

Postgraduate Certificate Pediatric Intensive Care





Postgraduate Certificate Pediatric Intensive Care

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

Website: www.techtute.com/us/medicine/postgraduate-certificate/pediatric-intensive-care

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01

Introduction

Pediatric Intensive Care is essential to ensure the survival and recovery of children in critical situations. These specialized units combine state-of-the-art technology with the expertise of a multidisciplinary team of dedicated professionals who work tirelessly to stabilize and improve the condition of the youngest and most vulnerable patients. The importance of this area lies not only in the ability to save lives, but also in offering comprehensive support that encompasses both the physical and emotional well-being of children and their families. For this reason, TECH offers a program in which it gives doctors the opportunity to specialize 100% online, responding to their demands and facilitating the arduous task of combining work with study.





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Thanks to this program you will implement advanced monitoring techniques in the Pediatric Intensive Care Unit and you will be able to establish surveillance and infection control strategies”

Pediatric Intensive Care is a cornerstone in advanced medical care. According to the World Health Organization, nearly 6 million children under the age of 5 die each year, many from diseases that could be effectively treated in intensive care. In these areas, significant progress has been made in terms of technology, protocols and multidisciplinary approaches. The ICUs are highly equipped, which, together with the specialization of healthcare professionals, favors increasingly precise and personalized care. Likewise, in this field they also focus on emotional and psychological support for patients and their families. As a result, healthcare teams are prepared to deal with complex situations and ensure the overall well-being of all those involved.

In this sense, TECH has designed this comprehensive program, in which physicians will be able to acquire the most relevant competencies in this area, as well as delve into the latest innovations in technology and treatments. In addition, they will analyze the key differences between pediatric and adult patients in the ICU and the ethical aspects of end-of-life and palliative care decisions. In turn, due to its importance in the recovery of children, they will delve into surveillance strategies and infection control.

All this, through a 100% online program, which will allow students to prepare through any electronic device with Internet access. In addition, they will be able to benefit from the innovative Relearning methodology, in which TECH is a pioneer in, as well as quality educational content, with multimedia and interactive resources. They will also benefit from the analysis of real case studies to acquire a comprehensive practical vision.

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

- ♦ The development of practical cases presented by experts in Intensive Care and Pediatrics
- ♦ The graphic, schematic and practical contents with which it is conceived provide scientific and practical information on those disciplines that are essential for professional practice
- ♦ Practical exercises where the self-assessment process can be carried out to improve learning
- ♦ Its special emphasis on innovative 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



Analyze the ethical aspects related to Pediatric Intensive Care through this complete 100% online TECH program"

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Specialize from any electronic device with Internet access thanks to the innovative Virtual Campus of this program".

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 course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Become a reference professional in the field of Pediatric Intensive Care, thanks to the disruptive Relearning methodology applied in this university program.

Master the techniques of Endotracheal intubation and delve into non-invasive airway support devices.



02 Objectives

This program is designed with the clear objective that students acquire the necessary skills to develop as professionals of reference and update their clinical practice. Therefore, through a rigorous syllabus, it is intended that they obtain a comprehensive understanding of the essential aspects and that they are prepared to face the ethical challenges of the field of Pediatric Intensive Care. In turn, they will analyze recent innovations in this area of knowledge and master the latest methods of patient assessment.





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Boost your professional career with this TECH university program and become a benchmark expert”



General Objectives

- ♦ Provide a comprehensive understanding of the essential principles of pediatric intensive care
- ♦ Recognize and evaluate Acute Respiratory Failure
- ♦ Become familiar with the modes of Invasive and Non Invasive Mechanical Ventilation
- ♦ Integrate Intervention Protocols based on best scientific evidence
- ♦ Provide a comprehensive understanding of hemodynamic monitoring techniques and tools specific to the pediatric population
- ♦ Provide advanced specialization on the diagnosis, management and treatment of Congenital Heart Disease in the Pediatric Intensive Care Unit
- ♦ Prepare pediatric specialists to perform critical interventions, including Cardiorespiratory Resuscitation and the use of specialized pharmacological agents in the intensive care setting
- ♦ Gain profound Pediatric Neurological knowledge, expanding knowledge of neurological anatomy and pathophysiology to enhance the evaluation and treatment of neurological emergencies in children
- ♦ Promote Comprehensive Neurological Management, including initial assessment, emergency interventions, long-term follow-up and family support
- ♦ Specialize professionals to rapidly and accurately identify and assess infectious emergencies and Sepsis in children
- ♦ Promote understanding of infection and Sepsis prevention strategies, as well as educate in the promotion of healthy practices and infection control measures
- ♦ Learn to assess the nutritional status and needs of critically ill children
- ♦ Achieve adequate fluid management by detecting abnormal situations
- ♦ Value pain as the 5th constant in pediatrics
- ♦ Develop expertise in pediatric endocrinologic emergencies, such as Diabetic Ketoacidosis and Adrenal Crisis
- ♦ Develop a thorough understanding of the principles and practices of Neonatology, including neonatal physiology and the management of specific medical conditions
- ♦ Foster a multidisciplinary and patient-centered approach to neonatal care, involving neonatologists, neonatal nurses and other health care professionals
- ♦ Acquire a thorough knowledge of neonatal physiology and pathologies, as well as the peculiarities of neonatal care



Take advantage of the opportunity to prepare yourself through interactive and multimedia pedagogical content, accompanied by the analysis of real case studies"



Specific Objectives

- ◆ Develop the fundamental principles and importance of pediatric intensive care, including ethics and evidence-based decision-making
- ◆ Perform a meticulous initial assessment of the critically ill pediatric patient, rapidly identifying signs of life-threatening illness and prioritizing care
- ◆ Apply advanced knowledge of hemodynamics to optimize Cardiovascular Support through the appropriate use of fluids, inotropic drugs, vasopressors, and continuous monitoring
- ◆ Select and administer critical drugs with thorough understanding of their pharmacokinetics and pharmacodynamics in children, as well as manage potential drug-drug interactions and side effects
- ◆ Navigate the ethical challenges present in the PICU, participating in patient- and family-centered decision-making, and managing sensitive communications about prognosis and treatment options
- ◆ Foster an environment of collaboration and respect on the intensive care team, enhance communication skills with patients' families, and contribute to a climate of teamwork that supports the delivery of high quality care

03

Course Management

This program complies with TECH's maximum guarantees of excellence, which is why it has a prestigious teaching staff. The team of professionals that make up this program has extensive experience in the area of intensive care and pediatrics, as well as a solid background in research. Therefore, they will provide students with a comprehensive and complete vision, enabling them to become prestigious specialists and address the problems of this field efficiently and effectively.



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*Specialize with prestigious experts
and acquire a comprehensive
and practical vision of the area of
Pediatric Intensive Care"*

Management



Dr. Ocete Hita, Esther

- ◆ Head of the Pediatric Hospitalization Section of Virgen de las Nieves University Hospital of Granada
- ◆ FEA Pediatrics in the Pediatric Intensive Care Unit of Virgen de las Nieves University Hospital of Granada
- ◆ Associate Professor in the Faculty of Medicine at the University of Granada
- ◆ Specialist Pediatrician
- ◆ Doctor of Medicine
- ◆ Degree in Medicine

Professors

Dr. Gómez Luque, José María

- ◆ Assistant Physician of the Pediatric Intensive Care Unit of the Virgen de las Nieves Hospital
- ◆ Medical specialist in Pediatric Intensive Care
- ◆ Instructor in Advanced CPR and Pediatric CPR
- ◆ Doctor of Medicine and Surgery from the University of Granada

Dr. Abril Molina, Ana

- ◆ Assistant Physician in the Pediatric Intensive Care Unit at Virgen de las Nieves University Hospital
- ◆ Collaborator in clinical trials and research projects with the Progreso y Salud Foundation
- ◆ PhD in Medicine, University of Granada
- ◆ Degree in Medicine from the University of Córdoba



Dr. Alés Palmer, María Luisa

- ◆ Specialist in the Pediatric Emergencies Sections of the Virgen de las Nieves University Hospital
- ◆ Specialist in the Neonatology Unit of the Virgen de las Nieves University Hospital
- ◆ Master's Degree in Genetic, Nutritional and Environmental Determinants of Growth and Development by the University of Granada
- ◆ University Expert in Pediatric Emergency Medicine from the Catholic University of Valencia
- ◆ Degree in Medicine and Surgery from the University of Granada
- ◆ Graduate in Pharmacy from the University of Granada

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Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice”

04

Structure and Content

The syllabus of this program has been designed according to the requirements of the Pediatric Intensive Care area, focusing on the most relevant concepts and establishing a clear difference with the treatment of adult patients. In addition, the proposals and demands of the teaching staff have been taken into account in order to offer a complete and rigorous specialization. Therefore, through a quality syllabus, students will delve into important aspects such as pharmacology in emergency situations or the implementation of advanced monitoring techniques.



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A syllabus developed under the commitment to offer a quality specialization, with the maximum academic rigor”

Module 1. Pediatric Intensive Care

- 1.1. Pediatric Intensive Care
 - 1.1.1. Pediatric Physiology and Pathophysiology in the Context of Intensive Care
 - 1.1.2. Pediatric and Adult Patients in the ICU Key Differences
 - 1.1.3. Principles of Bioethics and Evidence-based Decision-Making in the Pediatric Intensive Care Unit
- 1.2. Initial Assessment of the Critically Ill Pediatric Patient
 - 1.2.1. Comprehensive and Systematic Assessment
 - 1.2.2. Signs of Severity and Stabilization of Vital Functions
 - 1.2.3. Prioritization of Interventions According to Immediate Clinical Needs
- 1.3. Airway Management in Pediatrics
 - 1.3.1. Airway Patency and Ventilatory Management
 - 1.3.2. Endotracheal Intubation and Management of Complications
 - 1.3.3. Selection and Use of Noninvasive Airway Support Devices
- 1.4. Monitoring in the Pediatric Intensive Care Unit
 - 1.4.1. Implementation of Advanced Monitoring Techniques
 - 1.4.2. Interpretation of Data to Adjust Patient Management
 - 1.4.3. Monitoring Technologies to Improve Patient Safety
- 1.5. Pediatric Intensive Care Pharmacology
 - 1.5.1. Pharmacotherapy Management in Emergency and Intensive Care Situations
 - 1.5.2. Pharmacokinetics and Pharmacodynamics in the Pediatric Patient
 - 1.5.3. Identification and Management of Drug Interactions and Adverse Drug Effects
- 1.6. Nutrition in the Critically Ill Pediatric Patient
 - 1.6.1. Assessment of Nutritional Status and Requirements in the Critically Ill Patient
 - 1.6.2. Implementation of Enteral and Parenteral Nutrition Strategies
 - 1.6.3. Monitoring and Adjustment of Nutrition Based on Clinical Response
- 1.7. Ethical Aspects in Pediatric Intensive Care
 - 1.7.1. Specific Ethical Dilemmas in Pediatric Intensive Care
 - 1.7.2. Communicating Bad News in a Compassionate and Effective Manner
 - 1.7.3. Participation in End-of-life Decisions and Palliative Care



- 1.8. Communication with Families and Teamwork
 - 1.8.1. Development of Communication Skills with Families During Stress
 - 1.8.2. Shared Decision-Making with Caregivers
 - 1.8.3. Team Approach to Interdisciplinary Care
- 1.9. Prevention of Healthcare-associated Infections in the Pediatric Intensive Care Unit
 - 1.9.1. Protective Barriers and Isolation
 - 1.9.2. Appropriate Use of Antibiotics
 - 1.9.3. Infection Surveillance and Control Strategies
- 1.10. Intrahospital Transport in the Pediatric Critically Ill Patient
 - 1.10.1. Planning and Coordination
 - 1.10.2. Equipment and Monitoring
 - 1.10.3. Safety and Risk Minimization

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Prepare yourself at your own pace, comfortably and from anywhere with TECH. Enroll now!”

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.



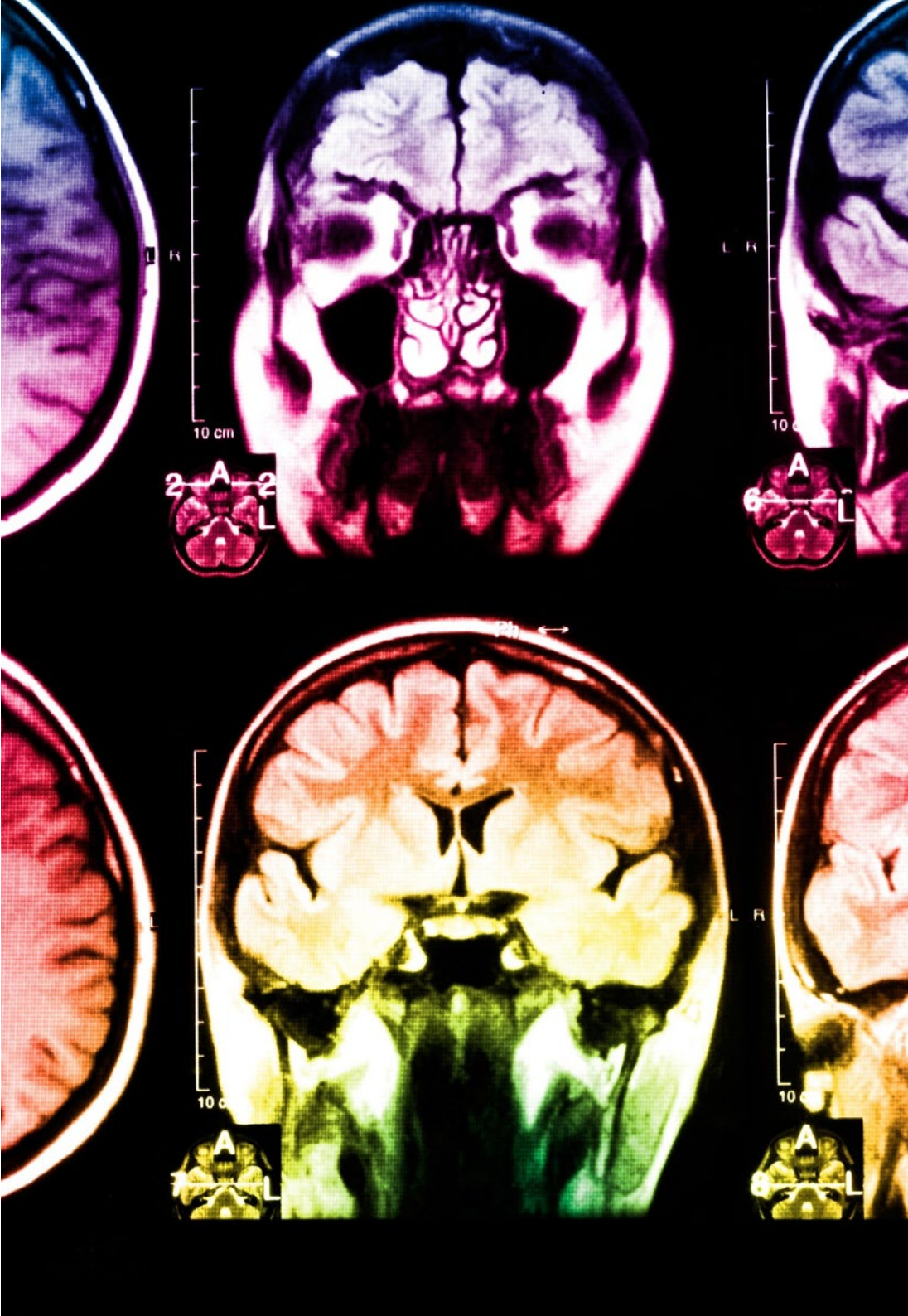
At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

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

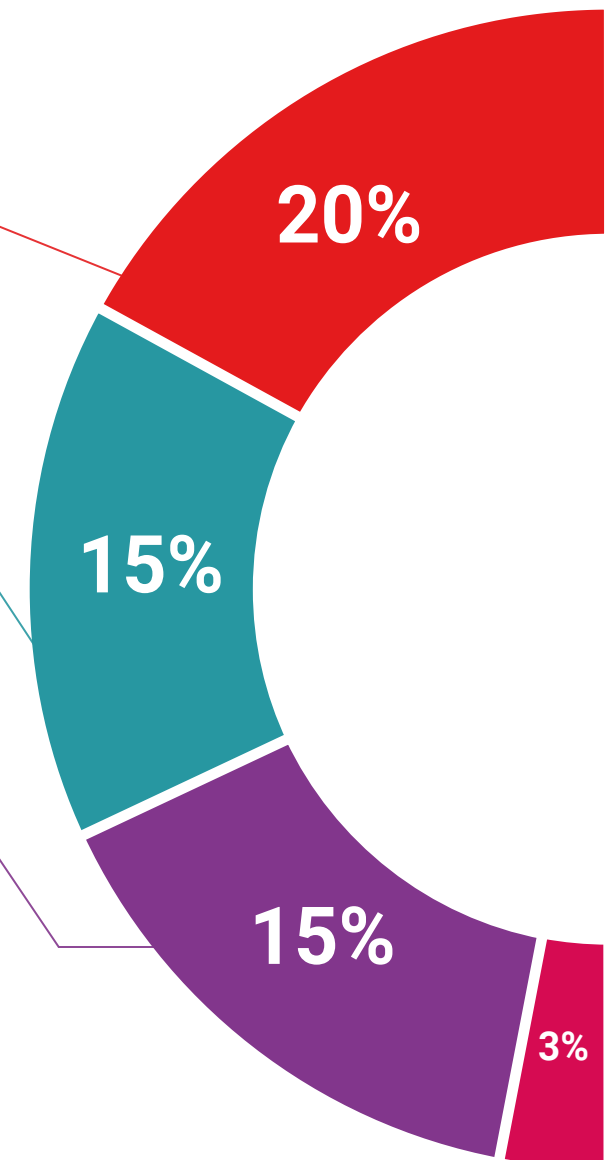
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

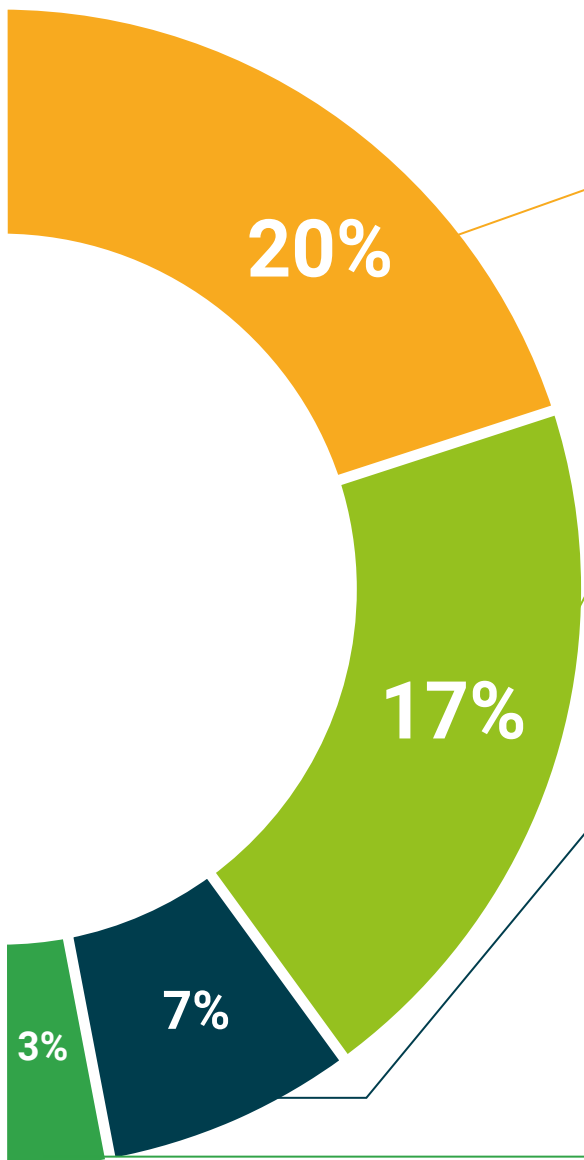
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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 Certificate in Pediatric Intensive Care guarantees, in addition to the most accurate 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 Certificate in Pediatric Intensive 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 Certificate in Pediatric Intensive Care**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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



Postgraduate Certificate Pediatric Intensive Care

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Postgraduate Certificate Pediatric Intensive Care

