Postgraduate Certificate Febrile Syndrome and Fever in the Emergency Department for Nursing

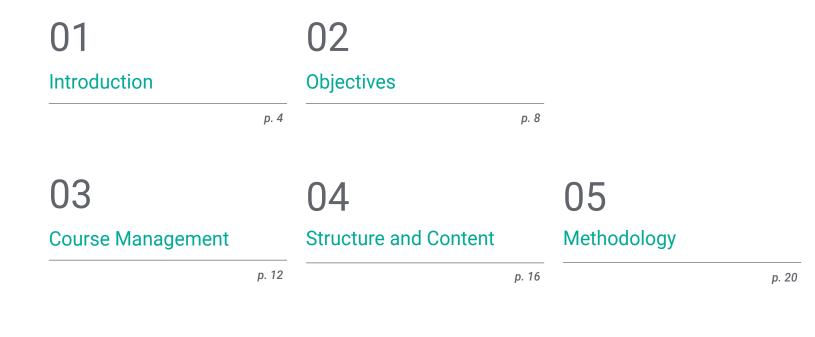




# **Postgraduate Certificate** Febrile Syndrome and Fever in the Emergency Department for Nursing

Course Modality: Online Duration: 2 months. Certificate: TECH Technological University Official N° of Hours: 225 h. Website: www.techtitute.com/nursing/postgraduate-certificate/febrile-syndrome-fever-emergency-department-nursing

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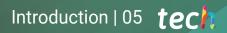


06 Certificate

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# 01 Introduction

Fever is one of the main symptoms caused by infections, so early action can improve the patient's condition quickly and effectively. Therefore, with this educational program we want to train nurses to be able to intervene with patients with infectious diseases who present these symptoms, in such a way that they achieve a real improvement in the patient.



We offer you a unique specialization due to two fundamental aspects: the quality of the teaching staff and the updating of the academic program. If you want to enhance your training, don't miss this opportunity"

# tech 06 | Introduction

One of the main features that infectious diseases can present in patients is fever, as the body tries to fight the microorganisms that cause them by raising the body temperature. However, this survival mechanism generated by the body itself must be treated by professionals to avoid major consequences in patients.

In order to offer a complete training on this aspect, TECH has designed this specific program for nurses working in the Emergency Department, so that they know how to act at all times. Specifically, the syllabus deals with aspects as varied as: the initial approach in acute febrile syndrome, antimicrobials, or the management of fever in different types of patients, according to their own pathologies, among other aspects.

Thus, this very complete specialization, which has been developed by a team of specialists in the field, will help students to improve their professional skills, obtaining a superior training that will allow them to achieve professional success.

In addition, this Postgraduate Certificate has the advantage that, being a 100% online training, the professional will have the ability to decide when and where to study, without commitments or obligations, thus being able to combine their study time with the rest of their daily obligations.

This Postgraduate Certificate in Febrile Syndrome and Fever in the Emergency Department for Nursing contains the most complete and up-to-date scientific program on the market. The most outstanding features of this program are:

- The development of clinical cases presented by experts in the field
- 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
- Therapeutic developments on intervention in Infectious Diseases
- Practical exercises where to carry out the self-assessment process to improve learning
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- Its 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

A high-level specialization that will enable you to achieve professional success"

## Introduction | 07 tech

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This program is the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in Febrile Syndrome and Fever in the Emergency Department, you will obtain a certificate by TECH"

It includes, in its teaching staff, professionals belonging to the field of nursing, who bring to this training the experience of their work, in addition to recognized 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 focuses on Problem-Based Learning, by means of which the nurse must try to solve the different professional practice situations that arise throughout the academic year. For this purpose, the professional will be assisted by an innovative interactive video system developed by recognized experts in Fever and Febrile Syndrome, and with great teaching experience. Increase your decision-making confidence by updating your knowledge through this Postgraduate Certificate.

We offer you the best teaching methodology and a multitude of practical cases that will make your study easier.

# 02 **Objectives**

The Postgraduate Certificate in Febrile Syndrome and Fever in the Emergency Department for Nursing is aimed at facilitating the performance of the health professional dedicated to the treatment of urgent infectious pathology in all areas, but especially in the Emergency Department.

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Objectives | 09 tech

Specialize with the use of the latest educational technology, to contribute with quality and safety to decision making and 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.

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Make the most of this opportunity and take the step to get up to date on the latest developments in Febrile Syndrome and Fever in the Emergency Department for Nursing"



# Objectives | 11 tech

#### **Specific Objectives**

- Explain the biomarkers used in the clinical diagnosis of infectious disease
- Define the use of C-reactive protein and procalcitonin in the diagnosis of infectious diseases
- Define the practical use of non-specific tests for infectious evidence
- Explain the initial focus in Acute Fever Syndrome
- Define the action taken in cases of Bacteremia, Sepsis and Septic Shock
- Explain how to activate code sepsis
- Define the use of different antimicrobials in febrile syndrome
- Describe the characteristics of the different types of antimicrobials
- · Define the implications of antimicrobial resistance when selecting treatment
- Explain the basic steps in the selection of antimicrobials according to the type of host and other extrinsic or environmental factors
- Explain the concept of empirical antibiotic therapy
- Describe how to act in the case of beta-lactam allergy
- Describe the use of antimicrobials and renal function
- Explain the relationship between fever and the presence of exanthema
- Explain the relationship between fever and the presence of adenopathies

- Fever and hematological alterations
- Explain the association of fever with altered level of consciousness
- Describe fever management in the elderly patient
- Describe fever management in the hemodialysis patient
- Describe fever management in a patient with intravascular devices
- Describe fever management in a patient with a HIV infection
- Describe fever management in a patient with iatrogenic immunosuppression
- Describe fever management in a patient with oncohematological pathology
- · Describe fever management in a patient with febrile neutropenia
- Describe fever management in the solid organ transplant patient
- Explain the implications of cytomegalovirus and BK virus infections in transplant recipients
- Describe fever management in a patient who has recently undergone surgery
- Describe the current management of infection of surgical wounds
- Explain the management of other infections in a patient who has recently undergone surgery
- Describe fever management in a pregnant patient
- Explain the use of antibiotic therapy in pregnancy

# 03 Course Management

The program includes in its teaching staff leading specialists in infectious diseases in the Emergency Department and other related areas, who bring to this training the experience of their work. 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 professionals of the moment on Infectious Diseases. Don't miss the opportunity to train with them"

# tech 14 | Course Management

#### Management



#### Dr. García del Toro, Miguel

- PhD in Medicine from the University of Valencia
- Head of the Infectious Diseases Unit at the General University Hospital Consortium of 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 of Infectious Diseases and Clinical Microbiology 2017
- More than 200 communications at national and international congresses in the specialty of Infectious Diseases, HIV and Viral Hepatitis
- Main Investigator of some twenty Clinical Trials and/or Research Projects



#### Ms. 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



#### Ms. 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, aware of the relevance of this specialization in order to intervene in the diagnosis, treatment and monitoring of infectious diseases in the Emergency Department and committed to quality teaching through new educational technologies.

Structure and Content | 17 tech

# 33.5.

This Postgraduate Certificate contains the most complete and up-to-date scientific program on the market"

## tech 18 | Structure and Content

#### Module 1. Systemic Febrile Syndrome Antimicrobials:

- 1.1. Biomarkers in Sepsis
  - 1.1.1. Lactate
  - 1.1.2. Procalcitonin
  - 1.1.3. Proadrenomedulin
  - 1.1.4. Combinations
- 1.2. Initial Approach in Acute Febrile Syndrome
  - 1.2.1. Initial Management of the Patient with Fever in the Emergency Department
  - 1.2.2. Treatment
  - 1.2.3. Special Categories
  - 1.2.4. Fever of Unknown Origin
  - 1.2.5. Attitude and Destiny of the Patient
- 1.3. Bacteremia, Sepsis and Septic Shock
  - 1.3.1. Definitions According to Consensus Conferences
  - 1.3.2. How to Identify a Patient with Sepsis?
  - 1.3.3. Controversies and Limitations of the New Definitions
  - 1.3.4. Managing Sepsis
- 1.4. Antimicrobials:
  - 1.4.1. Concept: What is an Antimicrobial?
  - 1.4.2. Antibacterials
  - 1.4.3. Pregnancy and Breastfeeding
  - 1.4.4. Antifungal



## Structure and Content | 19 tech

# **Module 2.** Emergency Diagnostic and Therapeutic Management of Fever in Special Situations

- 2.1. Fever in the Emergency Department
  - 2.1.1. General Concepts
  - 2.1.2. Action Protocol
  - 2.1.3. Patient Orientation
- 2.2. Fever in an Elderly Patient
  - 2.2.1. General Concepts
  - 2.2.2. Characteristics of the Specific Clinical Framework
  - 2.2.3. Points to Remember
- 2.3. Fever in a Hemodialysis Patient
  - 2.3.1. Infections Related to Vascular Access in Hemodialysis
  - 2.3.2. Other Considerations in the Infectious Pathology of a Patient on Dialysis
- 2.4. Fever in the Patient with Intravascular Catheters
  - 2.4.1. Clinical manifestations
  - 2.4.2. Etiology
  - 2.4.3. Diagnosis
  - 2.4.4. Treatment
  - 2.4.5. Prevention
- 2.5. Patient with HIV Infection
  - 2.5.1. Pulmonary Syndromes
  - 2.5.2. Neurological syndromes
  - 2.5.3. Other Fever Syndromes
  - 2.5.4. Immune Reconstitution Syndrome

- 2.6. Patient with latrogenic Immunosuppression
  - 2.6.1. Etiology
  - 2.6.2. Diagnostic Approach
  - 2.6.3. Treatment
- 2.7. Patient with Onco-hematologic Pathology
  - 2.7.1. Diagnosis and Therapeutic Management of an Onco-hematologic Patient with a Fever
- 2.8. Transplant Recipient of a Solid Organ
  - 2.8.1. Infections in the First Month Post-Transplant
  - 2.8.2. Infections Between the First and Sixth Month, Post-Transplant
  - 2.8.3. Infections After the Sixth Month Post-Transplant
  - 2.8.4. Diagnostic Strategy
  - 2.8.5. Empirical Treatment
- 2.9. Patient who has Recently Undergone Surgery
  - 2.9.1. Infection of Surgical Wounds Current Management
  - 2.9.2. Other Infections in a Patient who has Recently Undergone Surgery
- 2.10. Pregnant Patient
  - 2.10.1. Special Characteristics of a Pregnant Woman
  - 2.10.2. Diagnostic Orientation in the Emergency Department
  - 2.10.3. Treatment and Management in Special Situations
  - 2.10.4. Indications of Admission for Observation and Inpatient Treatment

A unique, key, and decisive experience to boost your professional development"

# 05 **Methodology**

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.** 

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine have considered it to be one of the most effective.** 

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

# tech 22 | Methodology

#### At TECH Nursing School we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Nurses learn better, faster, and more sustainably over time.

With TECH, nurses can experience a learning methodology 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, in an attempt to recreate the real conditions in professional nursing 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. Nurses 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 nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
- **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.



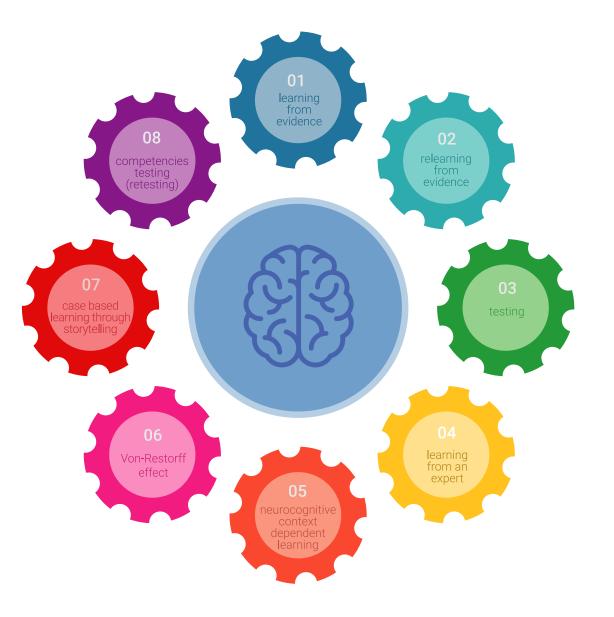
# tech 24 | Methodology

#### **Relearning Methodology**

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

This university is the first in the world to combine case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.

> The nurse 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

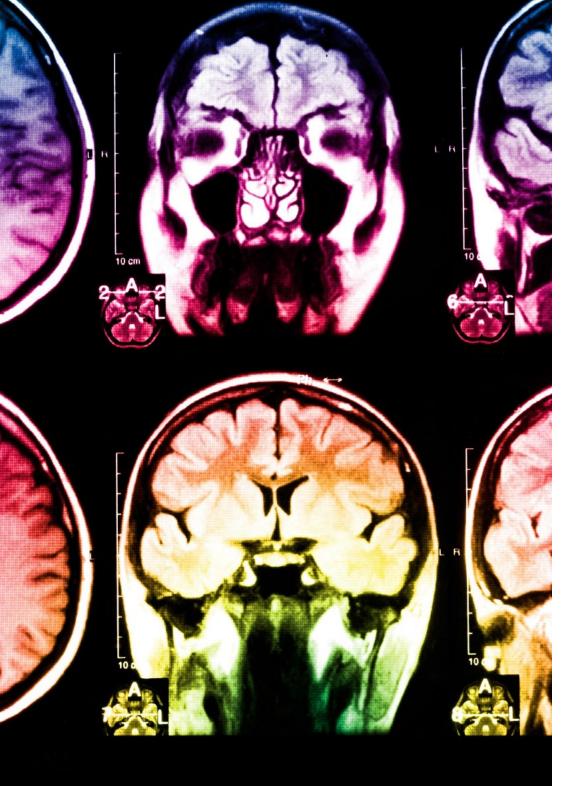
At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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

20%

15%

3%

15%

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.



#### Nursing 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 of this in direct contact with students and explained in detail so as to aid their assimilation and 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 exclusive educational system for presenting multimedia content 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.

## Methodology | 27 tech



#### **Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

20%

3%

7%

17%



#### **Testing & Retesting**

The student's knowledge is periodically assessed and re-assessed throughout the program, through evaluative and self-evaluative activities and exercises: in this way, students can check how they are doing in terms of achieving their 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 future difficult decisions.



#### Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.

# 06 **Certificate**

The Postgraduate Certificate in Febrile Syndrome and Fever in the Emergency Department for Nursing guarantees, in addition to the most rigorous and up-to-date training, access to a certificate issued by TECH Technological University.



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Successfully complete this training and receive your university certificate without the hassle of travel or paperwork"

## tech 30 | Certificate

This **Postgraduate Certificate in Febrile Syndrome and Fever in the Emergency Department for Nursing** 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 diploma** issued by **TECH Technological University** via tracked delivery\*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained though the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations and professional career evaluation committees.

Title: Postgraduate Certificate in Febrile Syndrome and Fever in the Emergency Department for Nursing

Official Nº of Hours: 225 h.



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

# technological university Postgraduate Certificate Febrile Syndrome and Fever in the Emergency Department for Nursing Course Modality: Online Duration: 2 months. Certificate: TECH Technological University Official N° of Hours: 225 h.

**Postgraduate Certificate** Febrile Syndrome and Fever in the Emergency Department for Nursing

