2.4. Pharmacological Treatment of HDA
- 2.3. Spontaneous Bacterial Peritonitis (SBP)
  - 2.3.1. Anatomy and physiology of the peritoneum and its relationship with PBE
  - 2.3.2. Clinical diagnosis and methods of detection of spontaneous bacterial peritonitis
  - 2.3.3. Evaluation and classification of patients with SBP
  - 2.3.4. Pharmacological treatment of spontaneous bacterial peritonitis
- 2.4. Hydroelectrolytic Alterations
  - 2.4.1. Sodium
  - 2.4.2. Chlorine
  - 2.4.3. Potassium
  - 2.4.4. Phosphorus
- 2.5. Clostridium difficile infection (CDI)
  - 2.5.1. Epidemiology and risk factors associated to CDI
  - 2.5.2. CDI Diagnosis
  - 2.5.3. Clinical evaluation of the patient with Clostridium difficile infection
  - 2.5.4. Pharmacological Treatment of CDI
- 2.6. Complicated intra-abdominal infection (CAIbc)
  - 2.6.1. Epidemiology and risk factors associated to complicated intra-abdominal infection
  - 2.6.2. Etiology and pathogenesis of cCBI
  - 2.6.3. Clinical evaluation of the patient with cBAI
  - 2.6.4. Pharmacological treatment of complicated intra-abdominal infection
- 2.7. Pancreatitis
  - 2.7.1. Epidemiology and risk factors associated to Pancreatitis
  - 2.7.2. Etiology and Classification of Pancreatitis
  - 2.7.3. Clinical diagnosis and methods of detection of Pancreatitis
  - 2.7.4. Pharmacological treatment of acute and chronic pancreatitis
- 2.8. Irritable Bowel Syndrome
  - 2.8.1. Anatomy and physiology of the gastrointestinal system related to irritable bowel syndrome
  - 2.8.2. Etiology and pathogenesis of irritable bowel syndrome
  - 2.8.3. Classification and subtypes of IBS
  - 2.8.4. Medical treatment of irritable bowel syndrome
- 2.9. Prokinetics and antiemetics
  - 2.9.1. Anatomy and physiology of the gastrointestinal system and the control of motility
  - 2.9.2. Classification and mechanisms of action of prokinetics and antiemetics
  - 2.9.3. Indications and contraindications for the use of prokinetics and antiemetics
  - 2.9.4. Pharmacological treatment of nausea and vomiting induced by opioids and other drugs
- 2.10. Pharmacology of drugs used in nutritional therapy
  - 2.10.1. Classification and Types of nutritional therapy
  - 2.10.2. Administration of drugs and enteral nutrition: interactions and special considerations
  - 2.10.3. Medications used for the management of malnutrition and nutritional support in critically ill patients
  - 2.10.4. Antibiotics and antifungals in enteral and parenteral nutrition patients

### Module 3. Pharmacology of infectious diseases and intoxications

- 3.1. Responsible Antibiotic Use
  - 3.1.1. Classification
  - 3.1.2. Mechanisms of action
  - 3.1.3. Spectrum of activity
  - 3.1.4. Principles of antibiotic pharmacokinetics and pharmacodynamics
- 3.2. Urinary Tract Infections (ITU)
  - 3.2.1. Anatomy and physiology of the urinary tract related to urinary tract infection
  - 3.2.2. Etiology and pathogenesis of cCBI
  - 3.2.3. Classification of Urinary Tract Infection
  - 3.2.4. Pharmacologic treatment of urinary tract infection
- 3.3. Skin and soft tissue infection (STEMI)
  - 3.3.1. Anatomy and physiology of skin and soft tissues related to IPPB
  - 3.3.2. Classification and Types of Skin and Soft Tissue Infections
  - 3.3.3. Evaluation of the patient with IPPB in the hospital setting
  - 3.3.4. Pharmacologic treatment of Skin and Soft Tissue Infections
- 3.4. Pneumonia
  - 3.4.1. Anatomy and physiology of the Respiratory System relationship with Pneumonia
  - 3.4.2. Etiology and pathogenesis of pneumonia
  - 3.4.3. Classification of pneumonia according to etiology and severity
  - 3.4.4. Pharmacological Treatment of Pneumonia
- 3.5. Meningitis
  - 3.5.1. Anatomy and physiology of the central nervous system relationship with Meningitis
  - 3.5.2. Classification of meningitis according to the causative agent and the clinical presentation
  - 3.5.3. Evaluation and classification of the patient with meningitis
  - 3.5.4. Pharmacological Treatment of Meningitis
- 3.6. Sepsis
  - 3.6.1. Anatomy and physiology of the Immune function System relationship with Sepsis
  - 3.6.2. Etiology and pathogenesis of Sepsis
  - 3.6.3. Classification and Stages of Sepsis
  - 3.6.4. Pharmacological Treatment of Sepsis





- 3.7. Acute psychosis and delirium
  - 3.7.1. Etiology and pathogenesis of acute psychosis and delirium
  - 3.7.2. Classification and subtypes of acute psychosis delirium
  - 3.7.3. Assessment and classification of the patient with acute psychosis and delirium in the hospital setting
  - 3.7.4. Pharmacological treatment of acute psychosis and delirium
- 3.8. Acetylsalicylic acid (ASA) intoxication
  - 3.8.1. Toxicokinetics of acetylsalicylic acid in intoxication
  - 3.8.2. Toxic effects and clinical symptoms associated with acetylsalicylic acid poisoning
  - 3.8.3. Clinical diagnosis and methods of detection of AAS poisoning
  - 3.8.4. Treatment and pharmacotherapeutic management of ASA poisoning
- 3.9. Paracetamol poisoning
  - 3.9.1. Toxicokinetics of Paracetamol in poisoning
  - 3.9.2. Toxic effects and clinical symptoms associated with Paracetamol poisoning
  - 3.9.3. Clinical diagnosis and methods of detection of Paracetamol poisoning
  - 3.9.4. Treatment and pharmacotherapeutic management of ASA poisoning
- 3.10. Antidotes
  - 3.10.1. General principles of poisoning management in the hospital setting
  - 3.10.2. Identification and diagnosis of poisonings and intoxications
  - 3.10.3. Pharmacotherapeutic management of poisonings
  - 3.10.4. Use and administration of antidotes in specific poisonings

“ *It delves with the best didactic material in the most current Pharmacology used to treat Meningitis, Pneumonia or Skin Infection* ”

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. 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 Diploma in Pharmacology and Toxicology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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 Diploma in Pharmacology and Toxicology** 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 Pharmacology and Toxicology**

Official N° of Hours: **450 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.



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

**tech** technological  
university

**Postgraduate Diploma**  
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