

# Postgraduate Certificate Intensive Care in Patients with Respiratory Disorders

Endorsed by:

A diagonal photograph of a patient in a hospital bed with a ventilator mask and various medical tubes. The image is partially obscured by a teal geometric shape in the bottom left corner.

**tech** technological  
university



## Postgraduate Certificate Intensive Care in Patients with Respiratory Disorders

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/pk/nursing/postgraduate-certificate/intensive-care-patients-respiratory-disorders](http://www.techtute.com/pk/nursing/postgraduate-certificate/intensive-care-patients-respiratory-disorders)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Certificate

---

*p. 28*

# 01

# Introduction

Severe acute respiratory infections in pediatric patients or acute respiratory distress syndrome in adults have led to the development of new strategies to deal with them. The improvement of action protocols, that joins the advances in scientific studies on respiratory pathologies and the improvement of mechanical ventilation. In this way, this set of advances leads ICU nurses to be constantly updating their knowledge. For this reason, TECH has designed this program that allows students to perform an effective up-to-date on the management of various respiratory disorders, oxygenation systems and the care of health personnel in patients with assisted breathing. All 100% online and with flexible access to its content.



“

*Get a complete refresher in Intensive Care in Patients with Respiratory Disorders in only 12 weeks”*

The care of patients with acute or critical respiratory problems is complex given the mix of physiological alterations, their human response and the technology used. A situation that requires specialized health professionals with a constant updating of their skills and abilities for the approach of patients in Intensive Care Units.

In this way, in this scenario, the nurse must perform successfully, providing full guarantee in their actions, in the performance of assisted breathing procedures or in the use of the most sophisticated equipment. This Postgraduate Certificate in Intensive Care in Patients with Respiratory Disorders is only 12 weeks long.

An academic process that will lead the graduate to be aware of the scientific evidence on the performance of aspiration of tracheobronchial secretions, thoracocentesis and thoracic drainage or the use of the most advanced respirators. In addition, thanks to the innovative teaching tools of this program, the professional will be able to dynamically delve into the various respiratory pathologies and their management.

Likewise, this period of updating will be much more effective thanks to the Relearning method, used by this academic institution. The fact is that the continuous reiteration of the most important concepts leads the student to consolidate them in an agile way, reducing the long hours of study and memorization.

Undoubtedly, a unique opportunity to study a university program in a comfortable way. All that is required is a digital device with an internet connection to visualize, at any time of the day, the content hosted on the virtual platform. In this way, no in-person attendance, or classes with fixed schedules, healthcare professionals can combine their work and/or personal activities with a quality academic option.

This **Postgraduate Certificate in Intensive Care in Patients with Respiratory Disorders** 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 Nursing in Intensive Care
- ♦ 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
- ♦ Practical exercises where self-assessment can be used 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



*TECH adapts to you and has designed a program that is compatible with your professional responsibilities and your day-to-day life”*

“

*Thanks to this program you will be up to date with new devices and therapies for critical patient ventilation”*

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

Its 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 education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

*Delve into oxygenation procedures, thoracic drainage or airway access from a theoretical-practical perspective.*

*Enhance your skills in the care of the mechanically ventilated patient with this program.*



# 02 Objectives

This Postgraduate Certificate was created with the aim of providing nursing professionals with a complete update of their knowledge on the approach to the patient with Respiratory Disorders in ICU. A process of updating that will be much easier to achieve thanks to the numerous teaching resources provided by this program and the expert teaching team in this field, responsible for developing this cutting-edge academic proposal.





“

*You have the best didactic material to deepen your knowledge in the approach to the patient with COPD or pulmonary thromboembolism”*



## General Objectives

---

- ♦ Update the necessary knowledge in the nursing care of critical patients, in order to increase the quality and safety of nursing practice in the Intensive Care Unit
- ♦ Acquire the necessary skills to provide comprehensive care to the critical patient with criteria of speed, efficiency and quality
- ♦ Review the fundamental principles of critical care nursing





## Specific Objectives

---

- ◆ Develop advanced theoretical knowledge of respiratory physiology and fundamentals of mechanical ventilation
- ◆ Identify the main pathological ventilatory patterns
- ◆ Demonstrate new ventilation devices and therapies in the patient

“

*Hone your skills for the withdrawal of Mechanical Ventilation with this 100% online academic option”*

03

# Course Management

TECH maintains a philosophy based on providing all students with a quality program that provides a real response to the continuous updating needs of healthcare professionals. For this reason, it has assembled a faculty specialized in Critical Care with a high level of expertise in this area. In addition, thanks to its proximity, the graduate will be able to resolve any questions he/she may have about the content of this program throughout its 12-week duration.





“

*An academic option developed by  
the best professionals in Critical  
Care Nursing”*

## Guest Director



### Ms. Díez Sáenz, Cristina

- ♦ Head of the Critical Care Unit at Gregorio Marañón General University Hospital
- ♦ Head Nurse of the Adult Intensive Care Unit at Gregorio Marañón General University Hospital
- ♦ Nursing supervisor at Gregorio Marañón ICU
- ♦ Nurse Assistant in different hospitalization areas in different health centers and hospitals
- ♦ Participation as collaborating researcher in the multicenter project "National validation of the scale of satisfaction with nursing care from the perspective of the critically ill patient"

## Co-Direction



### Ms. Lospitao Gómez, Sara

- ♦ Nurse Intensive Care and Interventional Cardiology at HUF
- ♦ Intensive Care and Interventional Cardiology at University Hospital of Fuenlabrada (UHF)
- ♦ Nurse Cardiac Surgery Post-Surgical Intensive Care Unit PCU 12 de Octubre Hospital
- ♦ Coronary Intensive Care Unit Nurse. 12 de Octubre Hospital
- ♦ Nurse of the Interventional Cardiology Unit (Hemodynamics, EEF and Implants)
- ♦ PR Manager of #TEAyudamos and Member of the group #JuntosxEICáncer
- ♦ Instructor for SVA by the National CPR Plan of SEMICYUC
- ♦ Member of: Care Sub-Commission (HUF), Care Commission (HUF), Secretary of the Ulcers and Wounds Working Group (HUF)

## Professors

### Ms. Álvarez Carrascal, Inmaculada

- ◆ Nurse in Pediatric ICU, Gregorio Marañón General University Hospital
- ◆ Nurse referent of Security in ICU of the Gregorio Marañón General Univeristy Hospital
- ◆ Instrumentalist nurse in the operating room of Churchill Hospital
- ◆ Nurse assistant in various hospital and health center services in the Andalusian Health Service
- ◆ Diploma in Nursing from the University of Seville
- ◆ Expert in and Intensive Care from the Complutense University of Madrid

### Ms González Palacios, Rubén

- ◆ Nurse assistant in the Intensive Care Unit of Gregorio Marañón Univeristy Hospital
- ◆ Attending Nurse in the Internal Medicine Unit of the 12 de Octubre General University Hospital
- ◆ Nurse assistant in different Primary Care centers in the Community of Madrid
- ◆ Developer of the mobile application "Compatibility drugs" for intravenous compatibility of drugs

### Dr. Ruiz Henestrosa Campos, , Manuel Jesús

- ◆ Head of the Emergency Unit in GUH Gregorio Marañón
- ◆ Nurse Assistant in GUH Gregorio Marañón Hospital
- ◆ Nurse Assistant in GUH Puerta del Mar de Cadiz
- ◆ Associate Professor Practicum III of Nursing
- ◆ Collaborating teacher at the International School of Health Sciences
- ◆ Nebrija University Collaborating Professor
- ◆ Esforem Collaborating Teacher
- ◆ Diploma in Nursing

# 04

# Structure and Content

The syllabus of this Postgraduate Certificate includes an advanced syllabus on Intensive Care in Patients with Respiratory Disorders. In this way, students will learn about the main pathologies, mechanical ventilation techniques, technological advances in this field, as well as the improvement of patient management in complex situations. All this, in addition, with a teaching material of exquisite quality, which will allow the graduate to get an update of the highest level.





“

*In thanks to the Relearning Method you will be able to reduce the long hours of study and memorization”*

## Module 1. Critical Care in Patients with Respiratory Disorders

- 1.1. Anatomophysiologic and Physiologic Memory of the Cardiocirculatory System
- 1.2. Anatomophysiologic and Physiologic Memory of the Cardiocirculatory System
- 1.3. Adult Respiratory Distress Syndrome
- 1.4. Pulmonary Embolism
- 1.5. COPD Flare-up
- 1.6. Asthmatic Status
- 1.7. Pneumonia and Bronchopneumonia
- 1.8. Neuromuscular Alterations that Affect Respiration
- 1.9. Procedures: Oxygen Therapy
- 1.10. Procedures: Airway Access
- 1.11. Procedures: Aspiration of Tracheobronchial Secretions
- 1.12. Procedures: Thoracocentesis and Chest Drains
- 1.13. Procedures: Thoracocentesis and Chest Drains
- 1.14. Concept of Mechanical Ventilation. Respirators and Parameters
- 1.15. Mechanical Ventilation Methods
- 1.16. Ventilator Alarms
- 1.17. Nursing Care of Mechanically Ventilated Patients
- 1.18. Removing MV
- 1.19. Removing MV
- 1.20. Mechanical Ventilation in Tracheostomized Patients





“

*A university program that focuses on advances in care procedures for critically ill patients with Respiratory Disorders”*

# 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.



“

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

## At TECH Nursing School we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Nurses learn better, faster, and more sustainably over time.

*With TECH, nurses can experience a learning methodology that is shaking the foundations of traditional universities around the world.*



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

“

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

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

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



## Relearning Methodology

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

This university is the first in the world to combine case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.



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



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

With this methodology we have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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

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

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



This program offers the best educational material, prepared with professionals in mind:



### Study Material

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

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



### Nursing Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch them as many times as you want.



### Interactive Summaries

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

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



### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





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

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



#### Classes

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

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



#### Quick Action Guides

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



06

# Certificate

The Postgraduate Certificate in Intensive Care in Patients with Respiratory Disorders guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.





“

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

This **Postgraduate Certificate Intensive Care in Patients with Respiratory Disorders** contains the most complete and up-to-date scientific program on the market.

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

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 committees.

Title: **Postgraduate Certificate in Intensive Care in Patients with Respiratory Disorders**

Official N° of Hours: **300 h.**

Endorsed by: The Spanish Society of Intensive Care Nursing and Coronary Units.



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

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



**Postgraduate Certificate**  
Intensive Care in Patients  
with Respiratory Disorders

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

# Postgraduate Certificate

## Intensive Care in Patients with Respiratory Disorders

Endorsed by:

