## Postgraduate Certificate

Urinary Tract and Sexually Transmitted Infections





## Postgraduate Certificate

Urinary Tract and Sexually Transmitted Infections

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Acceso web: www.techtitute.com/us/pharmacy/postgraduate-certificate/urinary-tract-sexually-transmitted-infections

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## tech 06 | Introduction

Urinary tract infections are more frequent among women, due to the female anatomy. In fact, it is estimated that half of all women may suffer a urinary tract infection in their lifetime. These pathologies are easily treated, but untreated infections can lead to more serious health problems.

In the case of sexually transmitted infections, they can go unnoticed by sufferers, since some may not present physical symptoms, which makes it difficult to diagnose them until there is no complication. In addition, there are sexually transmitted infections that can be passed from pregnant mothers to their children, leading to serious problems or even death.

The development and spread of bacterial resistance to antibiotics is one of the main problems of infection control in most countries, which is why it is considered one of the main health problems worldwide.

Therefore, pharmacy professionals, regardless of where they work, can see in this Postgraduate Certificate the opportunity to take a teaching program that brings together the most advanced and in-depth knowledge of the most important health problems in the field of infectious diseases and microbiology, where a group of professors of high scientific rigor and extensive international experience provides the most complete and up-to-date information on prevention, diagnosis, treatment and care of individual patients and population groups, suffering from the most prevalent and deadly infectious diseases. In this case, the program focuses on the different Urinary Tract and Sexually Transmitted Infections.

This **Postgraduate Certificate in Infections in the Urinary Tract and Sexually Transmitted Infections** endorses the latest advances in infectious diseases with a teaching program that positions it as an educational product of the highest scientific

teaching program that positions it as an educational product of the highest scientific rigor at international level. Additionally, this program provides training and professional development in different areas:

- Clinical symptoms development medicine to be able to address the infectious healthdisease process in a particular person through the study of the most prevalent and deadly infectious diseases, and, in epidemiology, to study the behaviour of the same phenomenon in a population
- The indication, performance and interpretation of the main state-of-the-art diagnostic tests to complement clinical skills in the diagnostic process. Emphasizing the most up-to-date microbiological tests used to rapidly diagnose germs and study antimicrobial
- The complex and determining pathophysiological relationships between the immune response and infectious agents
- Germs related to neoplasms and chronic non-communicable diseases
- Development and production of vaccines for the control of morbidity and mortality due to infectious diseases
- The important field of antimicrobial therapeutics, providing the best available information on the development and production of new antibiotics



Make the most of this Postgraduate
Postgraduate Certificate to
update your knowledge, expand
your education and obtain a
certified qualification from TECH
Technological University"



Learn about the problems of Urinary Tract and Sexually Transmitted Infections thanks to this Postgraduate Certificate.

Its teaching staff is made up of prestigious and renowned professionals with a long career in health care, teaching and research, who have worked in many countries on several continents, developing professional and teaching experience that they deliver in an extraordinary way in this Postgraduate Certificate.

The methodological design of this Postgraduate Certificate, developed by a multidisciplinary team of e-learning experts, integrates the latest advances in educational technology for the creation of numerous educational multimedia tools that allow the professional, based primarily around the Problem-Based Learning method, to address real problems in their daily clinical practice, which will allow them to advance by acquiring knowledge and developing skills that will impact their future professional work.

It should be noted in this Postgraduate Certificate that each of the contents generated, as well as the videos, self-evaluations, clinical cases and exams, have been thoroughly reviewed, updated, and integrated by the teachers and the team of experts that make up the working group, to facilitate the learning process with a step-by-step approach in order to achieve the teaching program objectives.

This is the best option you can find to continue your training and grow as a pharmacist.



# 02 **Objectives**

The main objective of the Postgraduate Certificate is the improvement of pharmacy professionals, by helping them acquire the most up-to-date and innovative scientific knowledge in the field of infectious diseases and how they are treated, allowing them to develop the skills that will turn their daily pharmaceutical practice into a benchmark of the standards of the best scientific evidence available, with a critical, innovative, multidisciplinary and integrative sense.



## tech 10 | Objectives



## **General Objectives**

• Guarantee professional improvement, through up-to-date and in-depth knowledge of the best scientific evidence, for the prevention, diagnosis, and treatment of infectious diseases with a multidisciplinary and integrative approach that facilitates the control of these pathologies



Combine your profession with your studies thanks to the case of this studies thanks to the ease of this 100% online diploma. Work with the latest educational technology, with an innovative interactive video system"





## Objectives | 11 tech



## **Specific Objectives**

- Provide students with advanced, in-depth, updated, and multidisciplinary information that allows them to comprehensively approach the process of health-infectious diseases
- Provide training and practical theoretical improvement that will enable a reliable clinical diagnosis supported by the efficient use of diagnostic methods to indicate an effective integral treatment
- Describe the clinical, diagnostic and treatment features of sexually transmitted infections
- Address in detail and depth the most up-to-date scientific evidence in the vast world of hepatitis

03
Course Management

Renowned and recognized pharmacists and medical specialists with numerous publications, teaching experience, and professional experience in many countries, where many of the diseases studied have a high morbimortality participate in the teaching program. The teaching staff is made up of a multidisciplinary team from various medical specialities, such as internal medicine, pediatrics, general surgery, gynecology and obstetrics, microbiology, pathological anatomy, pharmacology, among others.



## tech 14 | Course Management

## Management



## Dr. Díaz Pollán, Beatriz

- Faculty Specialist Déu Hospital La Paz University Hospital
- Official Doctoral Programme in Clinical Medicine Clinical symptoms, University Rey Juan Carlos
- Degree in Medicine and Surgery, Universidad Autónoma de Madrid.
- Master's Degree in Infectious Diseases and Antimicrobial Treatment from CEU Cardenal Herrera University
- · Postgraduate Certificate in Community and Nosocomial Infections from CEU Cardenal Herrera University
- Postgraduate Certificate in Chronic Infectious Diseases and Imported Infections from CEU Cardenal Herrera University
- Postgraduate Certificate in Microbiological Diagnosis, Antimicrobial Treatment and Research in Infectious Pathology from CEU Cardenal Herrera University
- Faculty Specialist Déu Hospital San Carlos Clinical Hospital
- Resident doctor, San Carlos Clinical Hospital

## **Professors**

### Dr. Rico, Alicia

- Specialist in the Microbiology and Parasitology Department at La Paz University Hospital, Madrid
- Degree in Medicine from the Complutense University of Madrid.
- Doctorate Courses at the Complutense University of Madrid
- Assistant and co-founder of the Infectious Diseases and Clinical Microbiology Unit, La Paz University Hospital, Madrid
- Clinical teaching collaborator Department of Medicine of the UAM

## Dr. Ramos, Juan Carlos

- Doctor at La Paz University Hospital, Madrid
- Official Doctoral Programme in Clinical Medicine. University of Alcalá
- $\bullet\,$  Degree in Medicine and Surgery from the Complutense , University of Madrid
- Master's Degree in Infectious Diseases in Intensive Care, Fundación Universidad-Empresa Valencia
- Author of several community publications

#### Dr. Loeches Yagüe, María Belén

- Specialist in the area of Infectious Diseases at La Paz General University Hospital, Madrid.
- \* Doctor in Medicine, Autonomous University, Madrid
- Degree in Medicine at Madrid Complutense University
- Master in Theoretical and Practical Learning in Infectious Diseases. Complutense University of Madrid
- Specialised Training in Microbiology and Infectious Diseases. Gregorio Marañón General University Hospital
- Professor of Infectious Diseases at the Infanta Sofía University Hospital in Madrid, European University of Madrid

#### Dr. Arribas López, José Ramón

- Head of Department of the Infectious Diseases and Clinical Microbiology Unit, La Paz University Hospital of Internal Medicine, Madrid
- Doctor in Medicine, Autonomous University, Madrid.
- Degree in Medicine and Surgery from the Complutense University of Madrid.
- Coordinator of the High-Level Isolation Unit La Paz Carlos III
- Member Interministerial Committee for the management of the Ebola crisis
- Head of the AIDS and Infectious Diseases research group at IdiPAZ

#### Dr. Mora Rillo, Marta

- Specialist in the area of Infectious Diseases at La Paz University Hospital
- \* Doctor in Medicine, Autonomous University, Madrid
- Degree in Medicine and Surgery, University of Zaragoza.
- \* Master's Degree in Infectious Diseases in Intensive Care, University of Valencia
- Online Master's Degree in Infectious Diseases and Antimicrobial Treatment from CEU Cardenal Herrera University
- Master's Degree in Tropical Medicine and International Health, Autonomous University of Madrid
- Expert in Emerging and High-Risk Virus Pathology, Autonomous University of Madrid
- Expert in Tropical Medicine, Autonomous University of Madrid

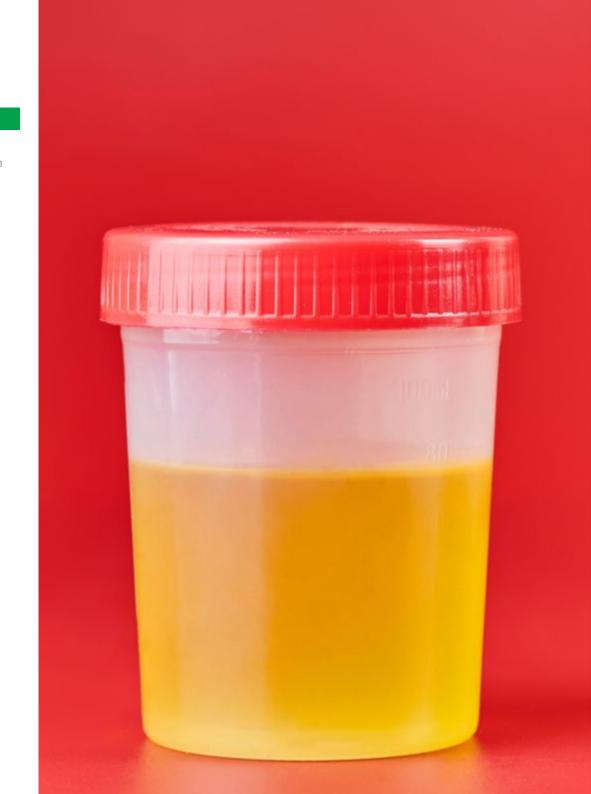




## tech 18 | Structure and Content

## **Module 1.** Urinary Tract and Sexually Transmitted Infections

- 1.1. Epidemiology of Urinary Tract Infection
  - 1.1.1. Factors Explaining the Increased Morbidity of Urinary Tract Infection in Women
- 1.2. Immunology of the Urinary System
  - 1.2.1. The Immune Response in the Genitourinary System
- 1.3. Classification of Urinary Tract Infection
  - 1.3.1. Types of Urinary Tract Infections
- 1.4. Urinary Infection
  - 1.4.1. Etiology
  - 1.4.2. Clinical Picture
  - 1.4.3. Diagnosis
  - 1.4.4. Treatment
- 1.5. Urinary Tract Infection in the Bladder Catheterised, Prostatic and Elderly Patient
  - 1.5.1. Urinary Tract Infection in the Bladder Catheterised Patient
  - 1.5.2. Urine Infection in a Patient
  - 1.5.3. Urine Infection in Elderly Patients
- 1.6. Most commonly used antimicrobials in urinary tract infections
  - 1.6.1. Pharmacological Elements
  - 1.6.2. Antimicrobial Resistance of the Main Bacteria Affecting the Urinary Tract
- 1.7. Epidemiological Update on Major STIs
  - 1.7.1. Main STIs
  - 1.7.2. Epidemiological News
- 1.8. Viral STIs
  - 1.8.1. Perinatal Herpes Simplex
  - 1.8.2. Viral Hepatitis
  - 1.8.3. Human papillomavirus
  - 1.8.4. HIV





## Structure and Content | 19 tech

- 1.9. Bacterial STIs
  - 1.9.1. Gonorrhoea
  - 1.9.2. Syphilis
  - 1.9.3. Soft Chancre
  - 1.9.4. Lymphogranuloma Venereum
- 1.10. Trichomoniasis and Genital Candidiasis
  - 1.10.1. Trichomoniasis: Epidemiology, Aetiology, Clinical Picture, Diagnosis and
  - 1.10.2. Genital Candidiasis: Epidemiology, Etiology, Clinical Picture, Diagnosis and Treatment
- 1.11. The syndromic Approach to STIs and Control Measures
  - 1.11.1. Main Clinical Framework
  - 1.11.2. STI Control Measures
- 1.12. Multidrug-Resistant Gonococcus: Treatment Alternatives
  - 1.12.1. Global Situation
  - 1.12.2. Alternative Treatments.
- 1.13. Current Management of Recurrent Herpes Infection
  - 1.13.1. Focus Latest Information of Recurrent Herpes Infection



The content of this course focuses on the infections that most affect most common infections that most affect tourists tourists in their international travels"

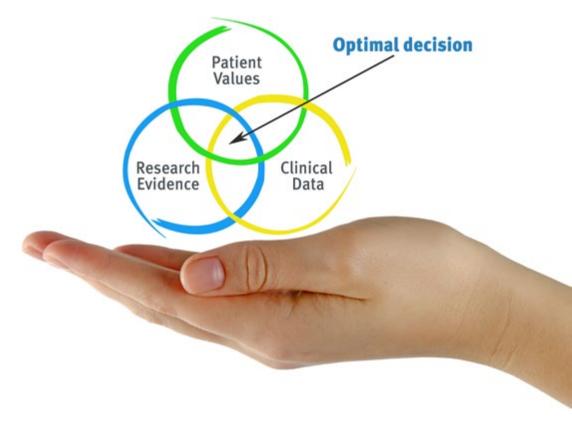


## tech 22 | Methodology

#### 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. 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 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.



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.



## tech 24 | Methodology

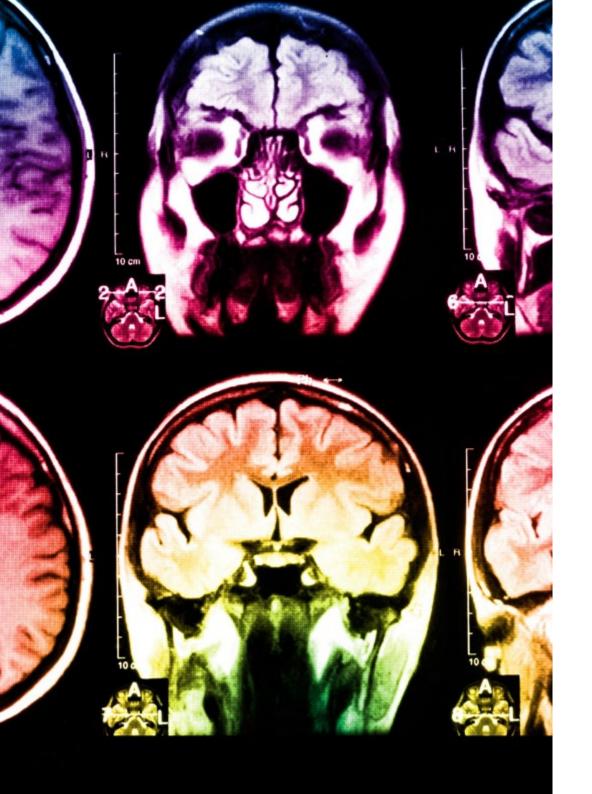
## **Relearning Methodology**

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.





## Methodology | 25 tech

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.

## tech 26 | Methodology

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**

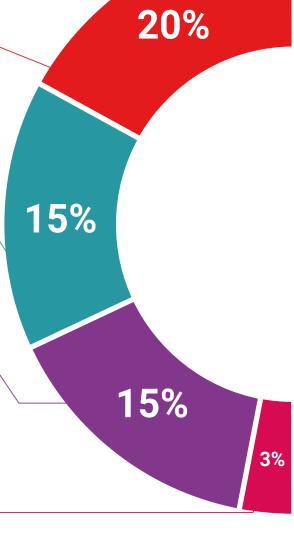
TECH introduces students to the latest techniques, to the latest educational advances, to the forefront of current pharmaceutical care procedures. All of this, first hand, and explained and detailed with precision to contribute to assimilation and a better understanding. And best of all, you can watch 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.

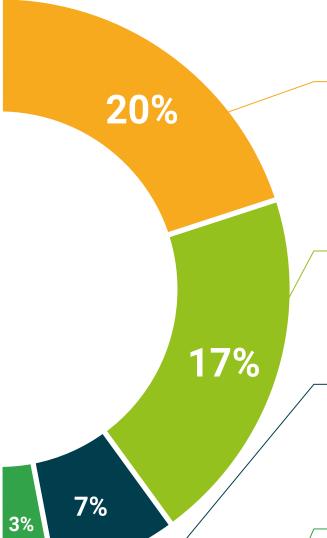
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **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.







## tech 29 | Certificate

This **Postgraduate Certificate in Urinary Tract and Sexually Transmitted Infections** 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 Urinary Tract and Sexually Transmitted Infections
Official N° of Hours: 150 h.



#### Urinary Tract and Sexually Transmitted Infections

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country

Unique TECH Code: AFVICRI2232 techtitute convicertificates

<sup>\*</sup>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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# Postgraduate Certificate Urinary Tract and Sexually Transmitted Infections

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## Postgraduate Certificate Urinary Tract and Sexually Transmitted Infections icle-Stimulating Hormo sphatase Globulin protein (AFP) Glucose Glycohemoglobin (HbA) ts (Coombs Test) Gonorrhea ntibodies (ANA) Growth Hormone inotransferase (AST) HDL Cholesterol Helicobacter pylori Hepatitis Panel Homocysteine cose Human Chorionic C **Blood Type** Blood Urea Nitrogen (BUN) Breast Cancer (BRCA) Gene CD4+ C-Reactive Protein (CRP) Cherr Chla Calcium (Ca) Blood Urea Nitrogen (BUN Cardiac Enzyme Studies Blood Glucose chl Cancer (BRCA) Gen CD4+ Count Ch tech technological Blood Type Chemistry Screen CC university - tain (CRP) **Chlamy**dia Tests Chloride (CI) plactoral and Triglycerides