

# Postgraduate Certificate

## Hospital Pharmacology of the Genitourinary, Obstetric and Gynecologic System





## Postgraduate Certificate Hospital Pharmacology of the Genitourinary, Obstetric and Gynecologic System

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

Website: [www.techtitute.com/us/pharmacy/postgraduate-certificate/hospital-pharmacology-genitourinary-obstetric-gynecologic-system](http://www.techtitute.com/us/pharmacy/postgraduate-certificate/hospital-pharmacology-genitourinary-obstetric-gynecologic-system)

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# 01

# Introduction

The discovery in 1961 that thalidomide was teratogenic changed the use of drugs during pregnancy. It went from a period of great permissiveness, since it was assumed that the placenta acted as a barrier protecting the fetus from the adverse effects of the drugs, to a period of total prohibition. Today it is accepted that drugs should be used rationally during pregnancy, assessing the benefit-risk ratio for the woman and the embryo. Due to the evolution of this field of study, this program has been created to provide the professionals with a unique content related to the management of Gestational Hypertension from its pathophysiology, risk assessment and pharmacological treatment. This with the support of a pedagogical format of 100% online modality.





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*In this program you will find multiple research advances in Hospital Pharmacology of the Genitourinary, Obstetric and Gynecological System”*

Most drugs cross the placenta and can act on the pregnancy from the moment of conception until delivery. The concentrations of free substances are, in many cases, equal or higher in fetal serum and amniotic fluid than in maternal plasma. There are drugs that can be considered safe during pregnancy, although others can cause anomalies to the fetus during the gestation process. For this reason, the industry expert has opted, at present, not to avoid all types of drugs in order to avoid and prevent any contraindication for the mother or the embryo.

In this sense, studies and tests in this field of study have continued to advance to answer multiple questions, affirming that experts in Pharmaceutics will continue to be at the forefront in this area of knowledge. In this way, this Postgraduate Certificate will provide the professionals with important updates in the field of Hospital Pharmacology of the Genitourinary, Obstetric and Gynecologic System and the precise pharmacological management of sexually transmitted diseases.

The graduates will enhance their competences in relevant areas such as how to differentiate the physiopathology, classification, treatment of cystitis and pharmacotherapeutic follow-up after a culture. This is a program that has an exceptionally specialized teaching staff and at the same time, supported with high quality teaching material that also offers the convenience of the online modality.

Likewise, for TECH it is important to coordinate excellence with comfort. That is why this program offers a very complete and first level update, achieving a qualification of great flexibility by only needing a device with Internet connection, obtaining an easy access to the virtual platform from the comfort of your home.

This **Postgraduate Certificate in Hospital Pharmacology of the Genitourinary, Obstetric and Gynecologic System** 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 the self-assessment process can be carried out 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



*At TECH you will continue to expand your knowledge and you will be able to answer questions, thanks to the didactic tools that complement the Hospital Pharmacy program"*

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*TECH offers you multimedia content to support you in achieving your goals, providing you with dynamism and comfort with the online methodology”*

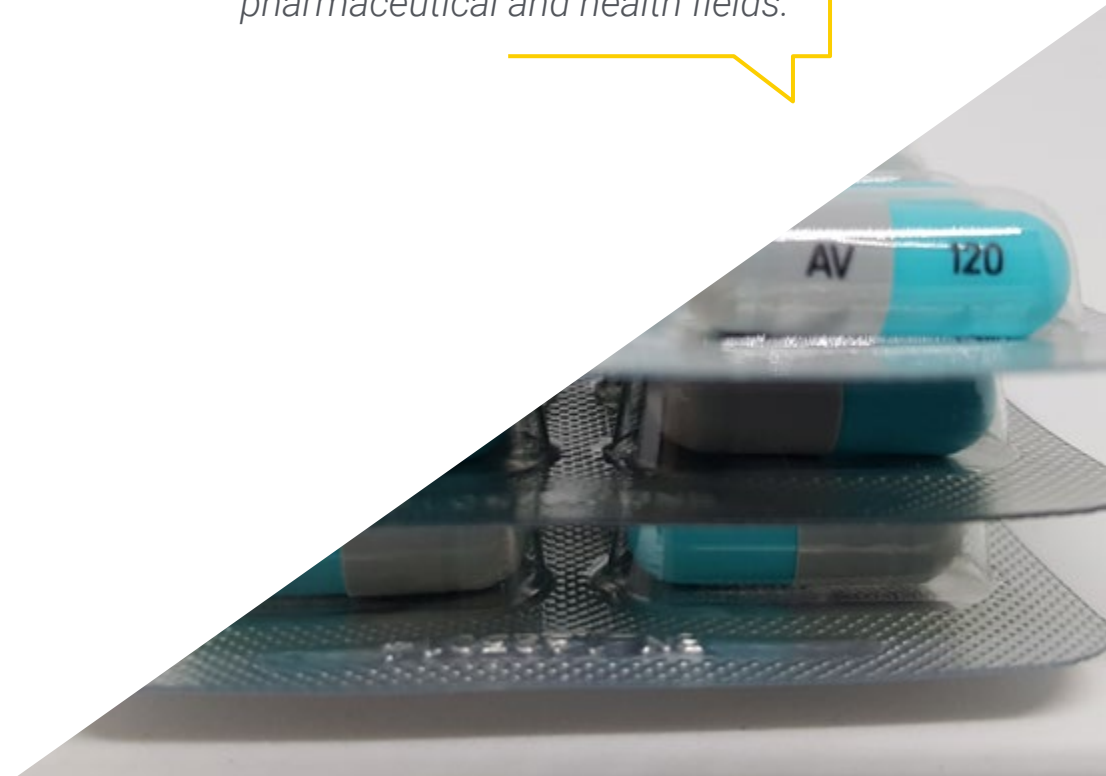
*In this Postgraduate Certificate you will strengthen your skills in the management of Gestational Hypertension from its pathophysiology.*

*This program has been designed by distinguished specialists in the pharmaceutical and health fields.*

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 Certificate in Hospital Pharmacology of the Genitourinary, Obstetric and Gynecologic System has been designed primarily to provide the professionals with the most recent updates in the field of Hospital Pharmacology. For this reason, TECH provides several innovative tools, optimally achieving the development of the program. Upon completion of this program, students will have strengthened their knowledge related to the management of Gestational Hypertension from its pathophysiology, risk assessment, clinical presentation and pharmacological treatment.







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*TECH provides you with different tools of academic innovation to identify microorganisms related to vaccination and HIV prophylaxis”*



## General Objectives

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- ◆ Identify the 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 issues, patient-specific and disease-specific information, and laboratory data
- ◆ Summarize strategies for the procurement, preparation, and administration of time-sensitive therapies
- ◆ Assess 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





## Specific Objectives

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- ◆ Identify the microorganisms related to Sexual Aggression, recommended tests, empirical treatment, emergency contraception, vaccination and HIV prophylaxis
- ◆ Manage the precise pharmacology for sexually transmitted diseases such as Chlamydia, Gonorrhoea, Syphilis, as well as their incidence
- ◆ Investigate the management of Gestational Hypertension from its pathophysiology, risk assessment, clinical presentation and pharmacological treatment
- ◆ Differentiate the pathophysiology, classification, treatment of cystitis and pharmacotherapeutic follow-up after culture



*In this Postgraduate Certificate you will perfect your competences in the management of the precise pharmacology for sexually transmitted diseases”*

03

# Course Management

TECH offers an elite education for the professional who studies its university qualifications thanks to the technological resources that achieve the success of each of its programs. In this way, the graduates will have access to exclusive content developed and guided by a teaching team specialized in pharmacotherapeutic supervision of critically ill patients, Pharmacotherapeutic Follow-up of HIV/AIDS patients and Medical Science Liaison. Their wide experience and deep knowledge will allow the graduates to solve doubts or answer questions that may arise during the course of the program.





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*Reach your objectives with highly experienced experience and the best didactic tools in the current academic panorama”*

## Management



### Mr. Ramo 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

### D. Amor García, Miguel Ángel

- ♦ Hospital pharmacist at Infanta Cristina University Hospital
- ♦ Coordinator of the FarMIC Group of the Spanish Society of Hospital Pharmacy
- ♦ Member of the National Commission of Hospital Pharmacy, Ministry of Health of Spain
- ♦ Resident pharmacist at Gregorio Marañón University Hospital
- ♦ Hospital pharmacist at Salamanca Clinical Hospital
- ♦ Master's Degree in Medical Science Liaison at CESIF
- ♦ Degree in Pharmacy from the University of Salamanca



# 04

# Structure and Content

This program has been designed and developed according to the highest standards of the pharmaceutical field and the continuous research of the sector, establishing a study plan that provides a great content in Hospital Pharmacology of the Genitourinary, Obstetric and Gynecological System. This Postgraduate Certificate has an emphasis on offering the best advanced information on Pharmacology of drugs used in the management of gestational hypertension. All this, by means of multiple multimedia tools that offer dynamism and a better experience to the professional in the academic process of this university qualification.








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*A syllabus developed by specialists with an exclusive content on Hospital Pharmacology of the Genitourinary, Obstetric and Gynecological System”*

## Module 1. Pharmacology of the Genitourinary, Obstetric and Gynecologic System

- 1.1. Sexual Assault
  - 1.1.1. Medical and pharmacological considerations in the immediate care of victims of sexual assault
  - 1.1.2. Pharmacotherapy for the prevention and treatment of sexually transmitted infections (STIs)
  - 1.1.3. Post-exposure prophylaxis (PEP) for HIV and other STIs in victims of sexual assault
  - 1.1.4. Pharmacologic therapy to prevent and treat physical injuries and psychological complications
- 1.2. Sexually Transmitted Diseases
  - 1.2.1. Epidemiology of sexually transmitted diseases
  - 1.2.2. Prevention and promotion of sexual health in at-risk populations
  - 1.2.3. Pharmacotherapy for the treatment of sexually transmitted infections (STIs)
  - 1.2.4. Post-exposure prophylaxis (PEP) for HIV and other STIs
- 1.3. Gestational hypertension
  - 1.3.1. Classification and diagnosis of gestational hypertension
  - 1.3.2. Pharmacology of drugs used in the management of gestational hypertension
  - 1.3.3. Monitoring and control of blood pressure in pregnant women
  - 1.3.4. Pharmacological management of mild and severe gestational hypertension
- 1.4. Venous thromboembolism
  - 1.4.1. Classification and diagnosis of venous thromboembolism
  - 1.4.2. Pharmacology of anticoagulants used in the treatment of VTE
  - 1.4.3. Use of parenteral and oral anticoagulants in the management of VTE
  - 1.4.4. VTE prophylaxis in hospitalized and surgical patients
- 1.5. Acute uncomplicated cystitis
  - 1.5.1. Classification and diagnosis of Acute Cystitis
  - 1.5.2. Pharmacology of antibiotics used in the treatment of Acute Cystitis
  - 1.5.3. Use of analgesic drugs in pain relief in acute cystitis
  - 1.5.4. Alternatives to antibiotics in the treatment of Acute Cystitis



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- 1.6. Urinary Tract Infections
    - 1.6.1. Classification and diagnosis of Urinary Tract Infection
    - 1.6.2. Pharmacology of antibiotics used in the treatment of the ITU
    - 1.6.3. Use of analgesic drugs in pain relief in the ITU
    - 1.6.4. Treatment of complicated and recurrent urinary tract infections
  - 1.7. Principles of pharmacokinetics and pharmacodynamics applied to gynecologic drug medications
    - 1.7.1. Principles of absorption
    - 1.7.2. Principles of metabolism
    - 1.7.3. Principles of excretion
    - 1.7.4. Relevant drug interactions in the area of Gynecology
  - 1.8. Pharmacology of drugs used in the Genitourinary System
    - 1.8.1. Drugs used in the treatment of urinary tract infections (UTI)
    - 1.8.2. Drugs used in the treatment of erectile dysfunction and other sexual disorders
    - 1.8.3. Pharmacotherapy in the management of benign prostatic hyperplasia (BPH)
    - 1.8.4. Medications for the management of renal disorders, such as nephritis and chronic renal failure
  - 1.9. Pharmacology of the obstetric system
    - 1.9.1. Pharmacology of prenatal supplements and micronutrients used in pregnancy
    - 1.9.2. Drugs used in the treatment of nausea and vomiting of pregnancy
    - 1.9.3. Drugs for the management of hypertensive disorders in pregnancy (preeclampsia and eclampsia)
    - 1.9.4. Use of drugs in the prevention and treatment of infections during pregnancy
  - 1.10. Pathophysiology of menstrual disorders
    - 1.10.1. Menstrual bleeding disorders: menorrhagia, metrorrhagia, and hypomenorrhea
    - 1.10.2. Premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD)
    - 1.10.3. Endometriosis: pathologic mechanisms and clinical manifestations
    - 1.10.4. Polycystic ovary syndrome (PCOS): characteristics and consequences

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

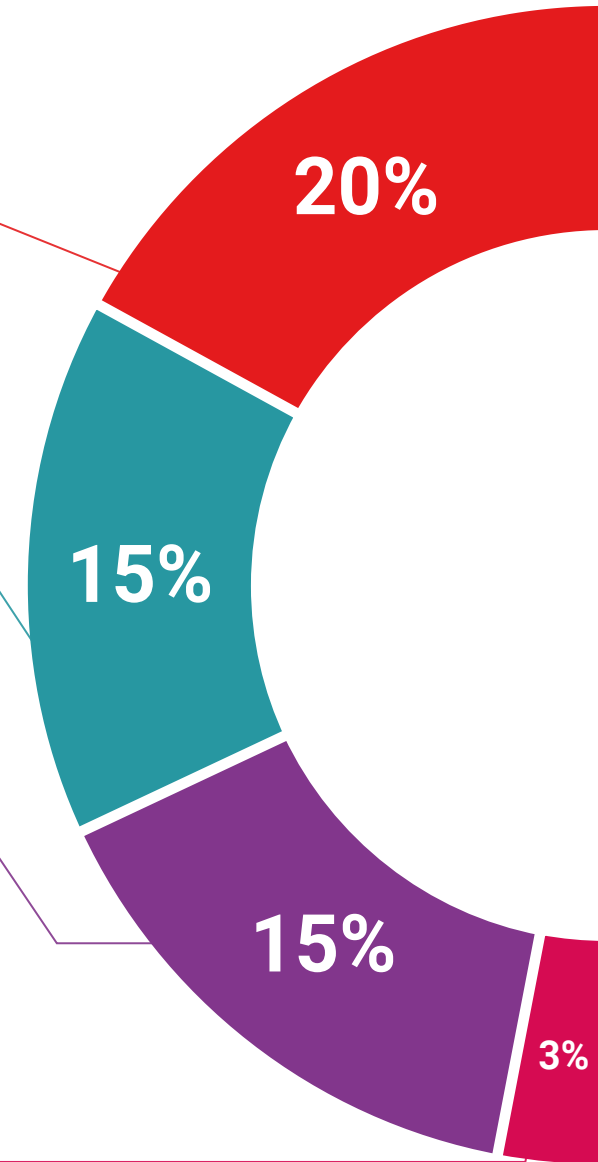
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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 Certificate in Hospital Pharmacology of the Genitourinary, Obstetric and Gynecologic System 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 Hospital Pharmacology of the Genitourinary, Obstetric and Gynecologic System** 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 Hospital Pharmacology of the Genitourinary, Obstetric and Gynecologic System**

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.

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



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Hospital Pharmacology of  
the Genitourinary, Obstetric  
and Gynecologic System

- » Modality: **online**
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