

# Postgraduate Diploma

Trauma Nursing: Care in  
Orthogeriatrics, Operating  
Room and Hospitalization



## Postgraduate Diploma Trauma Nursing: Care in Orthogeriatrics, Operating Room and Hospitalization

- » 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-trauma-nursing-care-orthogeriatrics-operating-room-hospitalization](http://www.techtute.com/us/nursing/postgraduate-diploma/postgraduate-diploma-trauma-nursing-care-orthogeriatrics-operating-room-hospitalization)

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01

# Introduction

Specialize in Trauma Nursing: Care in Orthogeriatrics, Operating Room and Hospitalization, with this high level program taught by professionals with extensive experience in the sector.

A unique opportunity to stand out in a sector with a high demand for professionals.



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*Improve your knowledge in Trauma Nursing: Care in Orthogeriatrics, Operating Room and Hospitalization 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 pediatrics. In relation to the discipline of traumatology, only slight glimpses are offered and, if hospital internships are not performed in a traumatology department, the nurse finishes his or her studies without the necessary knowledge to work in that department.

The idea of this program arises precisely from this lack of adequate specialization, 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 consists of several modules, divided into different areas, with the most up to date advances on each topic, videos and different resources for the student to acquire the necessary training.

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 highly skilled instruction. In this program, the student will find all the theoretical and practical knowledge presented through high quality multimedia content with analysis of clinical cases prepared by experts, master classes and video techniques that allow the exchange of knowledge and experience, maintaining and updating the level of its members. It also allows learning how to create action protocols and disseminate the most important developments in the field. With the online modality, 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 Diploma in Trauma Nursing: Care in Orthogeriatrics, Operating Room and Hospitalization** 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 Trauma Nursing: Care in Orthogeriatrics, Operating Room and Hospitalization
- ♦ 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 intervention in Trauma Nursing: Care in Orthogeriatrics, Operating Room and Hospitalization
- ♦ 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
- ♦ With special emphasis on evidence-based medicine and research methodologies in Trauma Nursing: Care in Orthogeriatrics, Operating Room and Hospitalization
- ♦ 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 the program in Trauma Nursing: Care in Orthogeriatrics, Operating Room and Hospitalization”

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*This Postgraduate Diploma 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 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 with this Postgraduate Diploma.*

*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 Trauma Nursing: Care in Orthogeriatrics, Operating Room and Hospitalization is oriented to facilitate 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 with the latest developments in Trauma Nursing: Care in Orthogeriatrics, Operating Room and Hospitalization”*





## Specific Objectives

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### Module 1. Nursing Care in Orthogeriatrics

- ◆ Instruct different nursing professionals who wish to acquire a deeper and more specific knowledge of the traumatological processes affecting the elderly
- ◆ Gain an in depth knowledge of the attention and care required by orthogeriatric patients

### Module 2. Nursing Care in the Traumatology Operating Room

- ◆ 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

### Module 3. Nursing Care in Trauma Hospitalization

- ◆ Identify and plan nursing care in hospitalization of trauma patients
- ◆ Appropriate use of the main standardized care plans in orthopedic and trauma surgery
- ◆ Have up to date knowledge and the latest scientific research on trauma patients focused on day to day healthcare practice



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,  
the latest advances in the procedures in  
Trauma Nursing: Care in Orthogeriatrics,  
Operating Room and Hospitalization"*



## 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. Cabero García, Begoña**

- ♦ University Expert in Care and Cure of Chronic Wounds by the University of Cantabria
- ♦ Degree in Nursing from the University of León

### **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

### **Ms. García Rodríguez, Laura**

- ♦ Diploma in Nursing from the University School of Nursing and Physiotherapy of the University of Salamanca
- ♦ Obstetrics and Gynecology Specialty (Midwife) at the UDENFOBG of the Basque Health Service
- ♦ Expert in Assisted Reproduction by the Rey Juan Carlos University and SEF



04

# Structure and Content

The structure of the contents has been designed by a team of professionals from leading hospitals and universities, aware of the relevance of current specialization in order to offer quality care to patients with traumatic pathology, and committed to quality teaching through new educational technologies.





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*This Postgraduate Diploma contains the most complete and up to date scientific program on the market"*

## Module 1. Nursing Care in Orthogeriatrics

- 1.1. Nursing Assessment and Diagnosis in the Elderly
  - 1.1.1. Assessment Scales in the Elderly
- 1.2. Special Considerations for the Elderly Population
  - 1.2.1. Home and Residential Care
  - 1.2.2. Drug Use in the Elderly
- 1.3. Major Geriatric Syndromes
  - 1.3.1. Constipation and Urinary Incontinence
  - 1.3.2. Mild Cognitive Impairment and Acute Confusional State
  - 1.3.3. Malnutrition
  - 1.3.4. Depression
- 1.4. Major Geriatric Syndromes in Traumatology
  - 1.4.1. Gait Disturbance (Orthopedics and Technical Aids)
  - 1.4.2. Falling Syndrome
  - 1.4.3. Immobilization Syndrome (Sarcopenia)
- 1.5. Prevention and Promotion of Musculoskeletal Health in the Elderly
- 1.6. Geriatric Surgical Patient
  - 1.6.1. Prevention of Perioperative Complications in the Elderly Patient
  - 1.6.2. Preparation for Intervention
  - 1.6.3. Antithromboembolic Prophylaxis
  - 1.6.4. Pathologies and Drugs Contraindicating Early Surgery
- 1.7. Postoperative Period in the Elderly in Traumatology
  - 1.7.1. Anemia as a Prognostic Factor. Transfusion Saving Measures
- 1.8. Nursing Care in the Elderly with Traumatic Pathology
  - 1.8.1. National Hip Fracture Registry
- 1.9. Nursing Care of the Elderly with non-Traumatic Pathology
  - 1.9.1. Care Plans for the Orthogeriatric Patient
- 1.10. Principles of Physiotherapy in Geriatrics

## Module 2. Nursing Care in the Traumatology Operating Room

- 2.1. Asepsis and Antisepsis
  - 2.1.1. Sterilization
- 2.2. Patient Positioning in the Orthopedic and Trauma Surgery Operating Room
  - 2.2.1. Surgical Positions
  - 2.2.2. Key Aspects of Placing the Patient in Proper Surgical Positioning
- 2.3. Surgical Ischemia
  - 2.3.1. Application Methods
  - 2.3.2. Complications and Contraindications of Ischemia
- 2.4. Anesthesia in Traumatology
  - 2.4.1. Patient Monitoring
  - 2.4.2. Main Anesthetic Techniques in Traumatology
- 2.5. Materials Used in the Traumatology Operating Room
  - 2.5.1. Biomaterials
  - 2.5.2. Metals, Polymers and Ceramics
  - 2.5.3. Principles of Surgical Cementation
- 2.6. Bone Grafts and Tissue Bank
  - 2.6.1. Biological Bone Grafts
  - 2.6.2. Synthetic Bone Grafts
  - 2.6.3. Tissue Bank. Bone and Tissue Explant
- 2.7. Instrumentation in the Main Traumatologic Surgical Techniques
  - 2.7.1. Basic Instruments in Traumatology
  - 2.7.2. Instruments in Osteosynthesis. The Surgical Reduction of Fractures
  - 2.7.3. Instrumentation in Minimally Aggressive Techniques
- 2.8. Instrumentation in the Main Orthopedic Surgical Techniques
  - 2.8.1. Instrumentation in Arthroscopic Surgery
  - 2.8.2. Instrumentation in Arthroplasty Surgery
  - 2.8.3. Instrumentation in Spine Surgery
- 2.9. Main Complications in the Trauma Operating Room
  - 2.9.1. Complications of the Different Surgical Positions
  - 2.9.2. Most Frequent Anesthetic Complications in the Trauma Operating Room
  - 2.9.3. Bone Cement Implantation Syndrome



- 2.10. Nursing Care in Surgical Patients in Orthopedic and Trauma Surgery
  - 2.10.1. Safe Surgery Program of the National Institute of Health
    - 2.10.1.1. Surgical Checklist
    - 2.10.1.2. Surgical Infection Project ZERO
  - 2.10.2. Surgery in the Context of Covid-19 and Multidrug-Resistant Infections

### Module 3. Nursing Care in Trauma Hospitalization

- 3.1. Assessment of Hospitalized Patients in the Traumatology Unit
- 3.2. Multidisciplinary Treatment of Patients in the Traumatology Unit
  - 3.2.1. Application of Pharmacological Treatments
  - 3.2.2. Application of Hot-Cold Therapies
- 3.3. Nursing Care for Postoperative Orthopedic and Trauma Surgery Patients
  - 3.3.1. Nursing Care after Trauma Surgery
  - 3.3.2. Nursing Care after Orthopedic Surgery
  - 3.3.3. Nursing Care after Spine Surgery
- 3.4. Immobilization of Patients in the Different Trauma Processes
  - 3.4.1. Safe Immobilization and Body Alignment Techniques
  - 3.4.2. Effects of Immobilization
  - 3.4.3. Assessment and Care of Patients in Splints and Casts
  - 3.4.4. Assessment and Care of Patients with Skin and Skeletal Traction
- 3.5. Mobilization of Patients in Different Trauma Processes
  - 3.5.1. Safe Mobilization Techniques
  - 3.5.2. Lifting and Ambulation Techniques
- 3.6. Risk Assessment and Prevention of Pressure Ulcers in Trauma Patients
  - 3.6.1. General Concepts about Pressure Ulcers (PU's)
  - 3.6.2. Most used Scales
- 3.7. Nutrition in Trauma Patients
  - 3.7.1. Nutritional Assessment in Trauma Patients
  - 3.7.2. Use of Nutritional Supplements
- 3.8. Rapid Recovery Program in Trauma Surgery
  - 3.8.1. Rapid Recovery. (*Fast-Track* or *Rapid Recovery*)

- 3.9. Inpatient Care Safety
  - 3.9.1. RNAO Best Practice Guidelines
  - 3.9.2. Recommendations for What "Not To Do"
- 3.10. Standardized Care Plans in Orthopedic and Trauma Surgery Hospitalization
  - 3.10.1. Standard Plan: Herniated Disc
  - 3.10.2. Standard Plan: Hip Fracture
  - 3.10.3. Standard Plan: Knee Prosthesis



*A unique, key, and decisive training 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 Diploma in Trauma Nursing: Care in Orthogeriatrics, Operating Room and Hospitalization 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 Trauma Nursing: Care in Orthogeriatrics, Operating Room and Hospitalization** 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 Trauma Nursing: Care in Orthogeriatrics, Operating Room and Hospitalization**

Official N° of hours: 450 h.



\*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.

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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