

# Postgraduate Diploma

## Imported Infectious Diseases in the Emergency Room





## Postgraduate Diploma

### Imported Infectious Diseases in the Emergency Room

Course Modality: Online

Duration: 6 months.

Certificate: TECH - Technological University

18 ECTS Credits

Teaching Hours: 450 hours.

Website: [www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-imported-infectious-diseases-emergency-room](http://www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-imported-infectious-diseases-emergency-room)

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# 01

# Introduction

Physicians around the world may be confronted with infectious diseases that, until a few years ago, were hardly known or treated in their region. This is due to the promotion of tourism and the increase in migration, which means that diseases that were eradicated in certain countries or limited to specific areas can now be found anywhere in the world. For this reason, emergency room physicians must have advanced knowledge in these cases, allowing them to act safely and with guarantees of success.





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*Increase your training in the field of imported infectious diseases and prepare yourself to treat rare pathologies”*

Obtaining a high level of knowledge about imported infectious diseases is practically a must for physicians working in this area. This is because, nowadays, no professional can be sure that they will not come across a case of a disease originating in another country.

Globalization, mass tourism and the possibility of reaching places that until a few years ago were almost impossible to imagine have caused diseases that were confined to certain countries to cross their own borders. As a result, it is now possible to diagnose patients with rare infections or infections that until recently did not even exist in certain regions.

Therefore, imported infectious diseases should be seen as another specialty in which to train and with which to improve the health of patients. To increase the training of physicians, CEU has designed this very complete Postgraduate Diploma, which shows from Public Health protocols to the particularities of tropical infections, such as malaria or hemorrhagic fevers, for example. A high academic level program that will help you improve your daily practice.

On the other hand, being a 100% online training, the professional will have the ability to decide when and from where to study, without commitments or obligations, thus being able to combine their study time with the rest of their daily obligations.

This **Postgraduate Diploma in Imported Infectious Diseases in the Emergency Room** contains the most complete and up-to-date scientific program on the market. The most important features of the Postgraduate Diploma are:

- The development of clinical cases presented by experts in imported infectious diseases in the emergency room.
- The graphic, schematic, and eminently practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional practice.
- Therapeutic developments on intervention in imported infectious diseases.
- Practical exercises where the self-assessment process can be carried out to improve learning.
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course.
- Special emphasis on research 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.

“Expand your knowledge in the field of imported diseases and achieve greater benefits in the care of your patients”

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*This Postgraduate Diploma is the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge of imported infectious diseases in the emergency room, you will obtain a Postgraduate Diploma from TECH"*

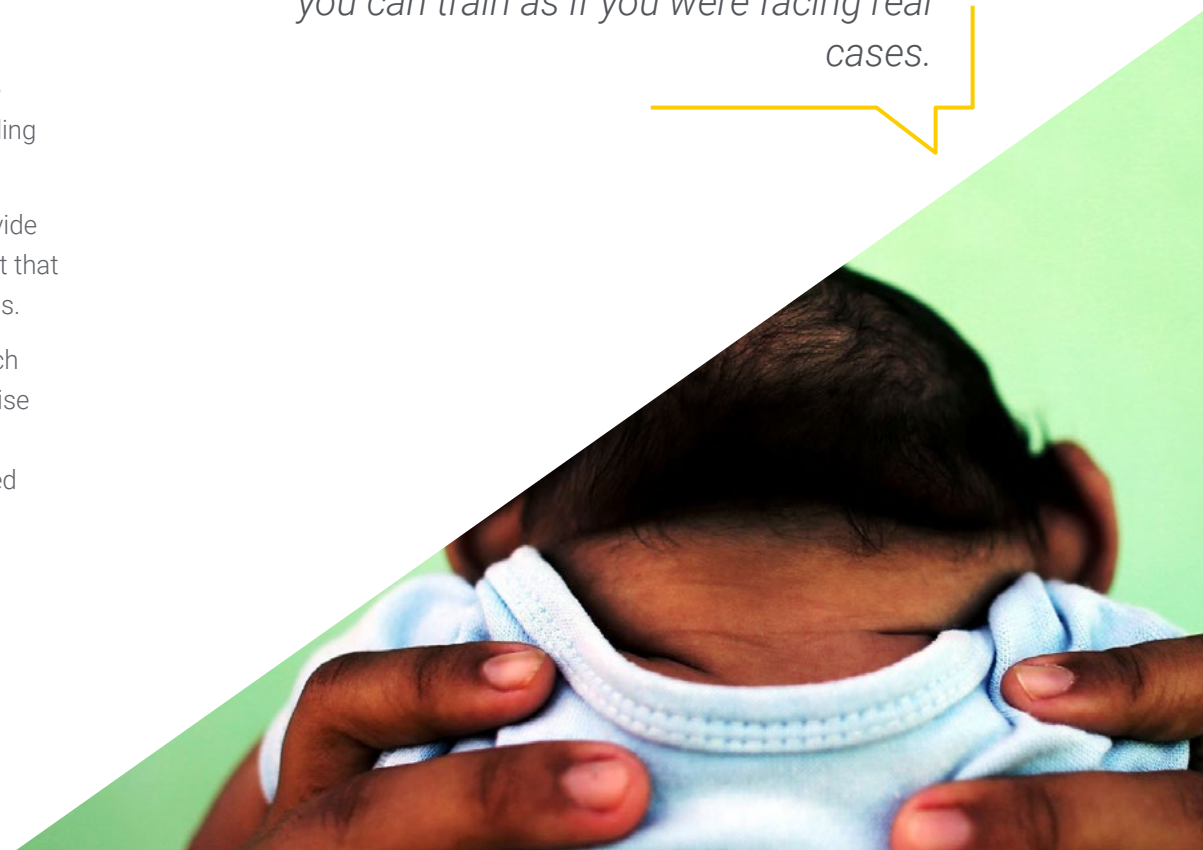
Its teaching staff includes a professionals from the field of medicine, who bring the experience of their work to this training, as well as recognised specialists from leading scientific societies.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive training experience designed to train for real-life situations.

The design of this program is based on Problem-Based Learning, by means of which the physician must try to solve the different professional practice situations that arise during the academic year. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned Infections and experienced experts in the field of Infectious Diseases with extensive teaching experience.

*Increase your decision-making confidence by updating your knowledge through this Postgraduate Diploma.*

*We provide you with the best teaching methodology of the moment so that you can train as if you were facing real cases.*



# 02 Objectives

The Postgraduate Diploma in Infectious Diseases in the Emergency Room is designed to facilitate the performance of the physician dedicated to the treatment of infectious diseases in all areas, but above all, in ER.







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*Enhance your training with the use of the latest educational technology to contribute with quality and safety to your daily work”*



## General Objective

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- Provide the theoretical knowledge necessary to understand the environment in which professional care is given to patients with infectious diseases..
- Provide the appropriate treatment in the different cases of infectious diseases.
- Gain in-depth understanding of the areas in which professionals must be trained, in order for them to be able to provide the best practice when treating infectious diseases.





## Specific Objectives

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- ♦ Define virulence factors and toxins.
- ♦ Identify the main human pathogens in our environment.
- ♦ Explain the different current scenarios of infection in the Emergency Department.
- ♦ Describe the etiopathogenic profiles of bacterial infection
- ♦ Describe the etiopathogenic profiles of viral infection
- ♦ Describe the etiopathogenic profiles of fungal infections.
- ♦ Describe the etiopathogenic profiles of microbacterial infections.
- ♦ Describe the etiopathogenic profiles of parasitic infections.
- ♦ Describe the process of collecting specimens.
- ♦ Define which specimens are most commonly requested in the Emergency Department.
- ♦ Explain the collection of specimens in patients with devices.
- ♦ Describe the management of specimens in the laboratory.
- ♦ Explain the clinical significance of bacterial resistance.
- ♦ Define the techniques available for emergency diagnoses.
- ♦ Describe the interpretation of preliminary results.
- ♦ Explain the analytical interpretation of the different types of samples.
- ♦ Define the procedures in hospitals without on-call microbiologists.
- ♦ Explain the diagnostic techniques that can possibly be performed in the emergency department laboratory.
- ♦ Describe the action protocols in cases of specific exposure.
- ♦ Describe the established isolation protocols.
- ♦ Explain the current indications of exclusion or isolation.
- ♦ Describe notifiable diseases.
- ♦ Explain the procedure for emergency declaration to Public Health.
- ♦ Describe the action protocol for epidemiological outbreaks.
- ♦ Describe imported pathology as , well as pathology with high contagious capacity.
- ♦ Describe the seasonal epidemiological parameters in the most common infections in the community.
- ♦ Explain epidemic outbreaks and common sources with punctual, continuous, propagative and mixed exposure.
- ♦ Define the post-exposure prophylaxis that is initiated in the emergency department.
- ♦ Describe the process to follow in the case of Bacterial Meningitis.
- ♦ Describe the process to follow in the case of HIV Infection.
- ♦ Describe the process to follow in the case of Sexual Assault.
- ♦ Describe the process to follow in the case of Rabies.
- ♦ Define the concept of globalization and emerging pathology.
- ♦ Define the geography of the tropical infectious diseases.
- ♦ Explain the epidemiology of tropical infectious diseases in travelers, immigrants and VFR.
- ♦ Explain the anamnesis of a traveler with fever in the emergency department.
- ♦ Explain the possible causes of fever after staying in a tropical or or subtropical area.
- ♦ Perform syndrome classification of imported infectious pathology.
- ♦ Define imported tropical infectious diseases of special interest.

03

# Course Management

The program's teaching staff includes leading specialists in Infectious Diseases in the Emergency Room and other related areas, who bring their years of work experience to this training program. Additionally, other recognized specialists participate in its design and preparation, which means that the program is developed in an interdisciplinary manner.





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*We have the best teachers to offer you quality training that will provide you with the necessary knowledge to develop in this area"*

## Management



### García del Toro, Miguel

- ♦ PhD in Medicine from the University of Valencia
- ♦ Head of the Infectious Diseases Service at the Consortium General University Hospital in Valencia.
- ♦ 50 national and international publications in journals and books, 33 of them indexed in Pubmed and/or Scopus.
- ♦ President Congress of the National Group for the Study of Hepatitis of the Society for Infectious Diseases and Clinical Microbiology 2017
- ♦ More than 200 communications to National and International Congresses in the specialty of Infectious Diseases, HIV and Viral Hepatitis.
- ♦ Principal Investigator of some thirty Clinical Trials and/or Research Projects and collaborating researcher.



### García Rodríguez, Magdalena

- ♦ Degree in Medicine and Surgery
- ♦ Specialist in Internal Medicine
- ♦ Attending Physician in the Infectious Diseases Unit and the Consorcio General Hospital Valencia
- ♦ Head of the International Health and Travel Advice Section
- ♦ Author of several publication and research projects
- ♦ Founding member and advisor of the Chagas Disease Association of the Valencian Community
- ♦ Member of a vaccine study group for the Spanish Society of Infectious Diseases and Clinical Microbiology.
- ♦ Member of a Malaria study group for the Spanish Society of Infectious Diseases and Clinical Microbiology.



### Ricart Olmos, María del Carmen

- ◆ Degree in Medicine and Surgery
- ◆ Specialist in Internal Medicine
- ◆ Attending Physician in the Infectious Diseases Unit and the Consorcio General University Hospital, Valencia
- ◆ Author of several publication and research projects
- ◆ Editor of the Consensus Document on Age and Human Immunodeficiency Virus Infection Expert Group of the Secretariat of the National AIDS Plan (SPNS), Spanish Society of Geriatrics and Gerontology (SEGG)
- ◆ Master's Degree in Infectious Diseases in Intensive Care

# 04

# Structure and Content

The structure of the contents has been designed by a team of professionals from the best hospitals and universities in the country, aware of the relevance of current training to intervene in the treatment and monitoring of imported infectious diseases in the Emergency Room and committed to quality teaching through new educational technologies.







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*This Postgraduate Diploma contains the most complete and up-to-date scientific program on the market”*

## Module 1. Up-to-date Information on Infectious Diseases

- 1.1. Principles of Infection.
  - 1.1.1. Virulence Factors and Toxins.
  - 1.1.2. Defensive Mechanisms of the Host.
- 1.2. Main Human Pathogens in our Environment.
  - 1.2.1. Current Epidemiology of the Infection.
  - 1.2.2. Data on a Worldwide Level.
  - 1.2.3. Data in our Environment.
  - 1.2.4. Microbial Resistance
- 1.3. Current Scenarios of Infection in the Emergency Department.
  - 1.3.1. Elderly Patients
  - 1.3.2. Oncology Patients
  - 1.3.3. Chronic Renal Patients on Dialysis.
  - 1.3.4. Transplant Recipient.
  - 1.3.5. HIV Infection
  - 1.3.6. Travellers and Immigrants.
- 1.4. Etiopathogenic Profiles of Infection.
  - 1.4.1. Bacterial Infections.
  - 1.4.2. Viral Infections.
  - 1.4.3. Fungal Infections.
  - 1.4.4. Microbacterial Infections.
  - 1.4.5. Parasitic Infections.



**Module 2. The Microbiology Laboratory in the Emergency Department**

- 2.1. Process of Sample Collection.
  - 2.1.1. General Considerations for Taking, Conserving and Transporting the Samples for Microbiological Study.
  - 2.1.2. Material for Sample Collection.
- 2.2. Management of Samples in the Laboratory.
  - 2.2.1. Receiving Samples
  - 2.2.2. Processing.
  - 2.2.3. Methods and Techniques used for Microbiological Diagnosis According to the Main Infectious Syndromes.
- 2.3. Techniques Available for Emergency Diagnoses.
  - 2.3.1. Bacteria
  - 2.3.2. Virus
  - 2.3.3. Fungi
  - 2.3.4. Mycobacteria.
  - 2.3.5. Parasites
- 2.4. Interpretation of Preliminary Results.
  - 2.4.1. Interpretation of Microbiological Diagnostic Tests
- 2.5. Procedures in Hospitals Without On-call Microbiologists.
  - 2.5.1. Disadvantages of Not Having an On-call Microbiologist.
  - 2.5.2. Advantages of Having an On-call Microbiologist.
  - 2.5.3. On-call Care without a Microbiologist.

### Module 3. Public Health and Infectious Disease in the Emergency Department

- 3.1. Emergency Department Personnel.
  - 3.1.1. Initial Assessment.
  - 3.1.2. Vaccination.
  - 3.1.3. Action Protocols in Cases of Specific Exposure.
- 3.2. Established Protocols of Isolation.
  - 3.2.1. Types of Transmission and Methods of Isolation.
  - 3.2.2. Special Situations.
- 3.3. Notifiable Diseases and Urgent Declaration to Public Health.
  - 3.3.1. Concept of Notifiable Diseases
  - 3.3.2. Surveillance of Notifiable Diseases.
- 3.4. Special Situations.
  - 3.4.1. Annual Flu.
  - 3.4.2. Epidemiological Outbreaks.
  - 3.4.3. Imported Pathology Possibility of Pathology with High Contagious Capacity
- 3.5. Updates on Epidemiological Outbreaks.
  - 3.5.1. Seasonal Epidemiological Parameters in the Most Common Infections in the Community.
  - 3.5.2. Epidemic Outbreak and Types of Source.
- 3.6. Post-exposure Prophylaxis that is Initiated in the Emergency Department.
  - 3.6.1. Bacterial Meningitis.
  - 3.6.2. HIV Infection
  - 3.6.3. Sexual Assault
  - 3.6.4. Anger

### Module 4. Imported Infectious Diseases in the Emergency Department

- 4.1. Introduction to Imported Pathology.
  - 4.1.1. Imported Pathology of Special Interest
    - 4.1.1.1. Chagas' Disease
    - 4.1.1.2. Dengue.
    - 4.1.1.3. Chikungunya
    - 4.1.1.4. Malaria.
- 4.2. Globalization and Emerging Pathology.
  - 4.2.1. Emerging and Reemerging Diseases.
  - 4.2.2. Main Causes of Emergency in Infectious Diseases.
  - 4.2.3. Transmission.
  - 4.2.4. Zoonosis:
  - 4.2.5. Future Previsions.
- 4.3. Geography of Tropical Infectious Diseases.
  - 4.3.1. Subspecialties of Medical Geography.
  - 4.3.2. Relevance and Relationship to Tropical Diseases.
  - 4.3.3. Main Infectious Diseases According to Area.
- 4.4. Epidemiology of Tropical Infectious Diseases in Travelers, Immigrants and VFRs..
  - 4.4.1. Importance
  - 4.4.2. Epidemiological Characteristics of Immigrants.
  - 4.4.3. Epidemiological Characteristics of People Traveling to the Tropics.
  - 4.4.4. Epidemiological Characteristics of VFRs.
  - 4.4.5. Data on Imported Pathology in Spain.
- 4.5. Anamnesis of a Traveler with Fever in the Emergency Department.
  - 4.5.1. Initial Approximation of a Traveler with Fever.
  - 4.5.2. Differential Diagnosis.
  - 4.5.3. Treatment of a Traveler with Fever.

- 4.6. Fever After Staying in a Tropical and / or Subtropical Area.
  - 4.6.1. Importance of Good Anamnesis.
  - 4.6.2. Investigation of Possible Vectors.
  - 4.6.3. Fever of Parasitic Origin.
  - 4.6.4. Fever of Viral Origin.
  - 4.6.5. Fever of Bacterial Origin.
  - 4.6.6. Other Causes of Fever.
- 4.7. Imported Infectious Pathology Syndrome Classification.
  - 4.7.1. Fever and Cutaneous Lesion.
  - 4.7.2. Fever and Altered Level of Consciousness.
  - 4.7.3. Fever and Liver Problems.
  - 4.7.4. Fever and Respiratory Semiology.
  - 4.7.5. Fever and Digestive Semiology.
- 4.8. Imported Tropical Infectious Diseases of Special Interest:
  - 4.8.1. Malaria.
  - 4.8.2. Arbovirus: Dengue, Zika, Chikungunya.
  - 4.8.3. MERS Coronavirus (MERS CoV).
  - 4.8.4. Schistosomiasis
  - 4.8.5. Invasive Enteritis (Salmonella, Shigella, E.coli, Campylobacter).
  - 4.8.6. Hemorrhagic Fevers (Ebola, Lassa, Marburg, Yellow Fever, Crimean-Congo).



*A unique, key, and decisive  
training experience to boost your  
professional development”*

05

# Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

This teaching system is used 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.



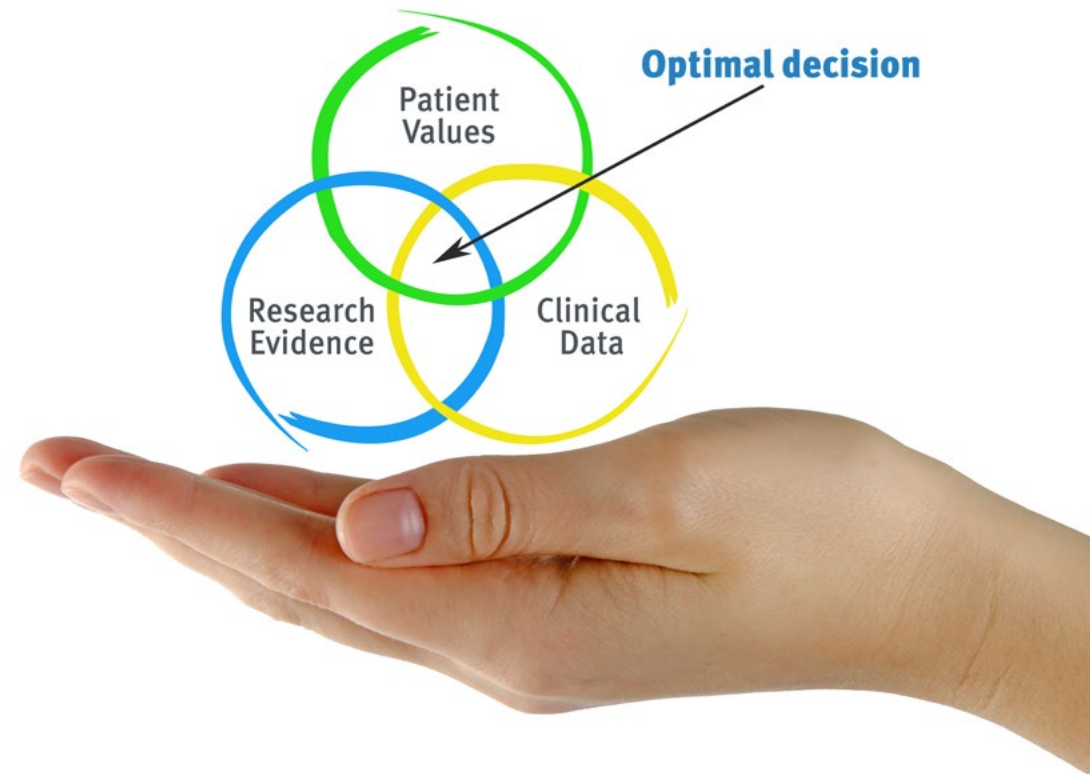
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*Discover Re-learning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH we use the Case Method

In a given situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you can 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 potential or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in professional medical 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. Students who follow this method not only grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on 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.



## Re-Learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

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.



*The physician 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 Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

*Re-learning 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 (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards.



In this program you will have access to the best educational material, prepared with you in mind:



#### Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



#### Latest Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### Interactive Summaries

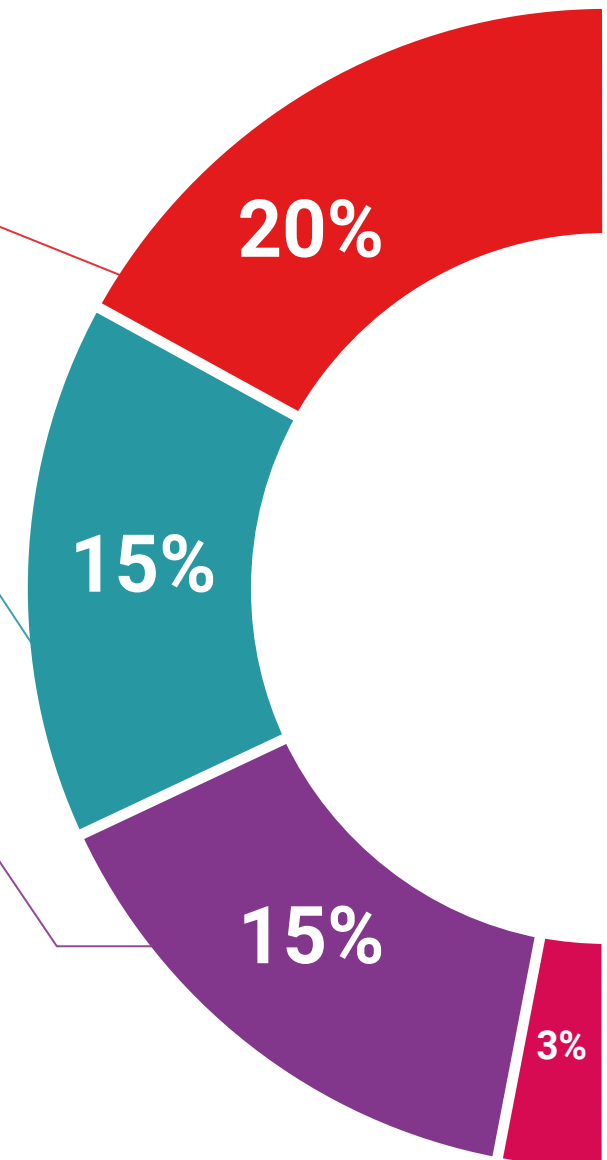
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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



#### Additional Reading

Recent articles, consensus documents, international guides. in our virtual library you will have access to everything you need to complete your training.





**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 & Re-testing**

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



**Classes**

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an expert strengthens knowledge and memory, and generates confidence in our future difficult decisions.



**Quick Action Guides**

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.



07

# Certificate

The Postgraduate Diploma in Infectious Diseases in the Emergency Room guarantees you, in addition to the most accurate and up-to-date training, access to a Postgraduate Diploma issued by **TECH - Technological University**.





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*Successfully complete this training and receive your university degree without travel or laborious paperwork”*

This Postgraduate Diploma in Imported Infectious Diseases in the Emergency Room contains the most complete and up-to-date scientific program on the market.

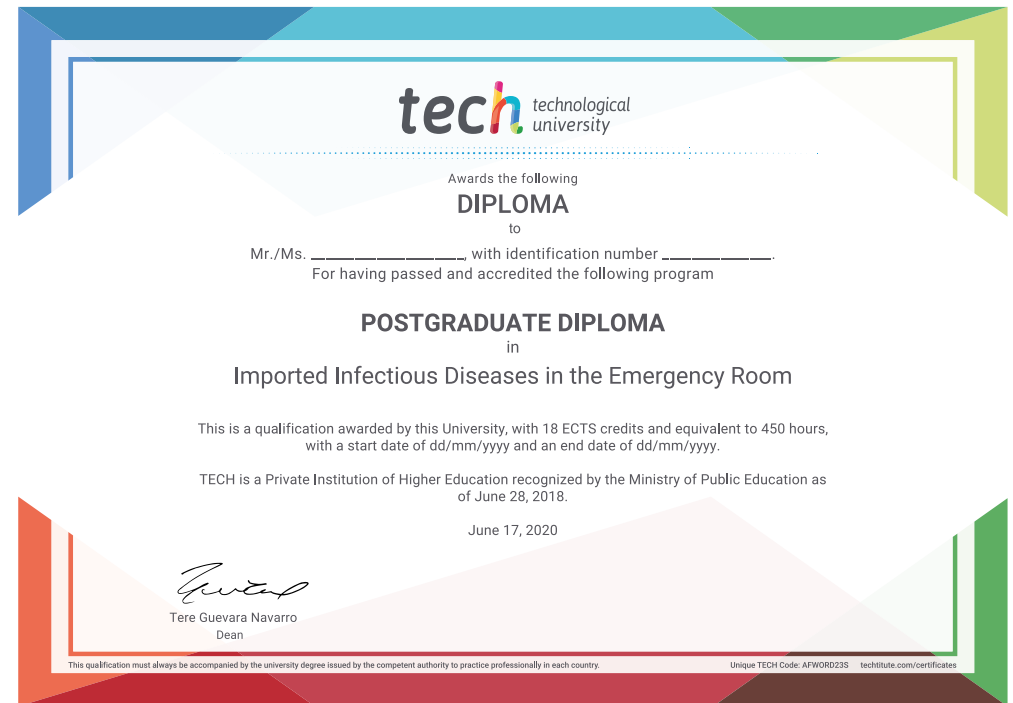
After the student has passed the evaluations, they will receive by mail with acknowledgement of receipt their corresponding **Postgraduate Diploma** issued by TECH - Technological University.

The certificate issued by TECH - Technological University will express 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 Infectious Diseases in the Emergency Room

ECTS: 18

Official Number of Hours: 450



\*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  
virtual classroom



## Postgraduate Diploma

Imported Infectious  
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Course Modality: Online

Duration: 6 months.

Certificate: TECH - Technological University

18 ECTS Credits

Teaching Hours: 450 hours.

# Postgraduate Diploma

## Imported Infectious Diseases in the Emergency Room

