

# Postgraduate Diploma

## Nursing Intensive Care of the Accident Patient



## Postgraduate Diploma Nursing Intensive Care of the Accident Patient

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

Website: [www.techtute.com/in/nursing/postgraduate-diploma/postgraduate-diploma-nursing-intensive-care-accident-patient](http://www.techtute.com/in/nursing/postgraduate-diploma/postgraduate-diploma-nursing-intensive-care-accident-patient)

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# 01

# Introduction

From occupational accidents to traffic accidents to domestic accidents, Patient end up in the ICU due to trauma or major burns. In this critical scenario, nursing professionals have seen how in recent years there has been a significant evolution in the protocols of action, initial assessment, monitoring and care for the prevention of other injuries and infections. Thus, this 100% online degree from TECH is born, which will lead the graduate to achieve a complete update in the care that the healthcare professional must provide to the injured patient. It will do so, moreover, with the best teaching material of the academic panorama and with a syllabus prepared by a teaching team with experience in the health sector and in Intensive Care Units.





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*Access to a Postgraduate Diploma in Nursing  
Intensive Care of the Accident Patient, compatible  
with your daily responsibilities"*

The death rate from burns worldwide is estimated at 180,000 people per year, requiring admission to Intensive Care Units. The same result for those people who suffer traffic accidents with serious consequences. These are two scenarios that healthcare professionals specialized in this field have to face on a daily basis.

Faced with this reality, the nursing professional is in its performance with advances in monitoring equipment, as well as the improvement of the techniques used to prevent infections or manage different trauma. In this context, TECH has developed this Postgraduate Diploma in Nursing Intensive Care in the Accident Patient of 6 months duration.

It is an intensive syllabus of 3 modules, which will lead the graduate to be aware of the most relevant advances in the field of care and care of the critically ill patient, especially with trauma and severe burns. A theoretical-practical itinerary that will be complemented by video summaries of each topic, videos in detail, specialized readings and simulations of case studies, accessible 24 hours a day comfortably from any Electronics device with internet connection.

In addition, the innovative Relearning methodology, based on the continuous reiteration of the essential content, will allow you to reduce the long hours of study and consolidate the concepts in a much simpler way.

Undoubtedly, the nurse is before an ideal opportunity to obtain a complete update of their skills through a quality university proposal, aimed at facilitating the reconciliation of daily activities with an avant-garde degree.

This **Postgraduate Diploma in Nursing Intensive Care of the Accident Patient** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ The development of case studies presented by experts in Intensive Care Nursing and Intensive Care Physicians
- ♦ 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 that is why it has created a 100% online degree, without classes with restricted schedules"*

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*Delve into Accidentology and injury biomechanics through the best multimedia didactic material"*

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.

*Deepen in the improvement of techniques for the management of Patient with cranioencephalic trauma, when and where you want.*

*The Relearning method will help you focus on the most important concepts and assimilate them in a much easier way.*



# 02 Objectives

This academic institution has developed a Postgraduate Diploma that provides the graduate with the most exhaustive information and under the maximum scientific rigor on Nursing Intensive Care in the Accident Patient. For this, the nurse has a syllabus with a theoretical-practical approach, very useful for their daily performance in the best hospitals. A unique opportunity for updating through the best didactic material, including clinical case studies.







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*Access clinical case study simulations facilitated by the excellent teaching team specialized in ICU that integrates this Postgraduate Diploma"*



## General Objectives

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- ♦ Synthesizing data to inform the assessment of the critically ill patient
- ♦ Collecting data to inform the assessment of the critically ill patient
- ♦ Use data to inform the assessment of the critically ill 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



*Integrate into your care practice the most effective methods to manage the initial moments of the patient's arrival to the ICU"*





## Specific Objectives

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### **Module 1. Advanced nursing care in the critically ill patient**

- ◆ Modify priorities and adapt the work plan in light of the changes
- ◆ Encourage compliance with unit and hospital guidelines, as well as national regulations, regarding medication administration in the critical care setting
- ◆ Ensuring that medication errors are avoided
- ◆ Appropriately prioritize and provide Patient with the necessary care in the Intensive Care Unit setting

### **Module 2. Special Situations. Severe trauma patient. Advanced assessment and care**

- ◆ Provide nursing care in The Polytraumatized Patient
- ◆ Anticipate potential problems
- ◆ Keep abreast of mobilization specific to the patient's needs
- ◆ Integrate all team members as part of the process

### **Module 3. Special Situations. Burn patient Advanced assessment and care**

- ◆ Provide nursing care in The Burns. Patient
- ◆ Identify and Skin to value Condition
- ◆ Provide the necessary care according to the location and type of burn

# 03

## Course Management

The management and teaching staff of this Postgraduate Diploma is made up of nurses and Intensive Care Unit physicians with an excellent track record in Intensive Care Units. Their experience in dealing with complex clinical situations is evident in this syllabus, which guarantees the graduate a complete update. In addition, the proximity of the teaching staff will facilitate the resolution of any doubts students may have during the course of the Postgraduate Diploma.





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*TECH has brought together an excellent teaching team with an established track record as ICU physicians in leading hospitals"*

## 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

### Ms. Gil Hernández, Cristina

- ♦ Nurse at the Ramón y Cajal University Hospital
- ♦ Nurse in Primary Care Management
- ♦ Nurse at San Francisco de Asis University Hospital
- ♦ Nurse at the Móstoles University Hospital
- ♦ Researcher in the BPSO Working Group at Hospital Sureste
- ♦ Graduate in Nursing from the Complutense University of Madrid
- ♦ Expert in Out-of-hospital Emergencies and Emergencies, Universidad Complutense de Madrid Expert in School Health, Universidad Católica de Ávila

### 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

### Mr. Martín De Castro, Javier

- ♦ Coronary Intensive Care Unit Nurse at the Hospital Universitario de la Hospital Universitario 12 de Octubre
- ♦ Nurse in the Post-Surgical Intensive Care Unit at the Puerta de Hierro Hospital
- ♦ Nurse in the Intensive Care Unit at the Ruber Juan Bravo Hospital
- ♦ Degree in Nursing
- ♦ Professional Master's Degree in Critical Illness and Emergencies at Universitat de Barcelona
- ♦ Postgraduate Diploma in Nursing Processes and Interventions for Pediatric Patient in Life-Threatening Situations
- ♦ Expert in Simulation Instructor: Improving teamwork through TeamSTEPPS®

### Dr. Villén Villegas, Tomás

- ♦ Assistant to Medical Coordination in Emergency Hospital Nurse Isabel Zandal
- ♦ Adjunct Emergency Specialist at Hospital Universitario La Paz
- ♦ Assistant Emergency Specialist at Ramón y Cajal University Hospital
- ♦ Adjunct Emergency Specialist at Hospital Infanta Sofia
- ♦ Postdoctoral Fellow at Harvard University
- ♦ Vice-president of the World Interactive Network Focus on Critical Ultrasound (WINFOCUS) Ibérica
- ♦ Member of: Working Group on Ultrasound of the European Society of Emergency Medicine (EuSEM), Society of Ultrasound in Medical Education (SUSME), Spanish Society of Emergency Medicine (SEMES)

**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

**Ms. Juncos Gonzalo, Mónica**

- ◆ Head of the Surgical ICU Nursing Unit at the Hospital General Universitario Gregorio Marañón, Madrid
- ◆ ICU Nurse at the Hospital General Universitario Gregorio Marañón, Madrid, Spain
- ◆ ICU Nurse at the Southeast Hospital
- ◆ Critical Care Nurse Pool at the Hospital General Universitario Gregorio Marañón







- ◆ Researcher in the project "Assessment of analgesia, sedation, restraints and delirium in Patient admitted to adult Intensive Care Units in Spain"
- ◆ Researcher in the project "Adaptation and validation of frailty scales in critically ill Patient admitted to Critical Care Units in Spain"
- ◆ Degree in Nursing from the Complutense University of Madrid
- ◆ Professional Master's Degree in Human Resources Management from the European University of Madrid
- ◆ Postgraduate Diploma in Nursing Management and Leadership by the Catholic University of Avila
- ◆ Postgraduate Diploma in Processes and Interventions by the Catholic University of Avila
- ◆ Member of: Spanish Society of Intensive Nursing and Coronary Units (SEIUC), Spanish Wound Society (SEHER), Spanish Society of Nursing Anesthesia, Resuscitation and Pain Therapy (A-SEEDAR)

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

# 04

## Structure and Content

The syllabus of this Postgraduate Diploma includes a 6-month intensive academic itinerary that will bring the graduate up to date with the procedures and techniques used in the care of the critically ill patient. Special emphasis will be placed in this program on special situations with severe trauma Patient, delving into their assessment and advanced care. All this is complemented by innovative didactic material and specialized readings to further extend the information provided.





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*A comprehensive syllabus that will allow you to stay abreast of the latest considerations in drug administration and withdrawal”*

## Module 1. Advanced nursing care in the critically ill patient

- 1.1. Nursing care and planning in the day-to-day care of the critically ill patient
  - 1.1.1. Skin cleansing and hydration
  - 1.1.2. Early mobilization
  - 1.1.3. Considerations in the immobilized patient
- 1.2. Mobilization of the critically ill patient
  - 1.2.1. Preliminary Considerations
  - 1.2.2. Lateral decubitus
  - 1.2.3. Supine position
  - 1.2.4. Prone Position
- 1.3. Isolation measures
  - 1.3.1. Isolation criteria
  - 1.3.2. Contact insulation
  - 1.3.3. Isolation by droplets
  - 1.3.4. Airborne insulation
  - 1.3.5. Reverse insulation
- 1.4. Wounds and PUs
  - 1.4.1. Pressure ulcers: prevention and devices
  - 1.4.2. Surgical wounds
  - 1.4.3. Moisture wounds
- 1.5. Collaboration with other professionals. Transversal skills
  - 1.5.1. Intra-professional and inter-professional communication
  - 1.5.2. Leadership
  - 1.5.3. Inter-professional support and support
- 1.6. Post-ICU syndrome
  - 1.6.1. Physical sequelae
  - 1.6.2. Emotional and psychological sequelae
  - 1.6.3. Risk screening and prevention
- 1.7. Therapeutic Effort Limitation
  - 1.7.1. Criteria and considerations
  - 1.7.2. How to proceed
  - 1.7.3. Spiritual considerations

- 1.8. Ultrasound: assessment and nursing intervention
  - 1.8.1. Assessment and prevention
  - 1.8.2. Assessment and prevention
  - 1.8.3. A must in the cannulation of vascular accesses
- 1.9. Vascular Access
  - 1.9.1. ICU catheters
  - 1.9.2. Nursing Care
  - 1.9.3. Drug management and compatibility
- 1.10. Intra-hospital transfers
  - 1.10.1. Before transfer
  - 1.10.2. During the transfer
  - 1.10.3. After the transfer

## Module 2. Special Situations. Severe trauma patient. Advanced assessment and care

- 2.1. Severe traumatic illness
  - 2.1.1. General Aspects
  - 2.1.2. Background
  - 2.1.3. Accidentology and injury biomechanics
- 2.2. Initial care of severe trauma: Primary and Secondary Assessment
  - 2.2.1. Pre-hospital care and transfer
  - 2.2.2. Primary assessment and stabilization
  - 2.2.3. Second Evaluation
- 2.3. Cranioencephalic trauma TBI
  - 2.3.1. Lesions
  - 2.3.2. Nursing care and management
  - 2.3.3. Procedures and Techniques
- 2.4. Facial and neck trauma
  - 2.4.1. Lesions
  - 2.4.2. Nursing care and management
  - 2.4.3. Procedures and Techniques
- 2.5. Thoracic trauma
  - 2.5.1. Lesions
  - 2.5.2. Nursing care and management
  - 2.5.3. Procedures and Techniques

- 2.6. Abdominal Trauma
  - 2.6.1. Lesions
  - 2.6.2. Nursing care and management
  - 2.6.3. Procedures and Techniques
- 2.7. Pelvic trauma
  - 2.7.1. Lesions
  - 2.7.2. Nursing care and management
  - 2.7.3. Procedures and Techniques
- 2.8. Spinal or vertebro-medullary (vertebro-medullary) trauma
  - 2.8.1. Lesions
  - 2.8.2. Nursing care and management
  - 2.8.3. Procedures and Techniques
- 2.9. Orthopedic trauma
  - 2.9.1. Lesions
  - 2.9.2. Nursing care and management
  - 2.9.3. Procedures and Techniques
- 2.10. Trauma in special situations and groups
  - 2.10.1. Advanced trauma life support (ATLS)
  - 2.10.2. Populations at risk
  - 2.10.3. *Crush and blast*

### Module 3. Special Situations. Burn patient Advanced assessment and care

- 3.1. Care of the burn patient
  - 3.1.1. Skin Anatomy
  - 3.1.2. Local and systemic pathophysiology of burns
  - 3.1.3. Definition of burns and severe burns
- 3.2. Assessment and types of burns
  - 3.2.1. Depending on the agent of injury
  - 3.2.2. Depending on the extension
  - 3.2.3. Depending on the depth
- 3.3. Approach and initial stabilization of the burned patient
  - 3.3.1. Optimization of ventilation and hydric resuscitation
  - 3.3.2. Pain Control
  - 3.3.3. Early treatment of burns
- 3.4. Systemic treatment of the burn
  - 3.4.1. Thermodilution-guided resuscitation
  - 3.4.2. Administration of albumin and ascorbic acid
  - 3.4.3. Nutritional Support
- 3.5. Frequent complications in the burn patient
  - 3.5.1. Hydroelectrolytic Alterations
  - 3.5.2. Shock, ARDS and MOF
  - 3.5.3. Infectious processes
- 3.6. Local treatment of burns: debridement
  - 3.6.1. Tangential debridement
  - 3.6.2. Enzymatic Debridement
  - 3.6.3. Scarotomy
- 3.7. Local treatment of burns: coverage
  - 3.7.1. Synthetic and biosynthetic coverage
  - 3.7.2. Graft coverage
  - 3.7.3. Pain Control
- 3.8. Bioactive dressings
  - 3.8.1. Hydrogels
  - 3.8.2. Hydrocolloid
  - 3.8.3. Alginate
- 3.9. Inhalation syndrome
  - 3.9.1. Pathophysiology of carbon monoxide inhalation
  - 3.9.2. Diagnosis of Carbon Monoxide poisoning
  - 3.9.3. Treatment
- 3.10. Special burns
  - 3.10.1. Burns caused by electrical agents
  - 3.10.2. Burns caused by chemical agents
  - 3.10.3. Infrequent burns

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 Patient, 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 Patient, 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 Intensive Care in Accident Patient 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 Intensive Care of the Accident Patient** 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 Diploma in Nursing Intensive in Accident Care Patient**

Official N° of Hours: **450 h.**



\*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

**tech** technological  
university

**Postgraduate Diploma**  
Nursing Intensive Care  
of the Accident Patient

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

# Postgraduate Diploma Nursing Intensive Care of the Accident Patient

