



Postgraduate Diploma

Infectious Diseases in Pediatric Patient Emergencies

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 20 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-infectious-diseases-pediatric-patient-emergencies

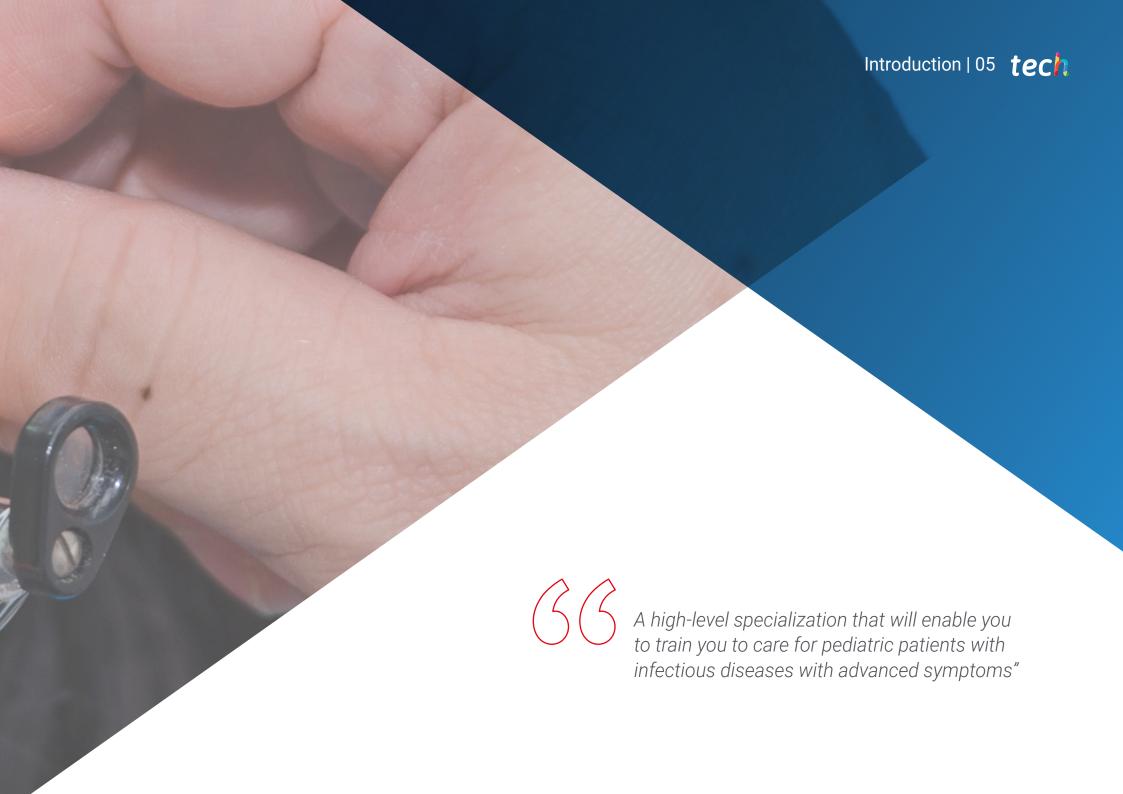
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Certificate

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tech 06 | Introduction

During their daily work in the Emergency Room, physicians are confronted with a multitude of cases that can become complicated because their diagnosis is already at an advanced stage. Infections are one of those diseases that may not be diagnosed early, since not all of them present visible symptoms. In addition to the infectious diseases already known, there are others that have recently appeared or that are common in other countries and that, therefore, are not found in the day-to-day work of the physician, but that, when the time comes, they have to face them and know how to deal with them

In this case, this program offers a complete training oriented to specialize physicians in infectious diseases that affect children and that, due to their complexity or because they have symptoms that can be harmful to children, end up being treated in the Emergency Room. Specifically, the training program includes classic aspects in the management of infectious pathology by apparatus or organs, incorporating new items essential for the correct management of infectious diseases in the current scenario of globalization of health. But, as it could not be otherwise, the main content is aimed at knowing the main infectious diseases affecting children in order to know the best way to take care of them. The fact is that the complexity that can be involved in the urgent care of pediatric patients with infectious diseases requires high-level training to qualify healthcare professionals.

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 Infectious Diseases in Pediatric Patient Emergencies** contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- The development of clinical cases presented by experts in infectious diseases in pediatric patients
- 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 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



We offer you a complete training on infectious diseases in children so that you can improve your skills in the care of your patients"



This Postgraduate Diploma may be the best investment you can make in the selection of an up-to-date program for two reasons: in addition to updating your knowledge in Infectious Diseases in Pediatric Patient Emergencies, you will obtain a Postgraduate Diploma from TECH - Technological University"

It includes in its teaching staff professionals belonging to the field of Infectious Diseases in Pediatric Patient Emergencies, who pour into this specialization the experience of their work, in addition to recognized specialists belonging to scientific societies of reference.

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 immersive training program to train in real situations.

This program is designed around Problem Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the course. For this purpose, the physician will be assisted by an innovative interactive video system created by renowned experts the field of Pediatric Patient Emergencies and has extensive teaching experience.

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

Take the opportunity to learn about the latest advances in Infectious Diseases in Pediatric Patient Emergencies and improve your patient care.







tech 10 | Objectives



General Objectives

- 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.



Objectives | 11 tech



Specific Objectives

- 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.
- Describe the management of fever syndrome and exanthems in a pediatric patient in the Emergency Department.
- Explain the emergency diagnosis and treatment of skin, soft tissue and skeletal system infections in pediatric patients.
- Explain the emergency diagnosis and treatment of ENT and respiratory infections in pediatric patients.
- Explain the emergency diagnosis and treatment of gastrointestinal, genitourinary and STI infections in pediatric patients.
- Explain the diagnosis and treatment of CNS and CV infections in a pediatric patient in the Emergency Department.
- Explain the treatment in pediatric infectious diseases.



The program includes in its teaching staff reference specialists in Infectious Diseases in Pediatric Patient Emergencies and other related areas, who pour into this specialization the experience of their work. Additionally, other recognized specialists participate





tech 14 | Course Management

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





tech 18 | Structure and Content

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. Interpreatation 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. Infectious Diseases in Pediatric Patients in the Emergency Department

- 4.1. Fever Without Focus
 - 4.1.1. Child With a Fever Without Focus and Poor Appearance
 - 4.1.2. Fever Without Focus and Good General Appearance.
 - 4.1.3. Children from 3-36 Months Old With a Fever Without Focus and Good General Appearance.
 - 4.1.4. Breastfeeding Infant less than 3 Months Old With a Fever Without Focus and Good General Appearance.
- 4.2. Sepsis and Septic Shock
 - 4.2.1. Concept.
 - 4.2.2. Current Definition of Shock and Septic Shock...
 - 4.2.3. Etiology and Epidemiology.
 - 4.2.4. Pathophysiology.
 - 4.2.5. Risk Factors.
 - 4.2.6. Differential Diagnosis.
 - 4.2.7. Clinical Presentation.
 - 4.2.8. Complementary Tests.
 - 4.2.9. Treatment.
- I.3. Fever in a Traveling Child
 - 4.3.1. Anamnesis
 - 4.3.2. Physical Examination
 - 4.3.3. Complementary Tests.
 - 4.3.4. Treatment.
 - 4.3.5. Malaria.
 - 4.3.6. Dengue.

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- 4.4. Exanthem
 - 4.4.1. Etiology.
 - 4.4.2. Diagnosis.
 - 4.4.3. Differential Diagnosis.
- 4.5. Skin and Soft Tissue Infections.
 - 4.5.1. Etiopathogenesis.
 - 4.5.2. Diagnosis.
 - 4.5.3. Main Clinical Framework.
 - 4.5.4. Treatment.
 - 4.5.5. Community-acquired Methicillin-Resistant S. Aureus
- 4.6. Cervical Adenitis
 - 4.6.1. Etiology.
 - 4.6.2 Clinical Evaluation
 - 4.6.3. Diagnosis and Treatment.
 - 4.6.4. Differential Diagnosis.
- 4.7. Osteoarticular Infections: Acute Osteomyelitis and Septic Arthritis.
 - 4.7.1. Epidemiology.
 - 4.7.2. Etiopathogenesis.
 - 4.7.3. Clinical Presentation.
 - 4.7.4. Diagnosis.
 - 4.7.5. Differential Diagnosis.
 - 476 Treatment
- 4.8. Pharyngotonsillitis and Its Complications.
 - 4.8.1. Concept.
 - 4.8.2. Epidemiology and Etiology.
 - 4.8.3. Clinical Presentation.
 - 4.8.4. Diagnosis.
 - 4.8.5. Treatment.

- 4.9. Otitis Media and External Sinusitis.
 - 4.9.1. Concept of Otitis Media and External.
 - 4.9.1.1. Epidemiology and Etiology.
 - 4.9.1.2. Clinical Presentation.
 - 4.9.1.3. Complications.
 - 4.9.1.4. Diagnosis.
 - 4.9.1.5. Treatment.
 - 4.9.2. Concept of Acute Sinusitis.
 - 4.9.2.1. Epidemiology and Etiology.
 - 4.9.2.2. Clinical Presentation.
 - 4.9.2.3. Diagnosis.
 - 4.9.2.4. Treatment.
- 4.10. Acute Mumps.
 - 4.10.1. Epidemic Mumps.
 - 4.10.2. Vaccination.
 - 4.10.3. Prevention of Epidemic Outbreaks.
- 4.11. Laryngitis and Epiglottitis.
 - 4.11.1. Concept.
 - 4.11.2. Epidemiology and Etiology.
 - 4.11.3. Clinical Presentation.
 - 4.11.4. Diagnosis.
 - 4 11 5 Treatment
 - 4.11.6. Admission Criteria
- 4.12. Syndrome Pertusoids
 - 4.12.1. Concept.
 - 4.12.2. Epidemiology and Etiology.
 - 4.12.3. Clinical Presentation.
 - 4.12.4. Complications.
 - 4.12.5. Diagnosis.
 - 4.12.6. Treatment.
 - 4.12.7. Prevention.

- 4.13. Bronchiolitis and Recurrent Wheezing Episodes.
 - 4.13.1. Acute Bronchiolitis
 - 4.13.2. Recurrent Wheezing
- 4.14. Pneumonia and Complications.
 - 4.14.1. Epidemiology.
 - 4.14.2. Etiology.
 - 4.14.3. Clinical Characteristics.
 - 4.14.4. Diagnosis.
 - 4.14.5. Treatment.
 - 4.14.6. Prevention.
 - 4.14.7. Complications.
- 4.15. TB.
 - 4 15 1 Manifestations
 - 4.15.2. Diagnosis.
 - 4.15.3. Treatment.
- 4.16. Acute Gastroenteritis.
 - 4.16.1. Etiopathogenesis.
 - 4.16.2. Clinical Presentation.
 - 4.16.3. Diagnosis.
 - 4 16 4 Treatment
- 4.17. Viral Hepatitis
 - 4.17.1. Evaluation and Initial Management of Hepatitis in the Emergency Room.
 - 4.17.2. Classic Viral Hepatitis.
- 4.18. Appendicitis (Need for Antibiotic or Not) and Perirectal Absesses.
 - 4.18.1. Acute Appendicitis
 - 4.18.2. Perirectal Absess
- 4.19. Urinary Infection
 - 4.19.1. Definition.
 - 4.19.2. Etiopathogenesis.
 - 4.19.3. Clinical. When to suspect a urinary tract infection in the pediatric age?
 - 4.19.4. Diagnosis.
 - 4.19.5. Management

- 4.20. CNS Infections in Pediatrics: Acute Meningitis
 - 4.20.1. Etiology.
 - 4.20.2. Clinical Presentation.
 - 4.20.3. Diagnosis.
 - 4.20.4. Treatment.
 - 4.20.5. Chemoprophylaxis.
 - 4.20.6. Complications and Prognosis.
- 4.21. Endocarditis, Myocarditis and Pericarditis.
 - 4.21.1. Infectious Endocarditis
 - 4.21.2. Myocarditis
 - 4.21.3. Pericarditis.
- 4.22. Treatment in Pediatric Infectious Diseases.
 - 4.22.1. Bacterial Infections in the Pediatric Emergency Department: Diagnosis and Antibiotic Treatment of Choice, Depending on the Resistance of the Pathogens Responsible for the Disease
 - 4.22.2. Delayed Antibiotic Prescribing Strategy.
 - 4.22.3. When is the Association of Amoxicillin with Clavulanic Acid and Macrolides Indicated in Pediatrics?
 - 4.22.4. Do I Also Have to be Careful with Topical Antibiotherapy to Avoid Bacterial Resistance?



A unique, key, and decisive master's degree experience to boost your professional development"



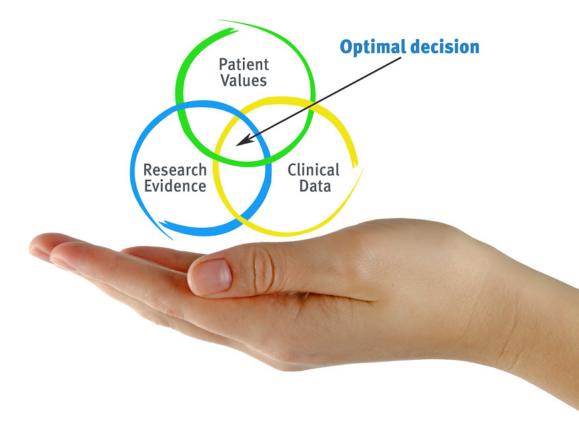


tech 24 | Methodology

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. 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 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 the physician'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. 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.
- 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.

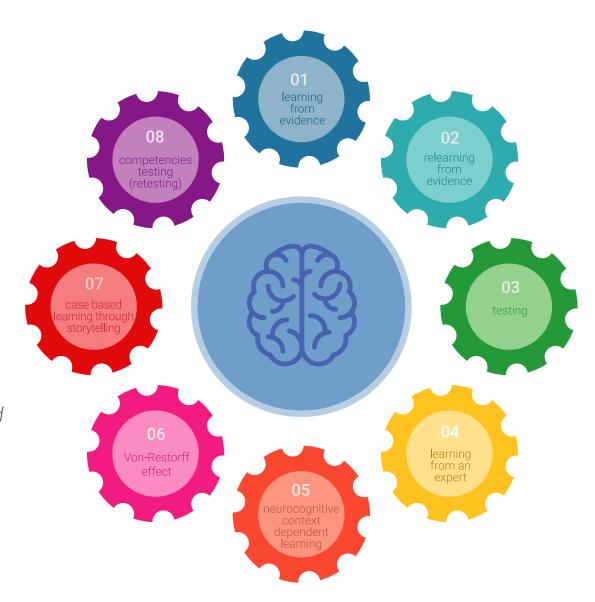


Re-Learning Methodology

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.



Methodology | 27 tech

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 training, 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 Postgraduate Diploma you will have access to the best educational material, prepared with you in mind:



Study Material

After a complex production process, we transform the best content into high-quality educational and audiovisual multimedia. We select the best syllabus and make it available to you. Everything you need to acquire in-depth knowledge of a discipline, from A to Z. Lessons written and chosen by specialists in each of the disciplines.



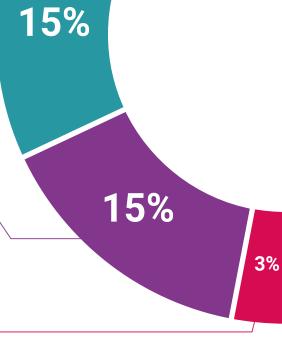
Surgical techniques and clinical procedures on video

We bring you closer to the newest techniques, to the latest scientific advances, to the forefront of current doctor news. 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 training system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

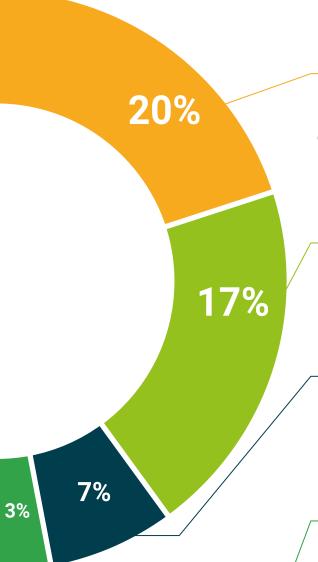


20%



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

Through the narratives of expert professionals, it is possible to acquire a high degree of understanding of the most frequent problematic situations. The professional's healthcare practice is not alien to the context in which it takes place. If we want to train ourselves to improve our professional practice, this training must be situated within the context in which it takes place.



Testing & Re-testing

We periodically evaluate and re-evaluate your knowledge throughout this program through activities and evaluative exercises.



Classes

There is scientific evidence suggesting that observing third-party experts can be useful. Learning from an expert strengthens knowledge and recall, and generates confidence in our future difficult decisions



Quick Action Guides

One of the most important functions of our team is to select those contents considered essential and present them in the form of worksheets or quick action guides to facilitate their understanding.







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This private qualification will allow you to obtain a **Postgraduate Diploma in Respiratory and Cardiovascular Infections in the Emergency Room** 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** private qualification 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 Diploma in Infectious Diseases in Pediatric Patient Emergencies

Modality: online

Duration: 6 months

Accreditation: 20 ECTS



Mr./Ms. _____, with identification document _____ has successfully passed and obtained the title of:

Postgraduate Diploma in Respiratory and Cardiovascular Infections in the Emergency Room

This is a private qualification of 600 hours of duration equivalent to 20 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



^{*}Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

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Postgraduate Diploma

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