

# Postgraduate Certificate

## Nursing Care in the Trauma Operating Room



## Postgraduate Certificate Nursing Care in the Trauma Operating Room

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

Website: [www.techtute.com/in/nursing/postgraduate-certificate/nursing-care-trauma-operating-room](http://www.techtute.com/in/nursing/postgraduate-certificate/nursing-care-trauma-operating-room)

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# 01

# Introduction

This program in Nursing Care in the Trauma Operating Room performs a detailed analysis of the knowledge and procedures to be carried out in the operating room and also analyzes the safety mechanisms, protocol and recovery for a correct and appropriate surgical process. Additionally, the program develops application skills so that the students can replicate them in the field, giving their careers the plus they need for the field of work that today's world requires.





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*Improve your knowledge in Nursing Care in the Trauma Operating Room through this program, where you will find the best teaching material with real clinical cases”*

During the nursing degree there is no broad and specific specialization in traumatology, as is the case with other specialties such as mental health or maternal and child health. In relation to the discipline of traumatology, only slight glimpses are offered and, if hospital internships are not performed in a traumatology department, the nurses finish their studies without the necessary knowledge to work in that department.

The idea of this program arises precisely from this lack of adequate training, so that nursing practitioners can specialize in this area and work with the guarantee that what they are doing is right. The main objective of this program is to equip nurses with the best knowledge and practices in the trauma field.

The program and its study material will help the students in their path as professionals, acquiring with the most up-to-date advances in the subject, new knowledge for their professional path.

It provides content from primary care to specialized care, including the emergency room, the hospitalization unit and the operating room; (the least known and most complex area) that will be approached in a holistic manner and with the collaboration of different specialists. It includes videos and clinical case studies.

The program is designed to provide online training that provides the student with all the theoretical and practical knowledge presented through high quality multimedia content, analysis of clinical cases prepared by experts, master classes and video techniques that allow the exchange of knowledge and experience, maintain and update the educational level of its members, create protocols for action and disseminate the most important developments in the field. With this online program, students can organize their time and pace of learning, adapting it to their schedules, in addition to being able to access the contents from any computer or mobile device.

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

- ◆ The development of clinical cases presented by experts in Nursing Care in the Trauma Operating Room
- ◆ Its graphic, schematic and practical contents, with which they are conceived, gather a scientific and practical information on those disciplines that are indispensable for professional practice
- ◆ New developments on care and intervention in Nursing Care in the Trauma Operating Room
- ◆ Practical exercises where self-assessment can be used to improve learning
- ◆ Algorithm-based interactive learning system for decision-making in the situations that are presented to the student
- ◆ Its special emphasis on evidence-based medicine and research methodologies in Nursing Care in the Trauma Operating Room
- ◆ 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



*Update your knowledge  
through this program  
in Nursing Care in the  
Trauma Operating Room”*

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*This Postgraduate Certificate is the best investment you can make when selecting a refresher program for two reasons: In addition to updating your knowledge in Traumatology, you will obtain a qualification endorsed by TECH Technological University”*

The teaching staff includes professionals from the field of Trauma Nursing, who bring their experience to this training program, as well as renowned specialists from leading scientific societies.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive training program designed to train in real situations.

The design of this program is based on Problem-Based Learning, through which the nursing professional must try to solve the different professional practice situations that arise throughout the program. For this reason, they will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of Traumatology with extensive teaching experience.

*Increase your decision-making confidence by updating your knowledge through this Postgraduate Certificate.*

*Make the most of this opportunity to learn about the latest advances in Trauma Nursing from professionals with extensive experience in the sector.*



# 02 Objectives

The program in Nursing Care in the Trauma Operating Room is aimed at improving the nurse's performance in the care of patients with traumatic pathology.







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*This program is designed for you to update your knowledge in Traumatology, with the use of the latest educational technology, to contribute with quality and safety to the decision-making, care, monitoring and accompaniment of the patient with Traumatic Pathology”*



## General Objectives

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- Provide the nurse practitioner with more precise theoretical and practical knowledge that will help them in their daily practice in the traumatology service and at all times when patients require their attention in this specialty
- Describe the role of nursing in each of the trauma services
- Perfect the techniques of trauma nursing



*Make the most of this opportunity and take the step to get up to date on the latest developments in Nursing Care in the Trauma Operating Room”*





## Specific Objectives

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- ◆ Gain knowledge about the different surgical techniques in traumatology
- ◆ Specialize in postural and specific operating room care
- ◆ Identify possible problems that may arise in the trauma operating room and be aware of the different solutions
- ◆ Be up to date on all aspects of patient safety in the surgical environment



03

# Course Management

The program includes in its teaching staff leading specialists in Trauma Nursing who bring to this program the experience of their work. Additionally, other recognized specialists participate in its design and preparation which means that the program is developed in an interdisciplinary manner.





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*Learn from leading experts in the field about the latest advances in the procedures in Nursing Care in the Trauma Operating Room”*



## Management



### Ms. Álvarez Calvo, Alicia

- Diploma in Nursing
- Diploma in Public Health
- Master's Degree in Clinical Process Management and University Expert in Emergencies
- Associate Professor of Surgical Conditions in Traumatology of the Degree in Physiotherapy. UEMC
- Collaborator in practical training for the UVA nursing degree
- Member of the Spanish Association of Trauma Nursing and the Spanish Association of Vascular and Injury Nursing
- Head Nurse of the Traumatology and Spine Operating Room of the Hospital of Valladolid

## Professors

### Ms. Nicolas Sacristán, Teresa

- University Diploma in Nursing from the Faculty of Health Sciences of Valladolid
- Nurse Resident of Mental Health at the Valladolid Clinical University Hospital
- Pedagogical Training Course in the specialty of Health Services (PHC) at the University of Valladolid.



04

# Structure and Content

The structure of the contents has been designed by a team of professionals from leading hospitals and universities, who are aware of the current importance of specialization to provide quality care to patients with trauma problems, and committed to quality teaching through new educational technologies.





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*This Postgraduate Certificate contains the most complete and up-to-date scientific program on the market”*

## Module 1. Nursing Care in the Traumatology Operating Room

- 1.1. Asepsis and Antisepsis
  - 1.1.1. Sterilization
- 1.2. Patient Positioning in the Orthopedic and Trauma Surgery Operating Room
  - 1.2.1. Surgical Positions
  - 1.2.2. Key Aspects of Placing the Patient in Proper Surgical Positioning
- 1.3. Surgical Ischemia
  - 1.3.1. Application Methods
  - 1.3.2. Complications and Contraindications of Ischemia
- 1.4. Anesthesia in Traumatology
  - 1.4.1. Patient Monitoring
  - 1.4.2. Main Anesthetic Techniques in Traumatology
- 1.5. Materials Used in the Traumatology Operating Room
  - 1.5.1. Biomaterials
  - 1.5.2. Metals, Polymers and Ceramics
  - 1.5.3. Principles of Surgical Cementation
- 1.6. Bone Grafts and Tissue Bank
  - 1.6.1. Biological Bone Grafts
  - 1.6.2. Synthetic Bone Grafts
  - 1.6.3. Tissue Bank. Bone and Tissue Explant
- 1.7. Instrumentation in the Main Traumatological Surgical Techniques
  - 1.7.1. Basic Instruments in Traumatology
  - 1.7.2. Instruments in Osteosynthesis. The Surgical Reduction of Fractures
  - 1.7.3. Instrumentation in Minimally Aggressive Techniques
- 1.8. Instrumentation in the Main Orthopedic Surgical Techniques
  - 1.8.1. Instrumentation in Arthroscopic Surgery
  - 1.8.2. Instrumentation in Arthroplasty Surgery
  - 1.8.3. Instrumentation in Spine Surgery







- 1.9. Main Complications in the Trauma Operating Room
  - 1.9.1. Complications of the Different Surgical Positions
  - 1.9.2. Most Frequent Anesthetic Complications in the Trauma Operating Room
  - 1.9.3. Bone Cement Implantation Syndrome
- 1.10. Nursing Care in Surgical Patients in Orthopedic and Trauma Surgery
  - 1.10.1. Safe Surgery Program of the National Institute of Health
    - 1.10.1.1. Surgical Checklist
    - 1.10.1.2. Surgical Infection Project ZERO
  - 1.10.2. Surgery in the Context of Covid-19 and Multidrug-Resistant Infections



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

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 Nursing Care in the Trauma Operating Room guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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 Certificate in Nursing Care in the Trauma Operating Room** 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 Nursing Care in the Trauma Operating Room**

Official N° of Hours: **150 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



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