

# Postgraduate Diploma Nursing Care in Critically Ill Patients

Endorsed by:



**tech** technological  
university



## Postgraduate Diploma Nursing Care in Critically Ill Patients

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

Website: [www.techtute.com/us/nursing/postgraduate-diploma/postgraduate-diploma-nursing-care-critically-ill-patients](http://www.techtute.com/us/nursing/postgraduate-diploma/postgraduate-diploma-nursing-care-critically-ill-patients)

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# 01

# Introduction

Critical care nursing is a highly demanding specialty due to the complexity and diversity of pathologies that occur in critically ill patients, which makes it a discipline in constant evolution. Current challenges, such as the management of patients with severe respiratory diseases or the care of patients with neurological disorders, require nurses up-to-date and prepared for the most complex clinical pictures. In this way, this TECH program was born, which addresses the most urgent issues in this area, such as sedoanalgesia, infection prevention and pain management in critically ill patients. With the advantage of being 100% online, this program allows nurses to update themselves from anywhere and at any time.





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*Delve deeper into critical nursing care through an online program with the latest scientific postulates and practical guidelines in the field"*

Critical care nursing is a constantly evolving specialty due to the complexity and diversity of pathologies that occur in critically ill patients. Current challenges include the management of patients with severe respiratory disease, such as adult respiratory distress syndrome, the implementation of noninvasive mechanical ventilation, and the use of ECMO in patients with acute respiratory failure.

In addition, the care of patients with neurological disorders presents unique challenges, such as neurological assessment in ICU and the management of patients with intracranial hypertension and coma. The management of severe trauma patients is also challenging, especially in the case of polytraumatized patients and critically ill burn patients.

Faced with these challenges, nursing professionals have the need to update themselves in the optimal management of critically ill patients, especially those involving the latest novelties or developments in each area. In this sense, TECH has created a Postgraduate Diploma in Nursing Care in Critically Ill Patients that delves into the most urgent issues in this area.

In this way, it offers a complete and updated approach to critical care in patients with respiratory, neurological, digestive and renal disorders, as well as in severe trauma patients. In addition, the program includes relevant topics such as sedoanalgesia and pain management in critically ill patients, and the prevention of nosocomial infections and care in the septic patient.

One of the advantages of the program is that it is 100% online, which allows nursing professionals to access the program from anywhere and at any time. This is especially useful for those professionals who work rotating shifts, with demanding schedules, or in areas far from academic institutions. In this way, it is the student themselves who decides when, where and how to take on the entire course load.

This **Postgraduate Diploma in Nursing Care in Critically Ill Patients** 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 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



*Master the management of critically ill patients with respiratory, neurological, digestive and renal disorders thanks to the Postgraduate Diploma in Nursing Care in Critically Ill Patients”*

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*Delve into the implementation of advanced sedoanalgesia techniques, infection prevention and pain management in critically ill patients”*

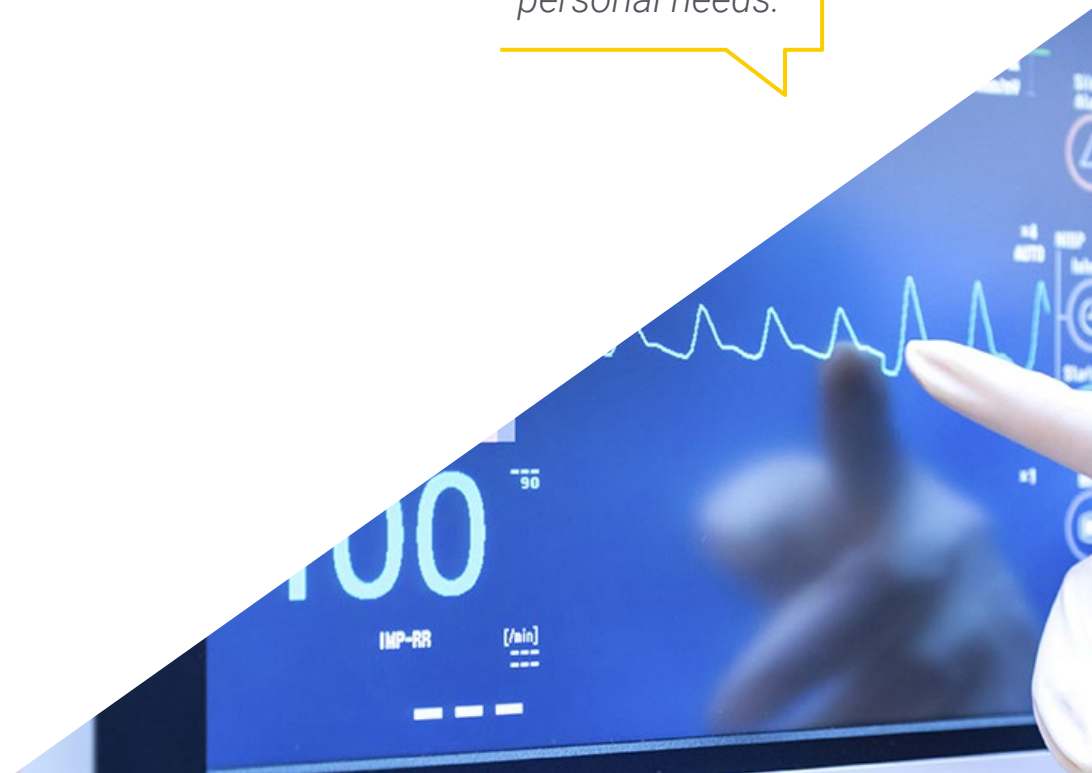
The program’s teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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.

*Get updated in the management of critically ill patients with the latest techniques and developments in specific care.*

*Get up to date in a flexible and accessible learning environment, adapted to your schedule and personal needs.*



# 02 Objectives

The Postgraduate Diploma in Nursing Care in Critically Ill Patients aims to provide nursing professionals with the skills and knowledge necessary for the optimal management of critically ill patients in challenging and complex situations. During the program, the student will be able to develop advanced skills in the management of patients with severe respiratory, neurological, digestive, renal and traumatic pathologies, analyzing real clinical cases to manage critical situations.





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*Consolidate your knowledge in neurological assessment in ICU and neurological pathologies with the Postgraduate Diploma in Nursing Care in Critically Ill Patients”*



## General Objectives

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- Update the necessary knowledge in the nursing care of critically ill 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

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*Incorporate advanced skills in sedoanalgesia, infection prevention, pain management and Non-Invasive Mechanical Ventilation”*





## Specific Objectives

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

- ◆ 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

### **Module 2. Care in Patients with Neurological Disorders**

- ◆ Gain in-depth knowledge of the anatomy and physiology of the nervous system
- ◆ Recognize the most common neurological pathologies in the ICU
- ◆ Identify cerebrovascular disease and delve into its approach and management
- ◆ Assess the coma patient, evaluate the degree of consciousness and provide specific care

### **Module 3. Digestive and Renal Pathology in the ICU and Other Pathologies**

- ◆ Examine the main digestive and renal pathologies treated in Intensive Care Nursing
- ◆ Review the procedures for ostomized digestive and urological patients
- ◆ Delve into critical care for intoxication and septic patients

### **Module 4. Critical Care for Severe Trauma Patients**

- ◆ Apply the appropriate therapeutic procedures to the critically ill patient
- ◆ Anticipate the most common complications derived from the pathological processes of critically ill patients and their treatment in order to prevent their occurrence

03

# Course Management

This program has a highly qualified and experienced teaching team in the field of critical patient nursing, composed of nurses of recognized prestige in the area. All of them have extensive experience in the care of critically ill patients and in the instruction of nursing professionals. During the program, students will have the opportunity to learn from the best professionals in critical care.



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*Learn from the best professionals  
in critical care with the teaching  
team of this Postgraduate Diploma”*

## Guest Director



### Ms. Díez Sáenz, Cristina

- ◆ 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

- ◆ 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 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

### **Mr. González Palacios, Rubén**

- ◆ 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

### **Mr. Ruiz Henestrosa Campos, Manuel Jesús**

- ◆ 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

This program is structured in different modules that cover all the necessary aspects for the care of critically ill patients in complex situations. The program has an online methodology, with access to quality multimedia material, work guides and real clinical cases so that the student can contextualize all the theory covered. In this way, nursing professionals will have access to a work guide that will continue to be useful even after completing the program.





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*Benefit from an interactive learning experience with the quality multimedia material and real clinical cases offered throughout the program"*

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

- 1.1. Anatomophysiologic and Physiologic Memory of the Cardiocirculatory System
- 1.2. Acute Respiratory Failure
- 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. Extracorporeal Membrane Oxygenation System (ECMO)
- 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. Non-Invasive Mechanical Ventilation
- 1.20. Mechanical Ventilation in Tracheostomized Patients

## Module 2. Care in Patients with Neurological Disorders

- 2.1. Anatomophysiological Review of the Nervous System
- 2.2. Cerebrovascular Disease. Stroke Code
- 2.3. Intracranial Hypertension
- 2.4. Delirium
- 2.5. Guillain-Barré Syndrome
- 2.6. Seizures and Status Convulsus
- 2.7. Meningitis and Lumbar Puncture Practice
- 2.8. Comatose Patient
- 2.9. Pain and Sedoanalgesia
- 2.10. Neurological Assessment in ICU: Most Frequently Used Diagnostic Tests





### Module 3. Digestive and Renal Pathology in the ICU and Other Pathologies

- 3.1. Gastrointestinal bleeding
- 3.2. Intestinal Obstruction
- 3.3. Inflammatory Bowel Disease
- 3.4. Mesenteric Ischemia
- 3.5. Acute Abdomen
- 3.6. Fulminant Hepatic Failure
- 3.7. Albumin-Based Liver Replacement System
- 3.8. Acute Pancreatitis
- 3.9. Intestinal Ostomy Patient: Colostomy
- 3.10. Intestinal Ostomy Patient: Ileostomy
- 3.11. Disseminated Intravascular Coagulation
- 3.12. Multiorgan Failure
- 3.13. Endocrinometabolic Alterations
- 3.14. Acute Renal Failure in the ICU
- 3.15. Urostomy Patient
- 3.16. Critical Care in Poisoning
- 3.17. Critical Care in Digestive Pathologies
- 3.18. Nosocomial Infections in the ICU
- 3.19. Sepsis and Septic Shock
- 3.20. Nursing Care in the Septic Patient

### Module 4. Critical Care for Severe Trauma Patients

- 4.1. The Critically Ill Burns Patient
- 4.2. The Polytraumatized Patient
- 4.3. Initial Assessment of the Polytraumatized Patient
- 4.4. TBI and Spinal Trauma. Spinal cord Injury
- 4.5. Thoracic and Abdominal Trauma. Hypovolemic Shock
- 4.6. Trauma to Extremities
- 4.7. Trauma in Special Situations
- 4.8. Trauma in Special Situations II

# 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 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.

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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. 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 Diploma in Nursing Care in Critically Ill Patients guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.



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

This **Postgraduate Diploma in Nursing Care in Critically Ill Patients** 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 Diploma** issued by **TECH Technological University** via tracked delivery\*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Nursing Care in Critically Ill Patients**

Official N° of Hours: **600 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 diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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