

# Postgraduate Certificate

Advanced Life Support and Invasive  
Techniques in Primary Care





## Postgraduate Certificate

### Advanced Life Support and Invasive Techniques in Primary Care

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

Website: [www.techtitute.com/pk/medicine/postgraduate-certificate/advanced-life-support-invasive-techniques-primary-care](http://www.techtitute.com/pk/medicine/postgraduate-certificate/advanced-life-support-invasive-techniques-primary-care)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 18*

05

Methodology

---

*p. 22*

06

Certificate

---

*p. 30*

# 01

# Introduction

This Postgraduate Certificate contains the latest procedure advances for physicians to be able to face with guarantees a cardiorespiratory arrest situations in adult and pediatric patients, according to the latest recommendations from the main international scientific institutions in advanced life support, in addition to addressing the latest developments in techniques and procedures in emergencies situations.





*This Postgraduate Certificate addresses the main advances in Life Support and invasive techniques in Primary Care, so that you will be able to face situations that can compromise a patient's life. Learn how to identify, initially care for and transfer hemodynamically unstable patients from primary care to a specialized care center"*

Primary care is the gateway to the health system, often receiving patients with potentially serious conditions that require immediate and complex treatment. Furthermore, it is usually performed with scarce resources, which makes the role of family physicians who treat emergencies in Primary Care a crucial one.

This Postgraduate Certificate in Advanced Life Support and Invasive Techniques in Primary Care is a complete program that describes how to approach the management of cardiorespiratory arrest, both in adult and pediatric patients, and explains through demonstrative workshops the main procedures and the main invasive techniques that are carried out in the emergency department.

The methodological proposal is based on the method "from Practice to Theory", creating step by step, within each clinical case, the cognitive bridges that allow for significant learning that lasts over time. This program is designed with the latest educational technology, allowing the exchange of knowledge and experiences, maintaining and updating the training level of its members, creating action protocols and disseminating advances in life support procedures and techniques.



*Update your knowledge through the Postgraduate Certificate in Advanced Life Support and Invasive Techniques in Primary Care in a practical way and adapted to your needs"*

This **Postgraduate Certificate in Advanced Life Support and Invasive Techniques in Primary Care** is the most complete and up-to-date scientific program on the market.

The most important features of the program include:

- ♦ Clinical cases presented by experts in the different specialties. 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.
- ♦ Diagnostic and therapeutic developments in the most frequent cardiovascular and respiratory emergencies in the primary health care setting; it also includes the use of semiautomatic defibrillators and airway obstructions, the approach to arrhythmias, and the latest in advanced life support procedures.
- ♦ Presentation of procedures, diagnosis, and treatment techniques. Such as the introduction of the use of external pacemakers, electrical cardioversion or defibrillation in the emergency department.
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course.
- ♦ It also includes pediatric life support maneuvers and echocardiography workshops.
- ♦ With a special emphasis on evidence-based medicine and research methodologies in emergencies.
- ♦ 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.

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*This Postgraduate Certificate may be the best investment you can make when choosing a refresher program for two reasons: in addition to updating your knowledge of Advanced Life Support and Invasive Techniques in Primary Care, you will obtain a qualification from TECH - Technological University”*

Forming part of the teaching staff is a group of professionals in the field of Primary Care emergencies, who bring to this training their work experience, as well as renowned specialists recognized by esteemed scientific communities.

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 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 reason, you will be assisted by an innovative, interactive video system created by renowned experts in the field of the primary health care emergencies with extensive teaching experience.

*This online methodology allows you to practice in a simulated environment through clinical cases.*

*Take the opportunity to update your knowledge of life support and invasive techniques in Primary Care emergencies to improve patient care.*



# 02 Objectives

The main program objective is to develop theoretical and practical learning, so that physicians can practically and rigorously master life support maneuvers and invasive emergency techniques in primary health care.







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*This refresher program will generate a sense of security when practicing medicine, which will help you grow both personally and professionally”*



## General Objective

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- Provide the necessary knowledge to perform basic and advanced life support maneuvers in adult and pediatric patients, and address invasive procedure and technique management as applied in the emergency department.



*Seize the opportunity and take the step to get up to date on the latest developments in cardiovascular life support maneuvers and know the techniques and invasive procedures in primary health care emergencies”*





## Specific Objectives

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- ◆ Define the cardiopulmonary resuscitation maneuvers used to reverse cardiorespiratory arrest.
- ◆ Describe the chain of survival phases.
- ◆ Indicate situations in which cardiopulmonary resuscitation is required, and the indications for suspending cardiopulmonary resuscitation.
- ◆ Indicate the steps for assessing resuscitation maneuver effectiveness.
- ◆ Point out the differences between the different electrocardiographic patterns, and the basics of early defibrillation.
- ◆ List and define the equipment needed to clear the airway, administer adequate ventilation, and perform venous or intraosseous access.
- ◆ Describe emergency ultrasound management by means of a demonstrative workshop.
- ◆ Explain patient monitoring procedures.
- ◆ Describe the treatment of bradyarrhythmias by transcutaneous pacing and tachyarrhythmias by electrical cardioversion.
- ◆ Establish shockable rhythm management.
- ◆ Explain basic instrumentalized for airway management.
- ◆ Address airway management by orotracheal intubation.
- ◆ Explain difficult airway management.

03

# Course Management

This program includes highly regarded health professionals in the field of emergency care in its teaching staff, who bring the experience of their work to this training. In addition, renowned specialists, members of prestigious national and international scientific communities, are involved in designing and preparing the program.





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*Learn the latest advances in medical procedures for life support and invasive techniques in Primary Care emergencies 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 Chair of the American College of Emergency Physicians (ACEP) Task Force on New Practice Models, holding various positions in ACEP, the Society for Academic Emergency Medicine and the American Academy of Emergency Medicine.



## Dr. M. Pines, Jesse

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- National Director of Clinical Innovation at US Acute Care Solutions, United States.
- Emergency Physician at Allegheny Health Network
- Professor of Emergency Medicine at The George Washington University, USA
- Professor of Emergency Medicine at Drexel University
- Director of the Medical Research Fellowship Program at The 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 from the University of Pennsylvania

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*Thanks to TECH, you will be able to learn with the best professionals in the world”*

## Management



### Vicente Fco Roig D' Cunha-Kamath

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





## Professors

### **Dr. Brasó Aznar, José Vicente**

- ◆ Hospital Emergency Physician
- ◆ Associate Professor of Emergency Medicine at the Faculty of Medicine of the University of Valencia.
- ◆ Head of Department Emergency Medicine. Ribera University Hospital

04

# Structure and Content

The content structure has been designed by a team of professionals who recognize the implications of training in daily medical praxis for emergency pediatric care, who are aware of the relevance of current training to treat patients with emergency pathologies, and who are committed to quality teaching using new educational technologies.





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*This Postgraduate Certificate in Advanced Life Support and Invasive Techniques in Primary Care is the most complete and up-to-date scientific program on the market”*

### Module 1. Basic Life Support

- 1.1. Basic Life Support with Automatic External Defibrillator
- 1.2. Foreign Object Airway Obstruction

### Module 2. Action in Response to Bradyarrhythmias

### Module 3. Action in Response to Tachyarrhythmia

### Module 4. Advanced Vital Support

- 4.1. Advanced Airway Management
- 4.2. Arrhythmia Treatment
- 4.3. Infusion Routes and Drugs
- 4.4. Rapid Intubation Sequence Workshop

### Module 5. Invasive Procedures and Techniques in the Emergency Department

- 5.1. External Pacemaker
- 5.2. Electrical Cardioversion
- 5.3. Defibrillation in Emergencies

### Module 6. Workshop: Echocopy Management in the Emergency Department

### Module 7. Basic and Advanced Pediatric Life Support

- 7.1. Basic Pediatric Life Support
- 7.2. Airway and Ventilation in Pediatrics
- 7.3. Infusion Routes and Drugs, Diagnosis and Treatment of Arrhythmias
- 7.4. Neonatal Resuscitation





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

05

# Methodology

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

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



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

## At TECH we use the Case Method

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

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



According to Dr. Gervas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching potential or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in professional medical practice.



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*Did you know that this method was developed in 1912 at Harvard for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”*

The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



## Re-learning Methodology

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

Our University is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.



*The physician will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.*

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

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

*Re-learning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

In our program, learning is not a linear process, but rather a spiral (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

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



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



#### Study Material

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

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



#### Latest Techniques and Procedures on Video

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



#### Interactive Summaries

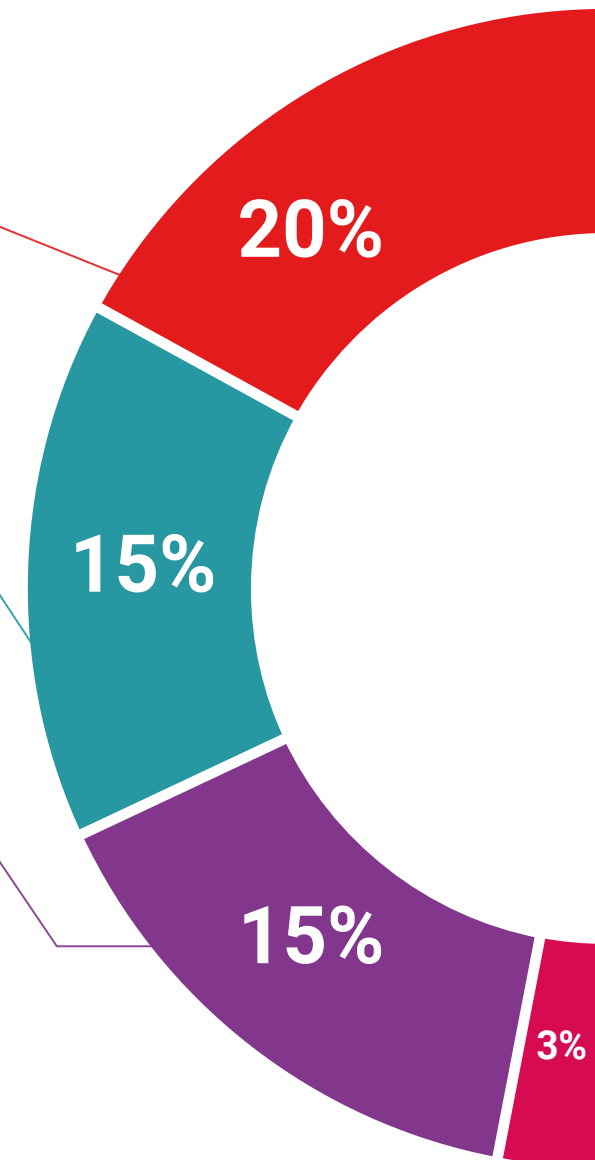
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

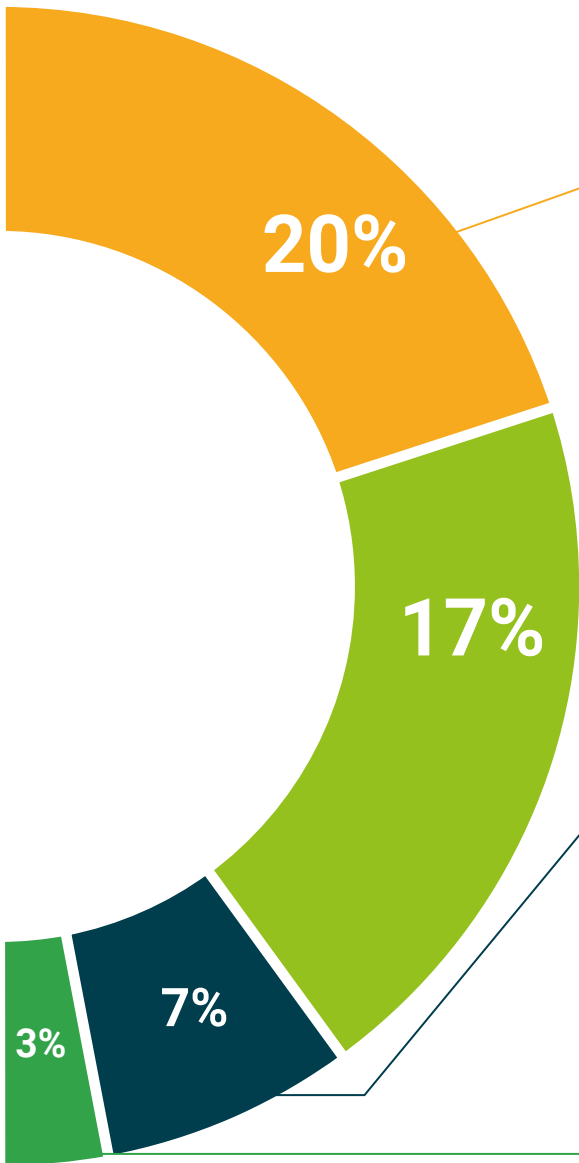
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



#### Additional Reading

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





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

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### Testing & Retesting

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



#### Classes

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

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



#### Quick Action Guides

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



# 06 Certificate

The Postgraduate Certificate in Advanced Life Support and Invasive Techniques in Primary Care guarantees, in addition to the most accurate and up-to-date training, access to a qualification issued by **TECH - Technological University**.





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

This **Postgraduate Certificate in Advanced Life Support and Invasive Techniques in Primary Care** is the most complete and up-to-date scientific program on the market.

After the student has passed the evaluations, they will receive by mail with acknowledgment of receipt their corresponding **certificate** issued by TECH Technological University.

The certificate issued by TECH - Technological University will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation.

Title: **Postgraduate Certificate in Advanced Life Support and Invasive Techniques in Primary Care**

ECTS: **3**

Official Number of Hours: **75**



\*Apostille Convention. In the event that the student wishes to have their paper certificate Apostilled, TECH EDUCATION will make the necessary arrangements to obtain it at an additional cost of €140 plus shipping costs of the Apostilled certificate.



future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present  
online training  
development languages  
virtual classroom



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and Invasive Techniques  
in Primary Care

- » Modality: **online**
- » Duration: **6 weeks**
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- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

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