

# Postgraduate Certificate

## Advanced Nursing Care in the Neurological Patient





## Postgraduate Certificate Advanced Nursing Care in the Neurological Patient

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

Website: [www.techtute.com/us/nursing/postgraduate-certificate/advanced-nursing-care-neurological-patient](http://www.techtute.com/us/nursing/postgraduate-certificate/advanced-nursing-care-neurological-patient)

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# 01

# Introduction

The unknowns that are still associated with the knowledge of the neurological system in the human being are immense. However, decades of study have allowed the development of increasingly effective and efficient strategies and treatments for the management of patients with diseases associated with the brain and its connection with internal organs. Among them, Intensive Care in Nursing is considered fundamental for the optimal evolution of health. And given the continuous advances that continue to be made in this field, TECH has developed this complete degree to serve as a guide for those professionals seeking an immediate and intensive update in the management of the neurocritical patient. Thus, in just 6 weeks, they will be able to get up to date in advanced care in a 100% online way.



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*Catch up on the latest developments in neurological monitoring and support with TECH and this comprehensive Postgraduate Certificate"*

Knowledge of the nervous system has been one of the keys to understanding the functioning of the human body, although the complexity of the neurological network and its connections with the rest of the organism continue, to this day, to raise many questions. However, decades of exhaustive analysis by various medical professionals have allowed the development of specialized clinical guidelines for the management of the various neurological diseases known today, with the nurse being a key player in promoting the health of patients suffering from them.

For this reason, and given the very important role played by these specialists in Intensive Care, TECH and its team of experts have decided to launch a Postgraduate Certificate focused on the latest developments in the nursing management of neurocritical patients. This is a Postgraduate Certificate made up of 180 hours of diverse content (theoretical, practical and additional) which reviews the latest advances in monitoring and support, as well as in reception and in-hospital follow-up of neurological disease. Thus, you will be able to update your knowledge in the epidemiology of the main pathologies, as well as in the strategies and use of tools to for the specific management of critically ill patients.

In order to achieve this, the teaching team of this degree, made up of experts in Intensive Care Nursing, has selected the most relevant and innovative information on the subject, information which will be accompanied by additional multidisciplinary content: detailed videos, research articles, news, images, dynamic summaries, diagrams, clinical cases... All this compacted in a convenient and flexible 100% online format, which will allow the graduate to access the course of the degree whenever he/she wants, without face-to-face classes, schedules or stress. This way you can make the most of the academic experience, adapting the academic calendar to your total and absolute availability.

This **Postgraduate Certificate in Advanced Nursing Care in the Neurological Patient** contains the most complete and up-to-date scientific program on the market.

The most important features include:

- ♦ The development of practical case studies presented by experts in Intensive Care Nursing
- ♦ 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



*Delve into the latest advances in visual assessment and monitoring of the neurocritical patient through 180 hours of the best theoretical, practical and additional content"*

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*TECH's virtual platform can be accessed through any device with an internet connection: from wherever you want and whenever you want"*

The program's teaching staff includes professionals from the sector who contribute their work experience to this program, in addition to 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.

*Would you like to master the most innovative nursing tools in Neurology Intensive Care? This Postgraduate Certificate is the key to achieve it.*

*A Postgraduate Certificate that will enhance your clinical eye, perfecting your acuity to interpret early the relevant warning signs in the neurological patient.*



# 02 Objectives

The aim of this Postgraduate Certificate in Advanced Nursing Care in Neurological Patients is none other than to provide the healthcare professional with all the resources they need to get up to date in their field of action in a 100% online way. In addition, one of TECH's priorities is to ensure that graduates improve their clinical skills, providing them with practical cases based on real hospital contexts to achieve this.





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*Getting the most out of this academic experience is TECH's priority. For this reason, TECH will provide you with all the pedagogical resources to help you achieve it"*



## General Objectives

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- ◆ Synthesize data to inform the assessment of the Neurologic patient
- ◆ Collect data to inform Neurologic patient assessment
- ◆ Use data to inform assessment of the neurological patient
- ◆ Plan care collaboratively and in a patient-centered manner
- ◆ Incorporate the latest evidence-based practice in critical care nursing
- ◆ Act effectively in pressurized and demanding situations
- ◆ Contextualize each action to the situation at hand





## Specific Objectives

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- ◆ Provide nursing care in Neurological and Neuromuscular Disorders
- ◆ Assess and measure the patient's level of analgesia
- ◆ Measure the patient's level of sedation
- ◆ Assess and measure the patient's level of relaxation
- ◆ Apply measurement scales for assessment and intervention
- ◆ Initiate and perform monitoring in all related and interventional variables that relate to the patient's neurological status



*Learn in detail the latest developments in analgesia management in the neurocritical patient through a multitude of multimedia resources"*

# 03

## Course Management

For TECH, it is a priority to include in its Postgraduate Certificate the best teaching staff. It considers that this is a unique opportunity for graduates to perfect their skills and update their knowledge under the guidance of top-level professionals who are also professionals of the highest level who, in addition, are active. This means that they know in detail the latest advances in nursing, which they will share, in this case, through 180 hours of theoretical, practical and additional content developed by themselves.





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*The teaching team of this Postgraduate Certificate has selected practical cases from their day-to-day work so that you can work on perfecting your nursing skills through the resolution of real situations"*

## Management



### Ms. Fernández Lebrusán, Laura

- Nurse in the Medical ICU at the Puerta De Hierro Hospital
- ICU Nurse at the Hospital Universitario del Sureste
- Surgical ICU Nurse at Hospital General Universitario Gregorio Marañón
- ICU Nurse at the Hospital Quirón Salud
- Associate Teacher at the University Francisco of Vitoria
- Graduate in Nursing at the Francisco de Vitoria University
- Professional Master's Degree in Critical Care and Intrahospital Emergency Care
- HEMS Specialist (Helicopter Emergency Medical Services), University of Alicante
- Advanced Clinical Simulation Instructor by Francisco de Vitoria University

## Professors

### Dr. Pérez Redondo, Marina

- Transplant Coordinator of at the Puerta De Hierro Hospital
- Assistant Physician of the Intensive Care Medicine Medicine Department at the Puerta de Hierro Majadahonda University Hospital
- Member of the Intensive Care Medicine Research Group in the areas of Cardiovascular, Digestive and Rheumatology Biopathology
- Scientist Collaborator, Faculty of Medicine, Autonomous University of Madrid(UAM)
- Degree in Medicine and Surgery from the University of Santiago de Compostela

### Mr. Sánchez Álvarez, Armando

- Nurse in polytrauma and emergency ICU at Hospital Universitario 12 de Octubre
- Nurse in Medical ICU in Hospital Ramón y Cajal
- Medical ICU and Surgical Rea at Hospital Severo Ochoa de Leganés
- General Emergency Nurse at Hospital Universitario La Paz
- Master's Degree in Critical Care at Universidad Rey Juan Carlos
- Postgraduate Diploma in Hospital and Outpatient Emergencies and Emergencies, Escuela de Ciencias de la Salud, Madrid

**Ms. Sánchez Hernández, Mónica**

- ◆ Nurse in the Post-Surgical Critical Care Unit (UCPQ) at the "Puerta de Hierro" Majadahonda University Hospital
- ◆ Responsible for Patient Safety and referral nurse in Chronic Wound Care
- ◆ Nurse in Primary Care substitutes in several Area V Centers
- ◆ Collaborating Nurse in the Center for Vascular Ulcer Cures (CCUV)
- ◆ Clinical teaching collaborator at the UAM
- ◆ Postgraduate Certificate in Nursing from the Escuela Universitaria de Enfermería Puerta de Hierro, a center attached to the Universidad Autónoma de Madrid
- ◆ Member of: Commission of Dermal Ulcers. Commission of Pressure Ulcers and Chronic Wounds

**Dr. Domínguez Pérez, Laura**

- ◆ Attending physician at the Acute Cardiac Care Unit and Clinical Cardiology Unit at Hospital Universitario 12 de Octubre
- ◆ Research stay at the Montreal Cardiology Institute
- ◆ Specialist in Cardiology at the Carlos III Hospital
- ◆ Doctorate in Medical Sciences from the Complutense University of Madrid
- ◆ Professional Master's Degree in Advances in Cardiology
- ◆ Professional Master's Degree in Acute Cardiac Care
- ◆ Expert in Diabetes Mellitus 2 and Cardiovascular Diseases
- ◆ Expert in Atrial Fibrillation
- ◆ Member of the Spanish Society of Intensive Care Medicine, Critical Care and Coronary Units

**D. Buenavida Camarero, Javier**

- ◆ Nurse in the Medical ICU of the Hospital Universitario Puerta de Hierro Majadahonda
- ◆ Nurse at Móstoles University Hospital
- ◆ Nurse at University Hospital of Getafe
- ◆ Professional Master's Degree in Critical Illness and Emergencies given by the University of Barcelona

**D. Domínguez García, Sergio**

- ◆ Nurse in the Dental ICU of the Hospital Universitario Puerta de Hierro Majadahonda
- ◆ Nurse in Intensive Care Unit of Infanta Elena University Hospital
- ◆ Nurse in Acute Geriatrics Unit of the Hospital General Universitario Gregorio Marañón
- ◆ Nurse in Intensive Care Unit of Jiménez Díaz Foundation Hospital
- ◆ Professional Master's Degree in Respiratory and Mechanical Ventilation by the University of Valencia
- ◆ Master's Degree in Critical Care at Universidad Rey Juan Carlos
- ◆ Collaborating member of CPR in SEEIUC



*A unique, key, and decisive educational experience to boost your professional development"*

# 04

## Structure and Content

In just a few years, TECH has managed to position itself among the best online universities in the world. This has been thanks to the offer of a wide range of degrees of the highest level, as well as the high degree of satisfaction of its students. The Postgraduate Certificate invests months in the development of its programs, analyzing and studying the context in which they are developed. An example of this is the present Postgraduate Certificate in Advanced Nursing Care in the Neurological Patient, composed of the most innovative and complete information of the current clinical environment and endorsed by a group of active professionals who have corroborated each of the sections.





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*Thanks to the additional content included in the Postgraduate Certificate, you will be able to expand each section in a personalized way, delving into those aspects you consider most important or relevant for your professional performance"*

**Module 1.** Neurological monitoring and support. Advanced care of the patient with neurological problems

- 1.1. Neurocritical patient
  - 1.1.1. Nursing care and intervention
  - 1.1.2. Neurological and pupillary assessment
  - 1.1.3. Pupillometer
  - 1.1.4. Scales
- 1.2. Code Stroke Reception and in-hospital follow-up
  - 1.2.1. Reception of the patient
  - 1.2.2. Primary assessment and intervention
  - 1.2.3. Fibrinolysis
  - 1.2.4. Follow-up and nursing care
- 1.3. External Ventricular Drainage (EVD)
  - 1.3.1. Management and operation
  - 1.3.2. Nursing care
  - 1.3.3. Assessment and interpretation
- 1.4. Invasive Monitoring
  - 1.4.1. PIC
  - 1.4.2. Pathway System
  - 1.4.3. Interpretation and nursing performance
- 1.5. Sedation management in the critically ill patient
  - 1.5.1. Most frequent medication
  - 1.5.2. RASS scales
  - 1.5.3. RAMSAY Scale
  - 1.5.4. SAS Scale
  - 1.5.5. MAAS Scale
- 1.6. Sedation Monitoring
  - 1.6.1. BIS
  - 1.6.2. INVOS
  - 1.6.3. Interpretation and nursing performance



- 1.7. Management of analgesia in the critically ill patient
  - 1.7.1. Most frequent medication
  - 1.7.2. EVA Scale
  - 1.7.3. ESCID Scale
- 1.8. Monitoring of Analgesia
  - 1.8.1. ANI
  - 1.8.2. NOL
  - 1.8.3. Interpretation and nursing performance
- 1.9. Management and monitoring of muscle relaxants in the critically ill patient
  - 1.9.1. Most frequent medication
  - 1.9.2. TOF
  - 1.9.3. Interpretation and nursing performance
- 1.10. Delirium management in intensive care units
  - 1.10.1. Prevention and identification
  - 1.10.2. CAM-ICU Scale
  - 1.10.3. Associated Complications

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*Opt for a degree developed by and for professionals of the highest level in Intensive Care Nursing and get up to date with the best”*

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 Certificate in Advanced Nursing Care in the Neurological Patient guarantees students, in addition to the most rigorous 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 program will allow you to obtain your **Postgraduate Certificate in Advanced Nursing Care in the Neurological Patient** 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** title 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 Nursing Care in the Neurological Patient**

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  
development language  
virtual classroom



**Postgraduate Certificate**  
Advanced Nursing Care in  
the Neurological Patient

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- » Certificate: TECH Global University
- » Credits: 6 ECTS
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