

Postgraduate Certificate

Advanced Pediatric Life Support





Postgraduate Certificate Advanced Pediatric Life Support

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 4 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/medicine/postgraduate-certificate/advanced-pediatric-life-support

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01

Introduction

This program is designed to update physicians on the latest advances in the procedures required to effectively handle pediatric and neonatal cardiopulmonary arrest situations, following the latest recommendations from leading international scientific institutions in advanced life support. It is delivered in a practical, 100% online format tailored to their needs.





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This Postgraduate Certificate covers the latest advancements in pediatric advanced life support techniques, allowing you to face situations that may threaten the patient's life. Learn to identify, initially treat, and transfer hemodynamically unstable children and newborns, or those in cardiopulmonary arrest”

The Postgraduate Certificate in Advanced Pediatric Life Support offers a comprehensive program that includes integrated care plans for pediatric cardiopulmonary arrest and hemodynamically compromised children. In addition, it covers pharmacological treatment use, care for newborn patients, as well as the stabilization and transportation of children. This training is designed to help you make quick and accurate decisions, improving prognosis and reducing potential consequences of cardiac dysfunction.

The program includes decision-making algorithms for procedures involving pediatric patients in cardiopulmonary arrest and initial airway management. It also establishes updated procedures for the administration of drugs, management of hemodynamically unstable arrhythmias, and initial care for pediatric trauma.

The program's content is based on the latest scientific evidence and the experience of recognized professionals in the field of pediatric emergencies, providing a practical approach that can be easily applied to everyday clinical work.

This **Postgraduate Certificate in Advanced Pediatric Life Support** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Clinical cases presented by experts in cardiopulmonary resuscitation. The graphical, schematic, and highly practical content is designed to provide scientific and healthcare information on the medical disciplines essential for professional practice
- ♦ Latest diagnostic and therapeutic developments on the management of the most common cardiovascular and respiratory emergencies in children
- ♦ An algorithm based on interactive learning system for decision-making in the different clinical situations
- ♦ This program also includes advanced life support maneuvers for children and newborns, following the latest recommendations from leading international organizations (ILCOR and AHA)
- ♦ 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



Update your knowledge through the Postgraduate Certificate in Advanced Pediatric Life Support in the Out-of-Hospital Setting for Physicians, in a practical and tailored format to your needs"

“

This Postgraduate Certificate is the best investment you can make when selecting an update program for two reasons: not only will it update your knowledge in Advanced Pediatric Life Support, but you will also receive a certification from TECH Global University”

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

Take advantage of the opportunity to learn about the latest advancements in Advanced Pediatric Life Support and improve the training of your students.

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

Thanks to its multimedia content, developed with the latest educational technology, professionals will benefit from situated and contextual learning—simulated environments designed to provide immersive learning experiences that prepare them for real-life 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 pediatric emergencies with extensive teaching experience.



02 Objectives

The main objective of this program is the development of theoretical and practical learning, so that the physician can master, in a practical and rigorous manner, the approach to the patient in situations of emergency and hemodynamic instability.



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This update program will generate a sense of confidence in medical practice, helping you grow both personally and professionally”



General Objective

- Update the necessary knowledge and skills to confidently face a pediatric and neonatal cardiopulmonary arrest situation



Update your knowledge through the Advanced Pediatric Life Support program"





Specific Objectives

- ♦ Identify the causes of cardiopulmonary arrest in children and compare them with those in adults
- ♦ Recognize the signs and symptoms of severity in a sick child
- ♦ Identify the priority treatment for critically ill children
- ♦ Highlight the importance of performing early and effective cardiopulmonary resuscitation to reduce morbidity and mortality
- ♦ Review the fundamentals of the different techniques of basic cardiopulmonary resuscitation used in infants and children
- ♦ Analyze the importance of early and appropriate treatment of airway obstruction due to a foreign body (FBAO)
- ♦ Understand the importance of airway management and ventilation
- ♦ Identify manual ventilation devices
- ♦ Contrast the indication for endotracheal intubation and alternative techniques
- ♦ Describe the different vascular access routes and analyze the appropriate indications for each
- ♦ Update the use of drugs and fluids that must be used in Advanced Pediatric Life Support
- ♦ Differentiate the treatment of types of arrhythmias (shockable and non-shockable) in cardiac arrest
- ♦ Incorporate the management of pediatric trauma and apply the treatment of polytrauma patients using the ABCDE rule to clinical activity
- ♦ Assess the importance of post-resuscitation stabilization
- ♦ Update the steps to be followed in transport preparation and identify potential issues that may arise during it
- ♦ Assess a newborn and successfully perform all the steps in neonatal resuscitation

03

Course Management

This program includes a teaching faculty of highly renowned healthcare professionals, who specialize in pediatric emergency care and bring their practical experience to this training. Additionally, renowned specialists—members of prestigious national and international scientific societies—have participated in the design and development of the program.



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Learn from leading professionals about the latest advancements in pediatric advanced life support medical procedures”

Management



Dr. Pascual Estruch, Lucía

- Bachelor's Degree in Medicine and Surgery from the University of Lleida in 2009
- Specialist in Pediatrics
- Formative-Assistive Rotations in the areas of Pediatric Cardiology and Pediatric and Neonatal Intensive Care
- Diploma in Nursing from the University of Valencia in 2003 • Professional Teaching Experience in Pediatric and Neonatal CPR, Electrocardiography, and Pediatric Arrhythmias
- APLS Credential (American Academy of Pediatrics and American College of Emergency Physicians)



Teachers

Ms. Balboa Navarro, Ana

- ♦ Emergencies Service Nurse at the General University Hospital of Elche
- ♦ Teacher in academic institutions
- ♦ Basic Life Support and Advanced Cardiovascular Life Support Instructor certified by the Spanish Society of Emergency and Urgent Care Medicine and the American Heart Association (SEMES-AHA)
- ♦ Pediatric and Neonatal CPR Instructor certified by the Spanish Group for Pediatric and Neonatal CPR (GERCPN)
- ♦ Credential from the American Academy of Pediatrics and the American College of Emergency Physicians
- ♦ Diploma in Nursing from the University of Alicante
- ♦ Official Master's Degree in Nursing Sciences from the University of Alicante

Dr. Mas Manchón, José Manuel

- ♦ Nurse in the General and Pediatric Emergency Service at the General University Hospital of Elche
- ♦ Clinical Practice Tutor at the General University Hospital of Elche
- ♦ Co-author of the publication Nursing Guide to Surviving in Emergency Services at the General University Hospital of Elche
- ♦ Head of the Training Area at the Spanish Red Cross

04

Structure and Content

The structure of the content has been designed by a team of professionals who understand the implications of training in daily medical practice for the care of children in cardiovascular emergency situations. They are aware of the importance of up-to-date education to act effectively with patients and are committed to providing high-quality education through the use of new educational technologies.



“

This Postgraduate Certificate in Advanced Pediatric Life Support contains the most complete and up-to-date scientific program on the market”

Module 1. Introduction to Pediatric Emergency and Basic CPR

- 1.1. Epidemiology, Etiology, and Prevention of Cardiac Arrest in Children
- 1.2. Recognition and Management of the Critically Ill Child
- 1.3. Basic Pediatric CPR

Module 2. Airway and Ventilation in Pediatrics

- 2.1. Basic and Advanced Airway Management
- 2.2. Basic Concepts of Mechanical Ventilation in Pediatrics

Module 3. Infusion Routes and Medications, Diagnosis and Treatment of Arrhythmias, and Initial Trauma Care in Pediatrics

- 3.1. Infusion Routes in Pediatric CPR. Medications and Fluids in Pediatric CPR
- 3.2. Diagnosis and Treatment of Arrhythmias in Cardiac Arrest
- 3.3. Initial Care for the Polytraumatized Child

Module 4. Neonatal Resuscitation

- 4.1. Neonatal CPR
- 4.2. Stabilization, Post-Resuscitation, and Transport

Module 5. Integrated CPR

- 5.1. Advanced Pediatric CPR Action Algorithm



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A unique, essential and decisive learning experience to boost your professional development”

04 Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



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TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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*At TECH you will NOT have live classes
(which you might not be able to attend)”*



The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

“*TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want*”

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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.



A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

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 assess 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.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



As such, the best educational materials, thoroughly prepared, will be available in this program:



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.

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.



Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



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.

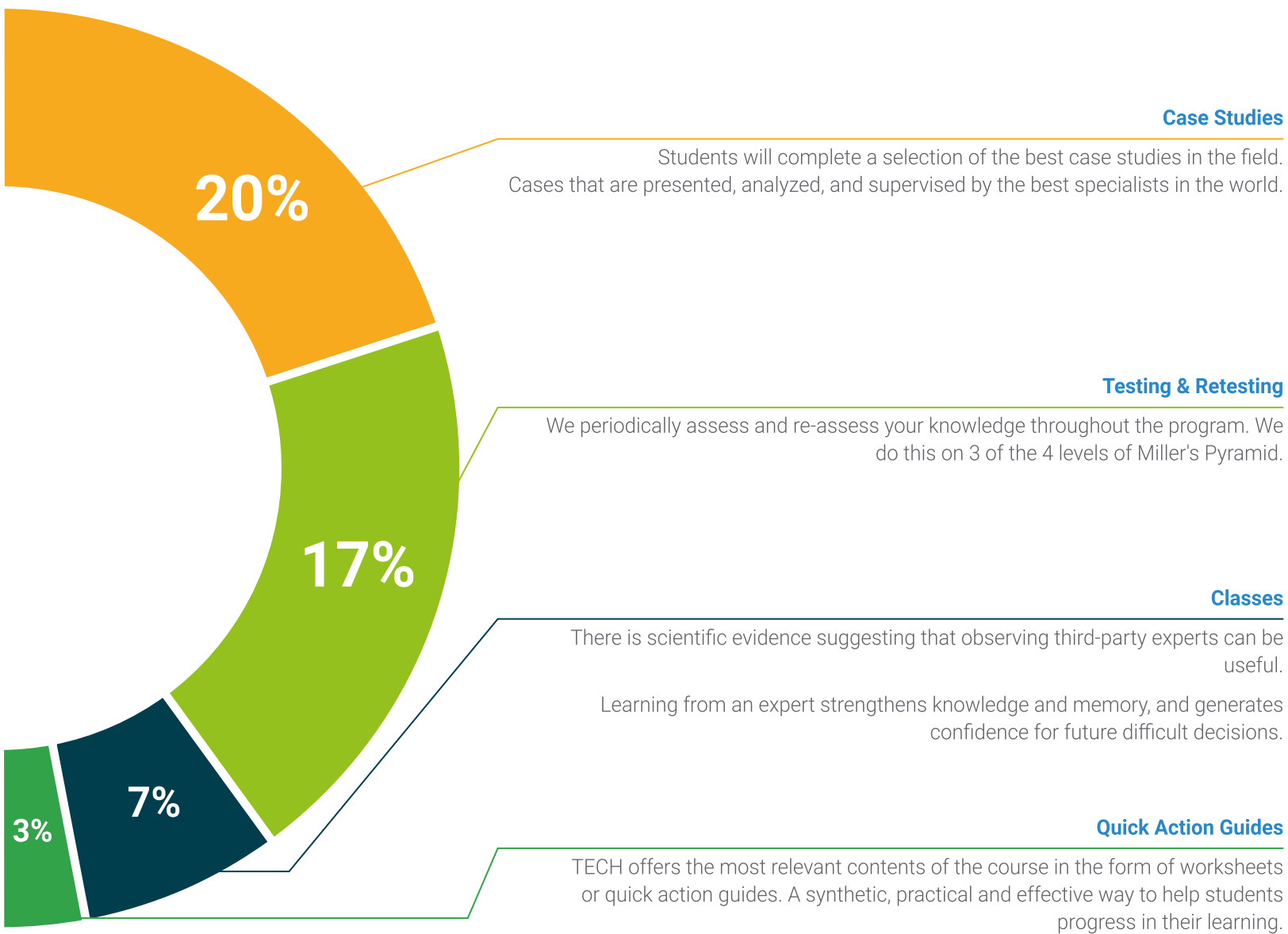
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

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





06 Certificate

The Postgraduate Certificate in Advanced Pediatric Life Support guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the 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 diploma for the **Postgraduate Certificate in Advanced Pediatric Life Support** 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 Certificate in Advanced Pediatric Life Support**

Modality: **online**

Duration: **6 weeks**

Accreditation: **4 ECTS**





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Advanced Pediatric Life Support

- » Modality: online
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- » Accreditation: 4 ECTS
- » Schedule: at your own pace
- » Exams: online

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