

Postgraduate Diploma

Life-Threatening Emergencies in Primary Care





Postgraduate Diploma Life-Threatening Emergencies in Primary Care

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 20 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-life-threatening-emergencies-primary-care

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 14

04

Structure and Content

p. 20

05

Methodology

p. 24

07

Certificate

p. 32

01

Introduction

It is difficult for the emergency department not to be a basic and critical point of reference for health systems. And in the case of children, maintaining a level of excellence is an even greater challenge. Adequate specialization of the professionals who care for them is essential to guarantee the quality of care. This program addresses the vital emergencies that are treated in primary care emergency departments.



A close-up photograph of a hand holding a strip of white ECG paper. The paper shows a red line representing a heart rate, with a prominent spike. The background is a blurred blue and white, suggesting a medical setting. The image is partially obscured by a dark blue diagonal overlay on the right side of the page.

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The new scenarios in emergency medicine motivate us to propose new specialization programs that meet the real needs of experienced professionals, so that they can incorporate advances in emergency care into their daily practice”

Emergency health care is an essential element in a health system, in which quality and ongoing care for individuals must be guaranteed. Primary care is the gateway to the health system, often receiving patients with potentially serious conditions that require immediate and complex treatment, often accompanied by minimal resources.

Considering the long hours that primary care physicians spend treating life-threatening emergencies, the importance they have, the current patient and professional demand for greater professional quality, more than justify that primary care physicians today should be able to intervene in all acute and urgent pathologies that may arise regardless of the level of severity. For this reason, the role of family physicians who treat life-threatening emergencies in primary care is crucial.

Being a constantly evolving field, this program includes a series of exclusive Masterclasses in which Jesse M. Pines, M.D. will offer the latest trends and developments in the field of emergency medicine. As an eminent expert in the field of Primary Care Emergency Medicine, Jesse M. Pines, M.D. will provide the specialist with the most important clinical practices and advances in the field.

This program offers rules of action for all possible situations that may be encountered in the practice on a regular basis and will be able to help them make decisions with agility and precision.

This **Postgraduate Diploma in Life-Threatening Emergencies in Primary Care** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Clinical cases presented by experts in the different specialties
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Diagnostic and therapeutic developments in treating patients with urgent pathologies
- ♦ Clinical practice guidelines on the different life-threatening pathologies
- ♦ Presentation of practical workshops on procedures, diagnosis, and treatment techniques
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ♦ All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



Benefit from a series of distinctive Masterclasses that address the latest developments in pharmacology, emergency medicine and advanced cardiovascular support"

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This Postgraduate Diploma is the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge of Life-Threatening Emergencies in Primary Care, you will obtain a qualification from TECH Technological University”

The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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 education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

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

Don't miss the opportunity to update your knowledge of Life-Threatening Emergencies in Primary Care tools to increase the quality of patient care.



02 Objectives

The main program objective is to develop theoretical and practical learning, in order to acquire the necessary skills to establish the appropriate diagnosis and treatment in each case, and to correctly and safely provide medical care to patients with acute pathology in primary care.





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This refresher program will generate a sense of confidence in the medical practice of emergency situations in primary care, which will help you grow personally and professionally”



General Objective

- Provide action rules for dealing with the life-threatening emergencies that family physicians must face in their daily clinical practice, helping them to make prompt and accurate decisions

“

A path to achieve education and professional growth that will propel you towards a greater level of competitiveness in the employment market”





Specific Objectives

Module 1. Organizational Aspects of the Emergency Department

- ♦ Define the structure and organization of emergency services in primary care
- ♦ Understand the importance of medical records in the emergency department and understand the most relevant legal and ethical aspects of health care in emergencies in primary care

Module 2. Cardiac Emergencies

- ♦ Interpret the main signs in order to properly analyze an electrocardiogram in urgent and emergency situations in Primary Care
- ♦ Use general procedures and techniques applied to critical patients in emergency situations
- ♦ Identify the symptoms of the different types of high-risk syncope
- ♦ Define the different conditions that cause chest pain and apply the appropriate protocols in each case
- ♦ Apply the specific procedures in Acute Coronary Syndrome and assess the possibility of prehospital fibrinolysis
- ♦ Get up-to-date on the therapeutic model in atrial fibrillation according to the latest scientific evidence
- ♦ Identify the signs and symptoms of patients who come to the primary care center with pericarditis
- ♦ Recognize the different signs and symptoms typical of ischemic heart disease.

Module 3. Advanced Cardiovascular Support and Invasive Techniques in the Emergency Room

- ♦ Adequate use of the comprehensive action plan with regard to The Heart Attack Code
- ♦ Resolve a hypertensive emergency situation using the updated procedure of care
- ♦ Incorporate advances in the appropriate management of patients with Congestive Heart Failure and Acute Pulmonary Edema
- ♦ Review the basic concepts of non-invasive mechanical ventilation management
- ♦ Correct use of non-invasive mechanical ventilation through the Boussignac CPAP System
- ♦ Apply up-to-date basic and advanced CPR techniques for all ages.
- ♦ Identify the different vital rhythms to apply the appropriate algorithm for advanced cardiopulmonary resuscitation, according to the latest scientific evidence on advanced cardiovascular support
- ♦ Adequately define the different parameters involved in invasive mechanical ventilation
- ♦ Master the procedure of pediatric and neonatal cardiopulmonary resuscitation in the primary care setting
- ♦ Demonstrate the correct sequence of transcutaneous pacemaker application

Module 4. Respiratory Emergencies

- ♦ Incorporate advances in the appropriate management of patients with Congestive Heart Failure and Acute Pulmonary Edema
- ♦ Review the basic concepts of non-invasive mechanical ventilation management.
- ♦ Correct use of non-invasive mechanical ventilation through the Boussignac CPAP System
- ♦ Identify the different vital rhythms to apply the appropriate algorithm for advanced cardiopulmonary resuscitation, according to the latest scientific evidence on advanced cardiovascular support
- ♦ Adequately define the different parameters involved in invasive mechanical ventilation
- ♦ Get up-to-date on treatment to resolve an acute decompensation in a dyspneic patient
- ♦ Recognize the differential diagnosis between the asthmatic patient, bronchospasm, and exacerbation of chronic obstructive pulmonary disease
- ♦ Review the pathophysiology involved in an asthmatic crisis
- ♦ Use pharmacological treatment measures in pneumonia
- ♦ Identify the main clinical signs and symptoms of pneumothorax
- ♦ Identify the signs and symptoms of massive pulmonary embolism
- ♦ Differentiate the different levels of health care in a patient with hemoptysis and assess the criteria for hospital referral
- ♦ Identify the concept of a patient that has almost drowned
- ♦ Differentiate the different levels of health care in a patient with hemoptysis and assess the criteria for hospital referral

Module 5. Neurological Emergencies

- ♦ Describe the initial management of the main neurological emergencies in out-of-hospital settings
- ♦ Adequate use of the comprehensive action plan for the Code Stroke



- ♦ Differentiate immediate and appropriate action in acute confusional syndrome, headache and seizures
- ♦ Recognize and resolve a seizure situation
- ♦ Describe the different types of headaches and the appropriate treatment in each case
- ♦ Recognize a coma situation without any doubt

Module 6. Digestive Emergencies

- ♦ Identify the signs and symptoms of the main gastrointestinal tract conditions and their repercussions
- ♦ Differentiate the main causes of acute abdomen and manage acute abdominal pain in Primary Care
- ♦ Review the pathophysiology of an intestinal obstruction process
- ♦ Express the different manifestations resulting from biliary diseases
- ♦ Recognize the specific pathological picture of upper gastrointestinal bleeding
- ♦ Use the different complementary tests to diagnose an ingested foreign body

Module 7. Pharmacology in Emergencies

- ♦ Handle drugs frequently used in emergency medicine.
- ♦ Distinguish between the different types of fluid therapy
- ♦ Point out the different drugs used for sedation, pain relief, and relaxation in emergency medicine

03

Course Management

The program includes in its teaching staff renowned experts in emergency primary care, who have contributed their work experience to this specialization. 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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Learn the latest advances in life-threatening emergencies in primary care from leading professionals”

International Guest Director

As National Director of Clinical Innovation at US Acute Care Solutions, **Jesse M. Pines, M.D.**, is one of the most recognized figures in the **Emergency Medicine and Healthcare Services** field.. In fact, his accomplishments include the creation and execution of the first governmental alternative payment model (ED EQUIP, in Maryland) to reduce the total cost of care. In addition, he leads the development and implementation of Telemedicine programs covering a wide variety of specialties, including the ER, Psychiatry and Intensive Care Units, among others.

His extensive experience in **medical leadership**, large database study design and Big Data research has led him to publish over 350 peer-reviewed articles and writing seven books in these areas. His work has been recognized internationally in various reputable media outlets, including TIME Magazine, the Wall Street Journal and Slate Magazine.

His more than two decades of experience have earned him several leadership positions at George Washington University. Among them, he was the **Director** of the Center for Health Innovation and Research, also leading the Research Fellowship program and the Center for Healthcare Quality.

Therefore, throughout his career, Dr. Jesse M. Pines has received multiple awards, both for the articles he has published and for his own work and contribution to the **field of Emergency Medicine**.. He is also the **Chairman of the American College of Emergency Physicians (ACEP)** Task Force on New Models of Professional Practice, holding various positions in the ACEP itself as well as in the Society for Academic Emergency Medicine and the American Academy of Emergency Medicine.



Dr. Pines, Jesse M.

- National Director of Clinical Innovation at US Acute Care Solutions, United States
- Emergency Physician at Allegheny Health Network
- Professor of Emergency Medicine at George Washington University
- Professor of Emergency Medicine at Drexel University
- Director of the Medical Research Fellowship Program, George Washington University
- Director of the George Washington University Center for Health Research and Innovation
- M.D., Georgetown University
- Master of Business Administration from Georgetown University
- M.S. in Clinical Epidemiology, University of Pennsylvania



Thanks to TECH you will be able to learn with the best professionals in the world"

Management



Dr. Roig D'Cunha-Kamath, Francisco Vicente

- ♦ Hospital Emergency Physician at Valencia University Clinical Hospital
- ♦ Assistant Physician in the Emergency Medicine Department at Valencia Clinical University Hospital
- ♦ Physician of the CIBE of Valencia Health and Community Foundation
- ♦ Professor of Human Anatomy in the European University of Valencia
- ♦ Doctor for the ASCIRES group
- ♦ Degree in Medicine from the University of Valencia
- ♦ Specialist via MIR in Family and Community Medicine

Professors

Dr. Brasó Aznar, José Vicente

- ♦ Section Chief of the Emergency Medicine Department of the La Ribera University Hospital
- ♦ Hospital Emergency Physician
- ♦ Associate Professor of Emergency Medicine in the Faculty of Medicine of the University of Valencia



04

Structure and Content

The structure of the contents has been designed by a team of professionals who are aware of the implications of specialized knowledge in medical practice of Vital Emergencies in Primary Care, aware of the current relevance of knowledge to be able to treat the emergency patient and committed to quality teaching through new educational technologies.



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This Postgraduate Diploma in Life-Threatening Emergencies in Primary Care is the most complete and up-to-date scientific program on the market”

Module 1. Organizational Aspects of the Emergency Department

- 1.1. Organization of the Emergency Department in Primary Care. Adequate Stocking of First Aid Kits
- 1.2. Role of the Healthcare Professional in Primary Care Emergencies
- 1.3. Medicolegal Management Issues in Primary Care Emergency Departments

Module 2. Cardiac Emergencies

- 2.1. Workshop: Reading and Interpreting an Electrocardiogram
- 2.2. Syncope
- 2.3. Acute Chest Pain
- 2.4. Acute Coronary Syndrome:
 - 2.4.1. Non-ST-Elevation Acute Coronary Syndrome (NSTEMACS)
 - 2.4.2. ST-Elevation Acute Coronary Syndrome (STEMACS)
 - 2.4.3. The Heart Attack Code
- 2.5. Atrial Fibrillation
- 2.6. Hypertensive Crisis
- 2.7. Pericarditis
- 2.8. Heart Failure
- 2.9. Acute Pulmonary Edema
- 2.10. Shock
- 2.11. Positive Ventilation Workshop: Boussignac CPAP

Module 3. Advanced Cardiovascular Support and Invasive Techniques in the Emergency Room

- 3.1. General Aspects
- 3.2. Basic Life Support and AED in Adults
- 3.3. Advanced Life Support in Adults
 - 3.3.1. Advanced Airway Management
 - 3.3.2. Arrhythmia Treatment
 - 3.3.3. Infusion Routes and Drugs
 - 3.3.4. Rapid Intubation Sequence Workshop



- 3.4. Basic Pediatric Life Support
- 3.5. Advanced Pediatric Life Support
 - 3.5.1. Recognition and Management of Critically Ill Children
 - 3.5.2. Advanced Airway Management
 - 3.5.3. Basics of Mechanical Ventilation in Pediatrics
 - 3.5.4. Infusion Routes and Drugs in Pediatric CPR
 - 3.5.5. Pediatric VAS Algorithms and Arrhythmia Treatment
- 3.6. Neonatal Resuscitation
 - 3.6.1. Post-resuscitation Stabilization and Neonatal Transport
- 3.7. Life Support in Special Cases
- 3.8. Invasive Procedures and Techniques in the Emergency Department

Module 4. Respiratory Emergencies

- 4.1. Acute Dyspnea
- 4.2. Acute Chronic Obstructive Pulmonary Disease (COPD)
- 4.3. Acute Bronchial Asthma
- 4.4. Pneumonia
- 4.5. Pneumothorax
- 4.6. Pulmonary Thromboembolism (PTE)
- 4.7. Hemoptysis
- 4.8. Workshop: Non-Invasive Mechanical Ventilation BIPAP

Module 5. Neurological Emergencies

- 5.1. Acute Confusional Syndrome
- 5.2. Stroke
- 5.3. Headaches
- 5.4. Central Nervous System (CNS) Infections: Meningitis Encephalitis and Brain Abscess
- 5.5. Coma
- 5.6. Seizures

Module 6. Digestive Emergencies

- 6.1. Acute Pancreatitis
- 6.2. Acute Gastrointestinal Bleeding
- 6.3. Acute Abdominal Pain
- 6.4. Intestinal Obstruction
- 6.5. Acute Gastroenteritis
- 6.6. Acute Biliary Disease
- 6.7. Proctology Emergencies

Module 7. Pharmacology in Emergencies

- 7.1. Pain Management
- 7.2. Sedoanalgesia in Emergencies
- 7.3. Adverse Effects to Medications



*A unique specialization experience,
key and decisive 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 we use the Case Method

What should a professional do in a given situation? 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. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional 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 achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



Relearning Methodology

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

This 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, a real revolution with respect to the mere study and analysis of cases.

Professionals will learn through real cases and by resolving 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, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. 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 highly 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.



Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and 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 the videos as many times as you like.



Interactive Summaries

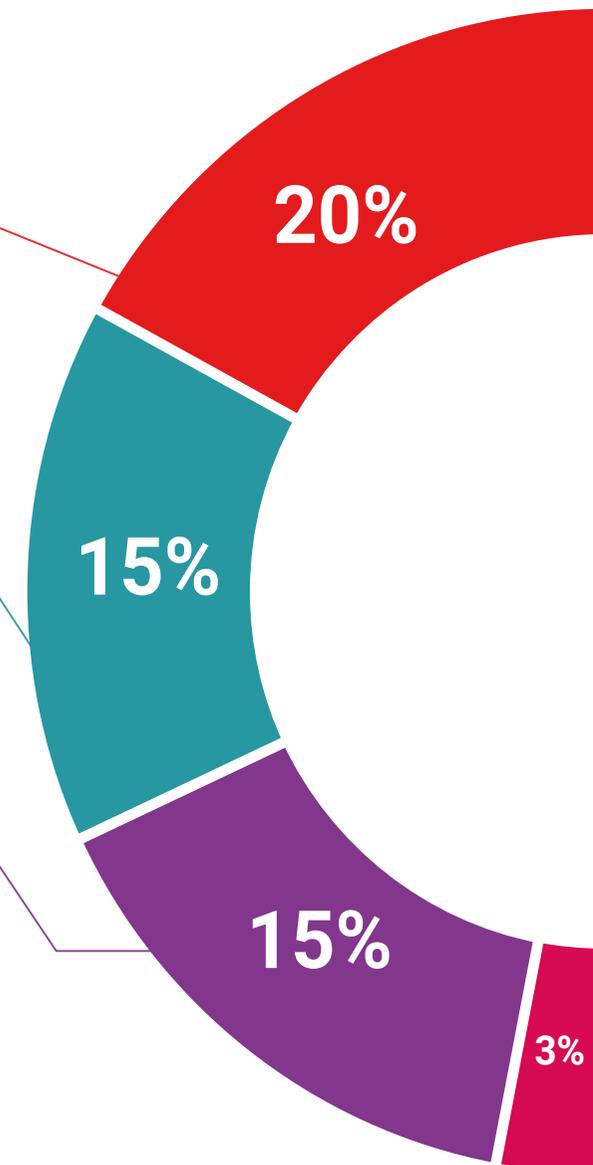
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

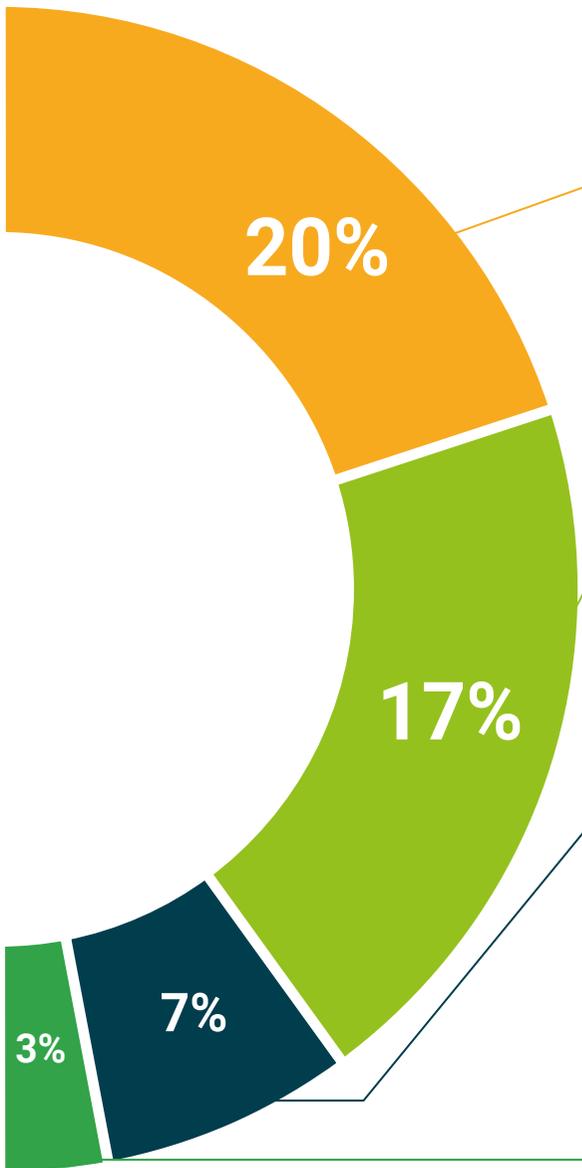
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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 on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



Quick Action Guides

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



06 Certificate

The Postgraduate Diploma in Life-Threatening Emergencies in Primary Care guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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*Successfully complete this program
and receive your university qualification
without having to travel or fill out
laborious paperwork”*

This private qualification will allow you to obtain a **Postgraduate Diploma in Life-Threatening Emergencies in Primary Care** 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.

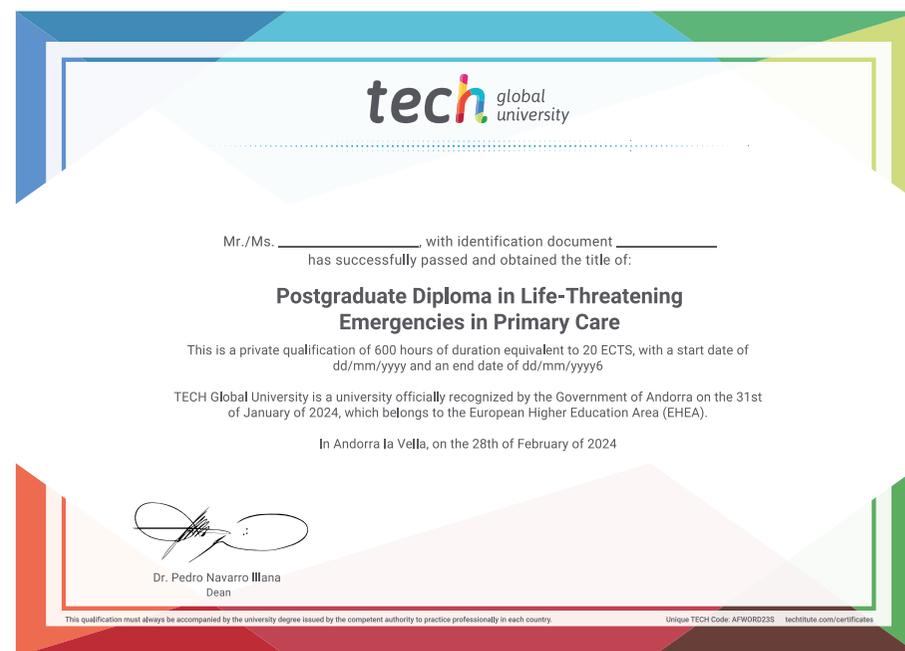
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Life-Threatening Emergencies in Primary Care**

Modality: **online**

Duration: **6 months**

Accreditation: **20 ECTS**



*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.



Postgraduate Diploma
Life-Threatening Emergencies
in Primary Care

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Postgraduate Diploma

Life-Threatening Emergencies in Primary Care