

Postgraduate Diploma

Fever Management in the Emergency Department for Nursing





Postgraduate Diploma Fever Management in the Emergency Department for Nursing

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/in/nursing/postgraduate-diploma/fever-management-emergency-department-nursing

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01

Introduction

Knowing how to manage fever in patients with infectious pathologies is of great importance in order to control the disease and have a better prognosis of their illness. The work of nurses is fundamental in this field, since the patient's improvement may or may not depend on their intervention. For this reason, high-level preparations such as this one specialize these professionals in the management of fever, giving a plus to their training and, therefore, to the care of the patient.





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With this intensive program you will be able to explain the biomarkers used in the clinical diagnosis of infectious diseases”

Infectious Diseases are a basic pillar of healthcare both in terms of individual health and public health worldwide. Today, for example, we can see how COVID 19 infection is revolutionizing the entire world, involving all healthcare professionals who, in one way or another, may have contact with the coronavirus.

Nurses are professionals who are on the front line in the care of any pathology, and in the case of infections, it could not be otherwise. Therefore, they need to have a broadly up-to-date knowledge of new developments in the care of patients with different types of infections. One of the main reactions of these pathologies is fever and its correct management becomes essential to achieve the patient's improvement.

As in most specialties, in the case of infectious pathology, the performance of the clinician in the Emergency Department is sometimes complex and, on many occasions, decisive in the morbidity and mortality of patients. Therefore, it is essential to establish updating tools for health professionals who have to deal with Infectious Diseases outside specialized units and services.

Specifically, this program includes classic aspects in the management of infectious pathology by apparatus or organs, incorporating new items for a correct management of Infectious Diseases in the current scenario of globalization of health. An important part of the program covers the concept of prevention of risks derived from the care of Infectious Diseases for both healthcare personnel and the population, going deeper into the measures that can be adopted in Emergency Departments to minimize them. In addition, there will be a space to learn about the current profiles of the population that most frequently attends Emergency Departments, in which the delay in action can mean a significant variability in the prognosis: multi-pathological, immunosuppressed, institutionalized, onco-hematological, etc. patients. The student will also be able to learn about pediatric pathology with this Postgraduate Diploma.

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 Fever Management in the Emergency Department for Nursing** 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 Fever Management in the Emergency Department.
- ♦ The graphic, schematic, and eminently practical contents with which they are created, provide scientific and healthcare training on those disciplines that are essential to professional practice.
- ♦ New therapeutic developments in the management of fever.
- ♦ 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



The specialization of nurses in the field of fever management is a great asset to their CV, as it is one of the main tasks that they will have to perform in the Emergency Department"

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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 in Fever Management in the Emergency Department for Nursing, you will obtain a certificate from TECH Technological University”

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 the management of fever and with great teaching experience.

Immerse yourself in the study of this Postgraduate Diploma and improve the care of your patients with infectious pathologies”

Prepare yourself with the best teaching methodology of the moment and acquire a specialization of the highest academic level that will allow you to increase your training and patient care”



02 Objectives

The Postgraduate Diploma in Management of Fever in the Emergency Department for Nursing is aimed at facilitating the performance of the professional in this area dedicated to the treatment of urgent infectious pathology in all areas, but especially in the Emergency Department.





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If your goal is to improve the care of your patients with fever, don't think twice and specialize with us. We offer you the best training in the market"



General Objectives

- Provide the necessary theoretical knowledge to be able to understand the environment in which the professional activity is developed to care for 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.



Make the most of the opportunity and take the step to get up to date on the latest developments in Fever Management in the Emergency Department for Nursing”





Specific Objectives

Module 1. Update on Infectious Diseases

- ♦ 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 infections.
- ♦ Describe the etiopathogenic profiles of viral infections.
- ♦ Describe the etiopathogenic profiles of fungal infections.
- ♦ Describe the etiopathogenic profiles of microbacterial infections.
- ♦ Describe the etiopathogenic profiles of parasitic infections.

Module 2. The Microbiology Laboratory in the Emergency Department

- ♦ 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.

Module 3. Systemic Febrile Syndrome. Antimicrobials:

- ♦ 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 Fever 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.

Module 4. Emergency Diagnostic and Therapeutic Management of Fever in





Special Situations

- ◆ 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 an elderly patient.
- ◆ Describe fever management in a patient in a hemodialysis program.
- ◆ 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 a patient 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 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.



“

The best teachers are at the best university. Don't miss the opportunity to train with them.

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 to 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 in the country, aware of the relevance of this specialization in order to intervene in the treatment and monitoring of Fever Management in the Emergency Department and committed to quality teaching through new educational technologies.



A close-up photograph of a person's hand, showing a red, itchy rash on the back of the hand and wrist. The hand is resting on a white, textured fabric. The image is partially obscured by a diagonal split: the top right is a solid teal color, and the bottom left is white.

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Our goal is to achieve academic excellence and to help you achieve it. For this, we have the best teaching program"

Module 1. Update 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. Travelers 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



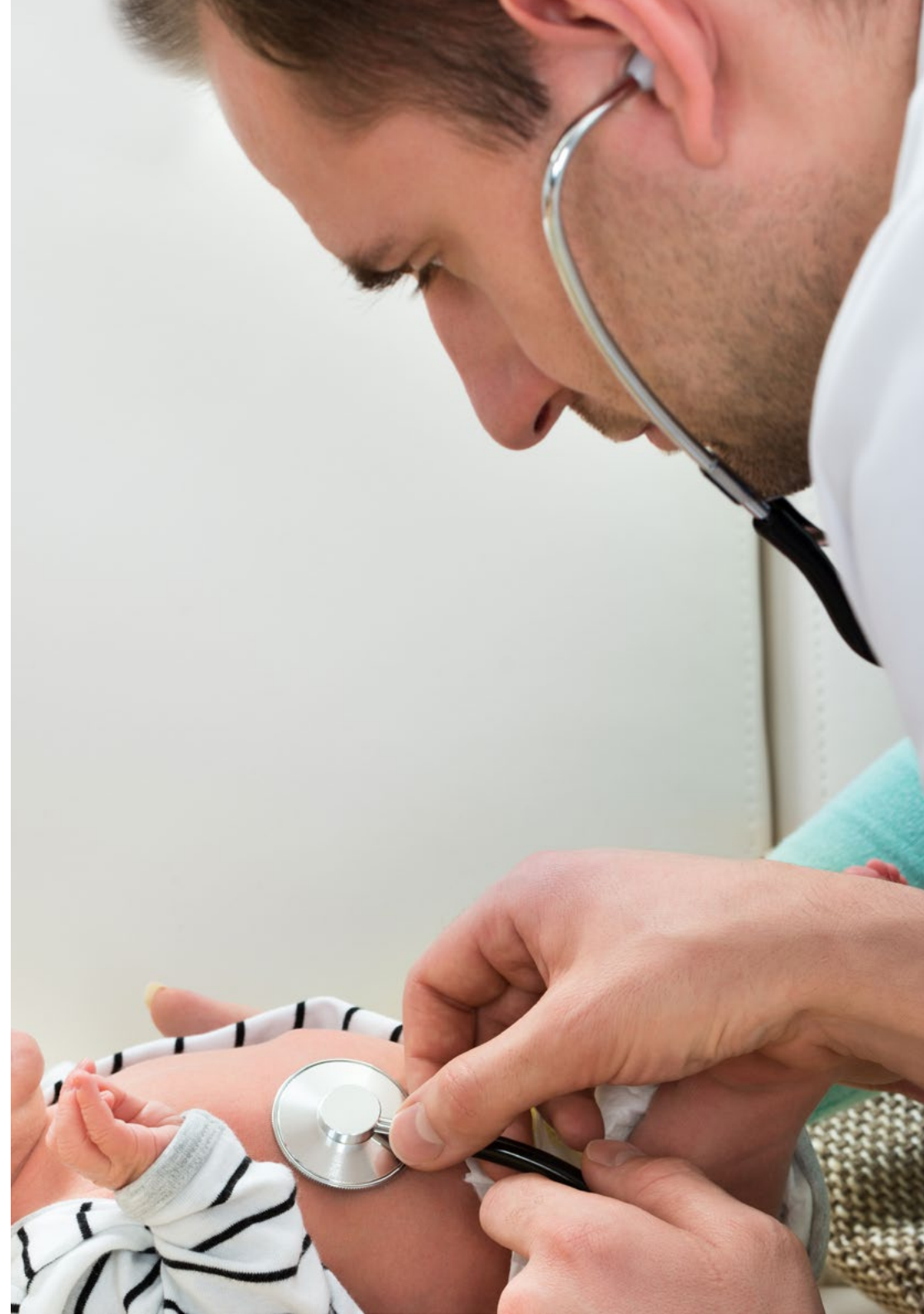


Module 2. The Microbiology Laboratory in the Emergency Department

- 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. Systemic Febrile Syndrome. Antimicrobials:

- 3.1. Biomarkers in Sepsis
 - 3.1.1. Lactate
 - 3.1.2. Procalcitonin
 - 3.1.3. Proadrenomedulin
 - 3.1.4. Combinations
- 3.2. Initial Focus in Acute Fever Syndrome
 - 3.2.1. Initial Management of a Patient with a Fever in the Emergency Department
 - 3.2.2. Treatment
 - 3.2.3. Special Categories
 - 3.2.4. Fever of Unknown Origin
 - 3.2.5. Attitude and Destiny of the Patient
- 3.3. Bacteremia, Sepsis and Septic Shock
 - 3.3.1. Definitions According to Consensus Conferences
 - 3.3.2. How to Identify a Patient with Sepsis
 - 3.3.3. Controversies and Limitations of the New Definitions
 - 3.3.4. Managing Sepsis
- 3.4. Antimicrobials:
 - 3.4.1. Concept: What is an Antimicrobial?
 - 3.4.2. Antibacterials
 - 3.4.3. Pregnancy and Breastfeeding
 - 3.4.4. Antifungal



Module 4. Emergency Diagnostic and Therapeutic Management of Fever in Special Situations

- 4.1. Fever in the Emergency Department
 - 4.1.1. General Concepts
 - 4.1.2. Action Protocol
 - 4.1.3. Patient Orientation
- 4.2. Fever in an Elderly Patient
 - 4.2.1. General concepts
 - 4.2.2. Characteristics of the Specific Clinical Framework
 - 4.2.3. Points to Remember
- 4.3. Fever in a Hemodialysis Patient
 - 4.3.1. Infections Related to Vascular Access in Hemodialysis
 - 4.3.2. Other Considerations in the Infectious Pathology of a Patient on Dialysis
- 4.4. Fever in the Patient with Intravascular Catheters
 - 4.4.1. Clinical manifestations
 - 4.4.2. Etiology
 - 4.4.3. Diagnosis
 - 4.4.4. Treatment
 - 4.4.5. Prevention
- 4.5. Patient with HIV Infection
 - 4.5.1. Pulmonary Syndromes
 - 4.5.2. Neurological syndromes
 - 4.5.3. Other Fever Syndromes
 - 4.5.4. Immune Reconstitution Syndrome
- 4.6. Patient with Iatrogenic Immunosuppression
 - 4.6.1. Etiology
 - 4.6.2. Diagnostic Approach
 - 4.6.3. Treatment
- 4.7. Patient with Onco-hematologic Pathology
 - 4.7.1. Diagnosis and Therapeutic Management of an Onco-hematologic Patient with a Fever
- 4.8. Transplant Recipient of a Solid Organ
 - 4.8.1. Infections in the First Month Post-Transplant
 - 4.8.2. Infections Between the First and Sixth Month, Post-Transplant
 - 4.8.3. Infections After the Sixth Month Post-Transplant
 - 4.8.4. Diagnostic Strategy
 - 4.8.5. Empirical Treatment
- 4.9. Patient who has Recently Undergone Surgery
 - 4.9.1. Infection of Surgical Wounds Current Management
 - 4.9.2. Other Infections in a Patient who has Recently Undergone Surgery
- 4.10. Pregnant Patient
 - 4.10.1. Special Characteristics of a Pregnant Woman
 - 4.10.2. Diagnostic Orientation in the Emergency Department
 - 4.10.3. Treatment and Management in Special Situations
 - 4.10.4. Indications of Admission for Observation and Inpatient Treatment



A unique, key and decisive training 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.



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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"

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.



Relearning Methodology

At TECH we enhance the 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.

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.



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.

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.

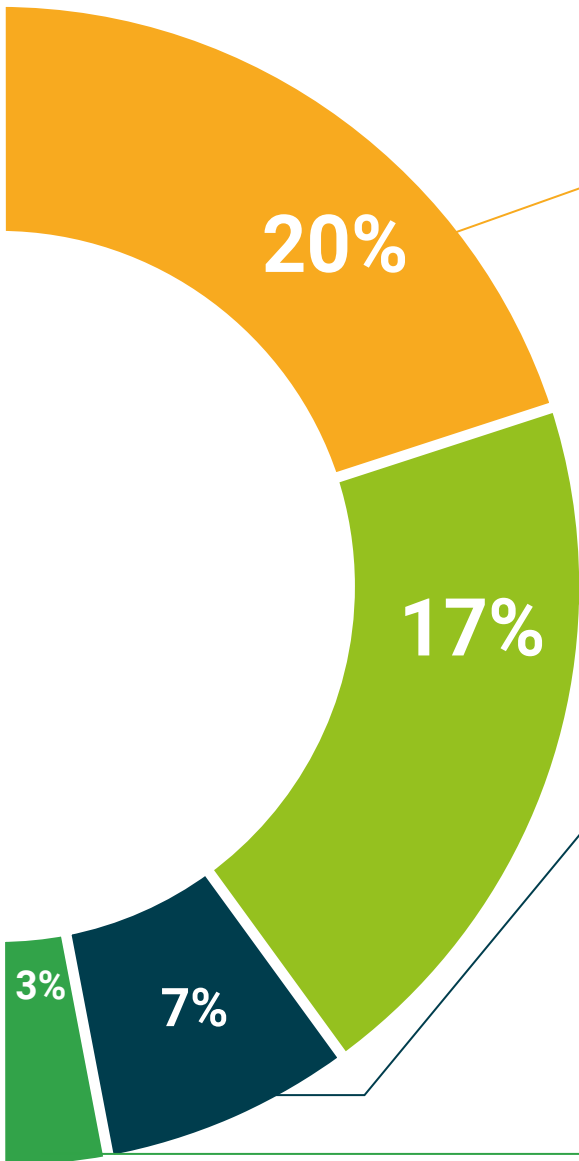
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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.





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.



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 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 Diploma in Fever Management 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 travel or laborious paperwork”*

This **Postgraduate Diploma in Fever Management in the Emergency Department for Nursing** contains the most complete and up-to-date scientific program on the market.

After the students has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery*.

The certificate issued by **TECH Technological University** will reflect 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 Fever Management in the Emergency Department for Nursing**

Official N° of Hours: **425 h.**



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



Postgraduate Diploma

Fever Management in the Emergency Department for Nursing

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Postgraduate Diploma

Fever Management in the Emergency Department for Nursing

