



Risk Situations Prevention Measurements and Infectious Diseases Therapy

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 16 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/pharmacy/postgraduate-diploma/postgraduate-diploma-risk-situations-prevention-measurements-infectious-diseases-therapy

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tech 06 | Introduction

This program offers the student the possibility of deepening and updating knowledge, using the latest educational technology. It offers a global vision of Risk Situations, Prevention Measurements and Infectious Diseases Therapy, while focusing on the most important and innovative aspects.

This program arises as a response to an important need in the field of Infectious Diseases. Today, this need responds, among other things, to the emergence of certain diseases that are unknown or have little practice (zika, chikungunya, hemorrhagic fevers, among others), and with others that have fallen into oblivion or are unknown to less experienced pharmacists such as diphtheria, measles, pertussis (whooping cough), or flaccid paralysis associated with poliovirus vaccines.

At the therapeutic level, the emergence of resistance (BLEES, MRSA, carbapenem-resistant enterobacteria, etc.), often caused by the unwise and irrational use of drugs, creates problems for the clinician when it comes to initial empirical treatment in certain situations.

On the other hand, parents who refuse vaccines, children from low-income backgrounds, infections in transplant recipients, children with devices, fevers without focus in well-vaccinated children are increasingly common situations that the pharmacist has to deal with.

All this means that, in order to provide the best possible care, the pharmacist must continuously update themselves, even if they are not a specialist, since the percentage of visits or inter-consultations related to infection is very high. If we add to this the increasing amount of information provided by parents, sometimes not always contrasted, professional updating becomes essential to be able to provide adequate information according to the current scientific evidence at all times.

With this program you will have the opportunity to study a teaching program that brings together the most advanced and in-depth knowledge in the field, where a group of professors of high scientific rigor and extensive international experience provides you with the most complete and up-to-date information on the latest advances and techniques for risk situations, prevention measures and therapy in Infectious diseases.

This Postgraduate Diploma in Risk Situations, Prevention Measurements and Infectious Diseases Therapy contains the most complete and up-to-date scientific program on the market. The most important features include:

- Clinical cases presented by experts in the different specialisms
- 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
- Developments on Risk Situations, Prevention Measurements and Infectious Diseases Therapy
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- With special emphasis on evidence-based medicine and research methodologies in Risk Situations, Prevention Measurements and Infectious Diseases Therapy
- All of this will be complemented by 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



This Postgraduate Diploma in Risk Situations, Prevention Measurements and Infectious Diseases Therapy contains the most complete and upto-date program on the market"



This Postgraduate Diploma may be the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Risk Situations, Prevention Measurements and Infectious Diseases Therapy, you will obtain a qualification endorsed by TECH Technological University"

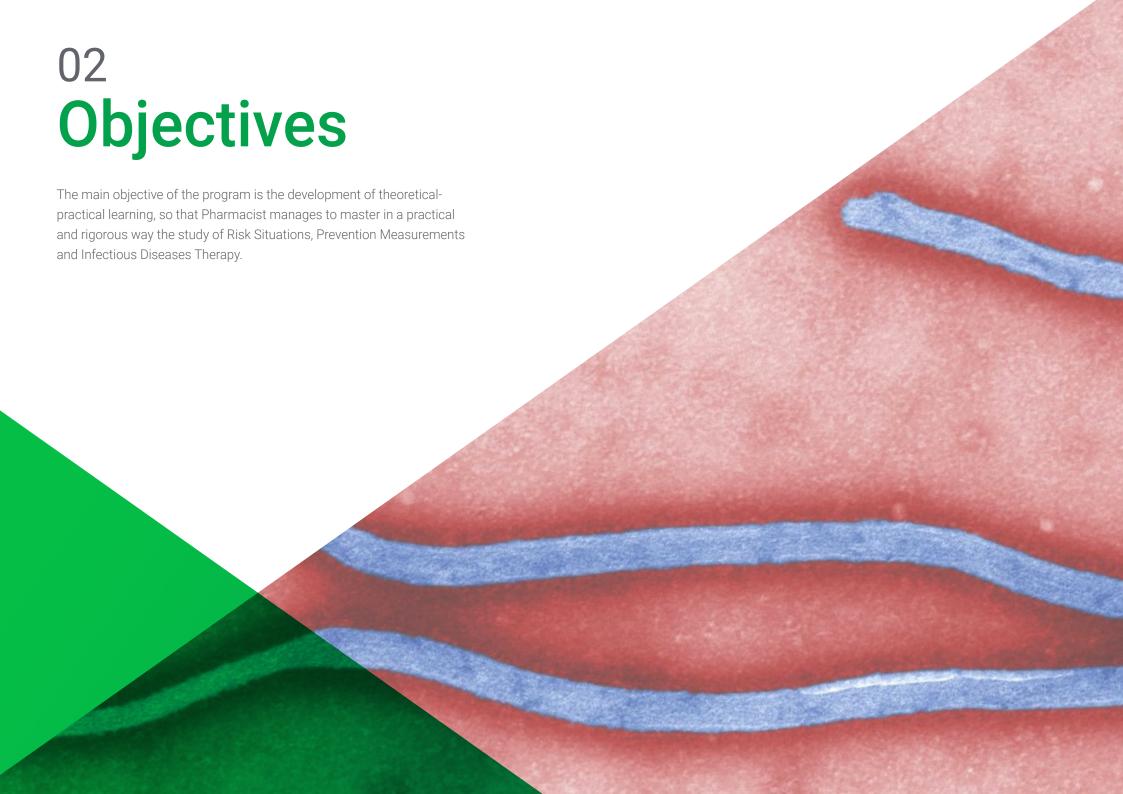
Don't miss the opportunity to update your knowledge in Risk Situations, Prevention Measurements and Infectious Diseases Therapy in order to improve your patient care.

Forming part of the teaching staff is a group of , professionals in the field of Risk Situations, Prevention Measurements and Infectious Diseases Therapy, who bring their work experience to this program, as well as a group of renowned specialists, recognized by esteemed scientific communities.

Thanks to its multimedia content developed with the latest educational technology, it will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to prepare for real situations

This program is designed around Problem-Based Learning, by means of which the pharmacist must try to solve the different situations of professional practice that arise during the course. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of Prevention and Therapy in Infectious diseases with extensive teaching experience.







tech 10 | Objectives

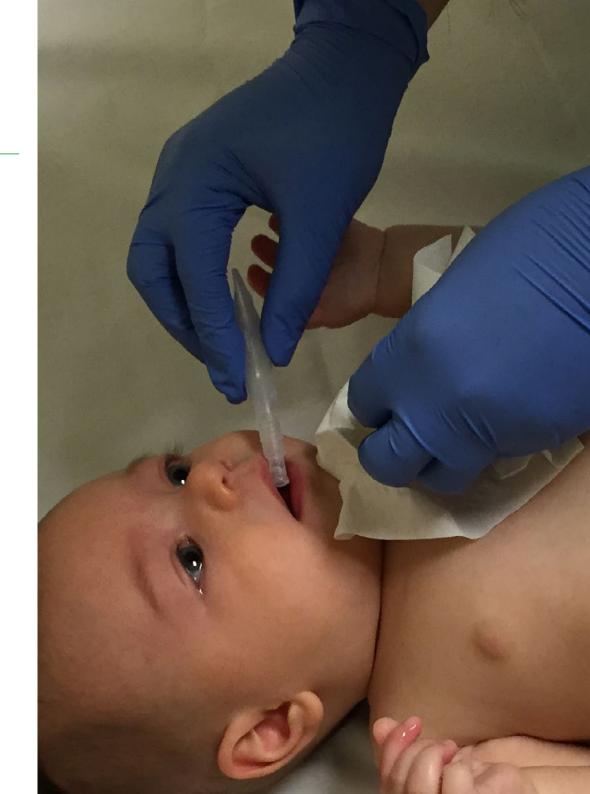


General Objective

• Update the knowledge of the pharmacist who cares for children, through the latest advances in the field of Infectious Diseases, in order to increase the quality of care, the safety of professional secrecy and achieve the best outcome for the patient's health



The pharmacist will be able to learn with the advantages that stem from having access to simulated learning environments and the "Learning from an expert" approach, in which they learn through observation"









Specific Objectives

- Describe the current epidemiology with the changes that have occurred in the last decade.
- Identify the epidemiological situation of bacterial meningitis
- Explain the epidemiology of tuberculosis in our environment and the resistance to treatment
- Describe the microbiome, its relationship to health and disease
- Explain the role of fever associated with infection and antipyretic therapeutics
- Describe the alterations of the immune system that contribute to vulnerability to infection
- Describe the management of severe sepsis and code sepsis
- Identify the up-to-date diagnostic criteria for viral hepatitis and their current treatment
- Describe the appropriate management of tuberculosis: infection, disease and contact study
- Acquire current knowledge of *Mycoplasma* pathology
- Describe the management of vertically transmitted or adolescent HIV infection
- Describe the use of anti-retrovirals, determination of resistance and side effects
- Describe the optimal and rational use of anti-bacterials against multidrug-resistant bacteria
- Describe the current use of vaccines, doses, intervals, side effects, responses to antivaccine movements
- Describe the indications for antibiotic prophylaxis and post-exposure prophylaxis





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Guest Director



Dr. Hernández-Sampelayo Matos, Teresa

- Head of Pediatrics Service and ACES Cajal Hospital Gregorio Marañon General University Hospital
- Head of the Pediatric Infectious Diseases Section at the Gregorio Marañon General University Hospital
- Accreditation by ANECA as a contract professor Doctor of the National Agency for Quality Assessment and Accreditation
- Emergency Pediatrics at the Autonomous University of Madrid. Medicine
- Pediatric Gastroenterology, Autonomous University of Madrid. Medicine
- Neonatology Autonomous University of Madrid. Medicine
- Project on Determination of free cytokine profile in plasma and specific response against Mycobacterium tuberculosis. Utility as biomarkers in children with active tuberculous disease and latent tuberculous infection
- Pediatric Antifungal Optimization Program at Astllas Pharma Europe Ltd.

Management



Dr. Otero Reigada, María del Carmen

- Former chief clinician in infectious diseases and infants, La Fe from Valencia University Hospita
- Pediatric Infectious Diseases Specialist.
- Specialist in Clinical Microbiology
- Currently pediatrician and pediatric infectologist, at Valencia Hospital

Professors

D. Aguilera Alonso, David

- Attending Physician in Pediatrics and Specific Areas / Pediatric Infectious Diseases Unit at the Gregorio Marañon General University Hospital
- Degree in Medicine and Surgery, University of Valencia
- Master's Degree in Pediatric Infectious Diseases Complutense University of Madrid
- Professional Master's Degree on HIV infection Rey Juan Carlos University
- University Expert in Basic Pediatric Infectious Diseases Rey Juan Carlos University

Dr. Calle Miguel, Laura

- Health Service of the Principality of Asturias, Health Area V, Pediatric Specialist Physician
- Master's Degree in Research in Medicine at the University of Oviedo
- Degree in Medicine and Surgery, University of Oviedo
- Doctor of Medicine. Pediatric Diseases, University of Oviedo
- Specialist in Pediatrics and Specific Areas of Gijón, Principality of Asturias, Spain

Dr. Hernanz Lobo, Alicia

- Assistant Pediatric Physician at the Gregorio Marañon General University Hospital Graduated in Medicine, Complutense University of Madrid (UCM) in 2012
- Specialist in Pediatrics and its Specific Areas, having Training as a resident intern at the Gregorio Marañón General University Hospital
- Master's Degree in Pediatric Infectious Diseases Complutense University of Madrid
- Degree and Master's Degree in Medicine Complutense University of Madrid
- Official Doctoral Program in Health Sciences Research Complutense, University of Madrid

Ms. Manzanares Casteleiro, Ángela

- Doctor, Autonomous University of Madrid. Completion of the Pediatrics specialty in May 2020
- Currently working up to 12/31/2020 in the Pediatric Infectious Diseases Section, 12 de Octubre University Hospital and the Pediatric Clinical Research Unit, 12 de Octubre Hospital
- Studying since October 2020 the Master's Degree in Pediatric Infectious Diseases at the Complutense University of Madrid with clinical practice at the Gregorio Marañón Hospital
- Researcher at the Foundation for investigation. Research at the 12 de Octubre University Hospital
- Resident Medical Intern, 12 de Octubre University Hospital, Madrid

Dr. Argilés Aparicio, Bienvenida.

 MIR Specialist in Pediatrics and its Specialized Areas at La Fe University Hospital (Valencia)

Dr. Bosch Moragas, María

MIR Specialist in Pediatrics and its specific areas at La Fe University Hospital, Valencia.
 CAP st Anadreu, Barcelona

Dr. Cantón Lacasa, Emilia

• Research Center (Microbiology Laboratory), La Fe University Hospital (Valencia)

Dr. Cambra Sirera, José Isidro

• Head of Section, Pediatrics Service, Lluís Alcanyís Hospital (Xàtiva)

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Dr. Canyete Nieto, Adela

 Head of Pediatric Oncology Unit, La Fe Polytechnic and University Hospital (Valencia)

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- Doctor of Medicine
- Specialist in Pediatric Surgery
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• Specialist in Pediatric Pulmonology, La Fe University and Polytechnic Hospital (Valencia)

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- Head of Hematology Unit, La Fe Polytechnic and University Hospital (Valencia)
- Professor at the Universitat de València

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- Pediatric Surgery Service, La Fe University and Polytechnic Hospital (Valencia)

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 Specialist in Clinical Microbiology, attached to the University and Polytechnic Hospital of La Fe (Valencia)

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• Microbiology Unit of (Xàtiva Hospital, Valencia Spain)

Dr. Ibáñez Martínez, Elisa

• Specialist in Clinical Microbiology and Parasitology, La Fe University and Polytechnic Hospital (Valencia)

Dr. Izquierdo Macián, Isabel

• Head of the Neonatology Service of the Child Disease Area, La Fe Polytechnic and University Hospital (Valencia)

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 Area Specialist Physician (FEA) in Preventive Medicine and Public Health, La Fe Polytechnic and University Hospital (Valencia)

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 Area Specialist Physician (FEA) in Preventive Medicine and Public Health, La Fe Polytechnic and University Hospital (Valencia)

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• Doctor of Medicine. Head of Section of Preventive Medicine, La Fe University and Polytechnic Hospital (Valencia)

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 Head of Department Pharmacy Service, La Fe University and Polytechnic Hospital (Valencia)

Dr. Monteagudo Montesinos, Emilio

• Head of the Pediatrics Department, La Fe University and Polytechnic Hospital (Valencia)

Dr. Negre Policarpo, Sergio

- PhD in Medicine and Surgery from the University of Valencia
- Head of the Pediatric Gastroenterology and Nutrition Section at the Quironsalud Hospital (Valencia)



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Dr. Oltra Benavent, Manuel

 Pediatric Specialist Physician in Pediatrics and its Specialized Areas, Francesc de Borja Hospital. Gandía Health Department

Dr. Ortí Martín, Ana

• Specialist in Pediatrics and its Specific Areas, Centro de Salud Padre Jofré (Valencia)

Dr. Peiró Molina, Esteban

- Specialist Physician
- Pediatric Cardiology Section, La Fe University and Polytechnic Hospital (Valencia)

Dr. Rincón Lopez, Elena María

- Assistant Physician, Pediatric Infectious Diseases Section, Gregorio Marañón General University Hospital (Madrid)
- Professional Master's Degree in Pediatric Infectious Diseases at the Complutense University of Madrid

Dr. Rodríguez, Héctor

 Specialist in Pediatrics and its Specific Areas, Centro de Salud at Manises Hospital (Valencia)

Ms. Sastre Cantón, Macrina

- Vaccine Research Area
- Foundation for the Promotion of Health and Biomedical Research of the Valencian Community (FISABIO)





tech 20 | Structure and Content

Module 1. HIV Infection in Pediatrics and Adolescence

- 1.1. Vertical Transmission
 - 1.1.1. Current Situation of Vertical Transmission in our Environment
 - 1.1.2. Prevention and Management
- 1.2. Infection in Adolescents
- 1.3. Anti-retrovirals in Pediatrics
 - 1.3.1. Updates
 - 1.3.2. Combinations
 - 1.3.3. Determination of Resistance
 - 1.3.4. Side Effects and Metabolic Alterations
- 1.4. Pharmacokinetics
 - 1.4.1. Interactions
 - 1.4.2. Level Monitoring
- 1.5. When and How to Start HAART
- 1.6. Current Management of HBV and HCV Coinfection

Module 2. Infection in the Patient at Risk

- 2.1. Children with Immunomodulatory Treatments in Rheumatology
 - 2.1.1. Management of Patients Undergoing Immunomodulatory Treatments
- 2.2. Current Empiricism of Infections in Oncology Patients
 - 2.2.1. Adenovirus Infections in HematoOncology
 - 2.2.2. Diagnostic and Therapeutic Approach to Febrile Neutropenia in Cancer Patients
 - 2.2.3. Empirical and Targeted Treatment of Infections in Cancer Patients
- 2.3. Infections and Current Response to Children with Underlying Pathology
 - 2.3.1. Risk infections in Patients with Hemolytic Anemias (emoglobinopathies and Membranopathies)
 - 2.3.2. Treatment of Severe Neutropenia and Congenital and Functional Asplenia
 - 2.3.3. Infections in Children with Cystic Fibrosis
- 2.4. Current Approach to Infections in the Transplanted Child
 - 2.4.1. Cytomegalovirus and BK Virus Infections in Transplant Recipients



Module 3. Treatment in Pediatric Infectious Diseases

- 3.1. Pharmacokinetics and Pharmacodynamics of Antibacterial Agents in Pediatrics
- 3.2. Bacterial Resistance and Antibiotherapy
 - 3.2.1. Carbapenem-Resistant Enterobacteriaceae, BLES, MRSA, Vancomycin-Resistant
 - 3.2.2. Resistance to Antifungals
- 3.3. Choice of Antibiotics in the Different Families.
 - 3.3.1. Beta-Lactams
 - 3.3.2. Macrolides
 - 3.3.3. Aminoglycosides
 - 3.3.4. Fluoroguinolones
- 3.4. Choice Among the Different Families of Antifungals
 - 3.4.1. Azoles
 - 3.4.2. Echinocandins
 - 3.4.3. Polyenes
- 3.5. Resurrection of Old Therapeutic Agents
- 3.6. New Antibiotics or Families
 - 3.6.1. Ceftobiprole, Ceftaroline, Doripenem, Dalbavancin, Talavicina, Teixobactin, Ceftolozane-Tazobactam, Ceftazidime-Avibactam, Lugdunin, Oritavancin, Iclaprim, Ramoplanin, Fidaxomicin, Fidaxomicin
- 3.7. New Tuberculostatics
- 3.8. Antibiotherapy in Obese Pediatric Patients
- 3.9. New Requirements for the Rational and Judicious Choice of Suitable Treatment
 - 3.9.1. Antibiotic Policy in Hospitals and Primary Care Optimization Program
- 3.10. Role of Agriculture and Animal Husbandry in Antibiotic Resistance
- 3.11. Use of Antivirals
 - 3.11.1. In Immunocompetent Patients
 - 3.11.2. Use of Antivirals in Immunocompromised Patients
- 3.12. Essential Antiparasitic Drugs in Pediatrics
- 3.13. Update on Allergy to Anti-Infectives Alternatives
- 3.14. Monitoring of Anti-Infectives
- 3.15. Update on the Duration of Antibiotic Treatments

Module 4. Preventive Measures

- 4.1. Control and Response to Hospital Outbreaks of Infection
 - 4.1.1. Common Microorganisms
 - 4.1.2. Current Multidrug-Resistant Microorganisms (Including Decontamination in the MRSA Patient)
- 4.2. Hospital Organization and Control of Today's Multidrug-Resistant Microorganisms
- 4.3. Current Indications for Isolation in Hospital Pediatrics
- 4.4. Current Vaccines
 - 4.4.1. Prematurity
 - 4.4.2. Immuno-deficient Child
 - 4.4.3. Child Undergoing Immunosuppressive Treatments
 - 4.4.4. Splenectomized Patients
 - 4.4.5. Transplant Recipients
 - 4.4.6. HIV
- 4.5. Update on Vaccination of Children in Special Situations
- 4.6. Current Indications for Antibiotic Prophylaxis
- 4.7. Indications for Prophylaxis
 - 4.7.1. In case of Accidental Puncture
 - 4.7.2. Indications for Sexual Abuse Prophylaxis
- 4.8. Post-Exposure Performance
 - 4.8.1. Chickenpox
 - 4.8.2. Measles
 - 4.8.3. In Hepatitis B
 - 4.8.4. In Hepatitis A
 - 4.8.5. Tuberculosis
 - 4.8.6. Tetanus
 - 4.8.7. Rabies
- 1.9. Current Status of Perioperative Prophylaxis of the Surgical Patient
- 4.10. Update on Antibiotic Prophylaxis in Transplant Children and Patients Treated for Atypical Hemolytic Uremic Syndrome

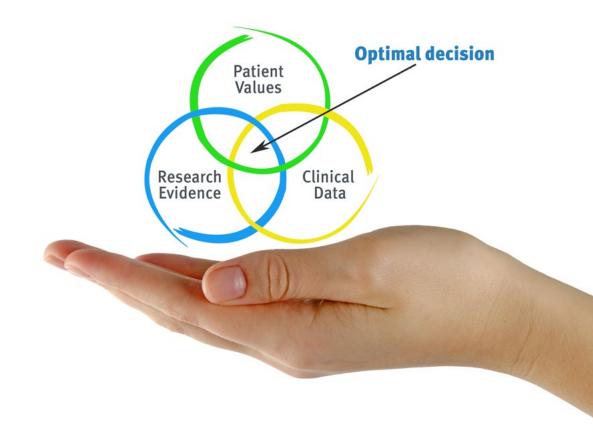


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At TECH we use the Case Method

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.





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 | 27 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.

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

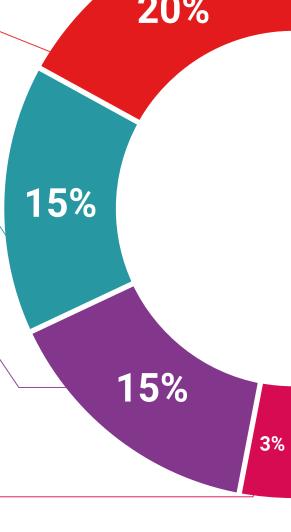
TECH introduces students to the latest techniques, to the latest educational advances, to the forefront of current pharmaceutical care procedures. All of this, first hand, and explained and detailed with precision to contribute to assimilation and a better understanding. And best of all, you can watch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

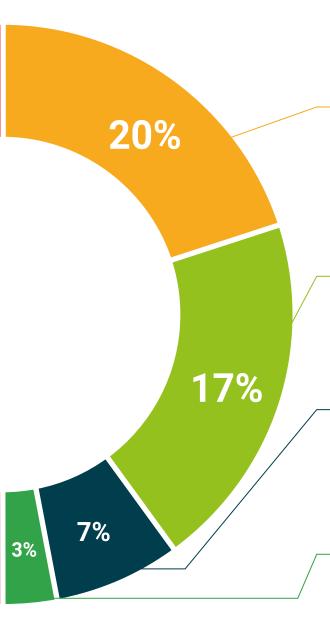
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





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.







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This program will allow you to obtain your Postgraduate Certificate in Risk Situations, Prevention Measurements and Infectious Diseases Therapy endorsed by TECH Global **University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (official bulletin). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Certificate in Risk Situations, Prevention Measurements and **Infectious Diseases Therapy**

Modality: online

Duration: 6 months Accreditation: 16 ECTS



, with identification document has successfully passed and obtained the title of:

Postgraduate Diploma in Risk Situations, Prevention Measurements and **Infectious Diseases Therapy**

This is a program of 400 hours of duration equivalent to 16 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA)

In Andorra la Vella, on the 28th of February of 2024





Postgraduate Diploma

Risk SituationsPrevention Measurements and Infectious Diseases Therapy

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 16 ECTS
- » Schedule: at your own pace
- » Exams: online

