

Postgraduate Certificate

Update on Critical Patient Transport and
Pharmacotherapy Used in the ICU





Postgraduate Certificate

Update on Critical Patient Transport and Pharmacotherapy Used in the ICU

Course Modality: **Online**

Duration: **8 weeks**

Certificate: **TECH Technological University**

Official N° of Hours: **100 h.**

Website: www.techtute.com/us/nursing/postgraduate-certificate/update-critical-patient-transport-pharmacotherapy-used-icu

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01

Introduction

Advances in technology have helped to streamline the transfer critical patients from Intensive Care Units to other sites, and have also led to improvements in new pharmacological therapies, resulting in the need for continuous professional development on the part of nursing professional in order to provide excellent patient care. This program allows professionals to update their knowledge in a practical way, which is tailored to their needs.





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The quality of care for critically ill patients is dependent on nursing professionals having up-to-date knowledge. Get up to speed on nursing protocols for Pharmacotherapy and Critical Patient Transport"

Nursing professionals may be required to work in any hospital and out-of-hospital environment, and therefore, up-to-date knowledge of critical patient transport is considered essential for future employment in hospital wards, particularly in the ICU.

Critically ill patients require specialized and specific care from nursing professional based on the best scientific evidence. Knowledge of the Critical Patient Transport process is essential to avoid any possible complications during transfers. This Postgraduate Certificate is designed as an update on Critical Patient Transport in the Intensive Care Unit, so that nursing professionals acquire the necessary skills for the proper performance of this process and also become familiar the most commonly used medication and routes of administration.

With the appropriate professional development, nurses will be able to provide the best quality care to critical patients during transport, avoiding the possible complications that may arise.

With this Postgraduate Certificate, nursing professionals will be able to effectively care for critically ill patients in the emergency department of the hospital.

This **Postgraduate Certificate in Update on Critical Patient Transport and Pharmacotherapy Used in the ICU** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Clinical cases presented by experts
- ♦ Graphic, schematic, and practical contents which provide scientific knowledge on those medical disciplines that are essential to professional practice
- ♦ New developments in patient transfer and interhospital transport protocols
- ♦ An update on pharmacotherapy for use with critically ill patients.
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ♦ Theoretical lectures, questions to the expert, discussion forums on controversial issues and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



Update your knowledge with the Postgraduate Certificate in Update on Critical Patient Transport and Pharmacotherapy Used in the ICU"

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This Postgraduate Certificate is the best investment you can make when choosing a refresher program, for two reasons: in addition to updating your knowledge in Critical Patient Transport and Pharmacotherapy Used in the ICU, you will obtain a Postgraduate Certificate endorsed by TECH Technological University"

The teaching staff includes leading professionals in nursing, who contribute their professional experience to this refresher program, in addition to other professionals specializing in intensive care.

Multimedia content developed with the latest educational technology, will provide professionals with situated and contextual learning, that is to say, a simulated environment that will provide immersive learning designed to prepare them for real situations.

The design of the program is based on Problem-Based Learning, by means of which nursing professionals must try to solve the different professional practice situations that arise throughout the course. All this is supported by an innovative interactive video system developed by renowned experts in Intensive Care nursing with extensive teaching experience.

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

Take this opportunity to learn about the latest advances in Critical Patient Transport and Pharmacotherapy Used in the ICU, and improve patient care.



02 Objectives

The program is aimed at reviewing the main aspects of Critical Patient Transport and Pharmacotherapy Used in the ICU, based on scientific evidence and the experience of renowned professionals.





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This program will give you a sense of confidence when taking decisions and providing care, which will help you grow both personally and professionally”



General Objective

- Update the knowledge of nursing professionals dedicated to the Transport of Critical Patients, following established nursing protocols, so that they can anticipate possible complications, and understand the most commonly used drug therapies in the ICU

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Seize this opportunity and take the next step to get up to date on the most important aspects of Critical Patient Transport and Pharmacotherapy Used in the ICU”





Specific Objectives

- ◆ Plan the intra-hospital transfer of critically ill adult and pediatric patients
- ◆ Explain the stages of intra-hospital transfer
- ◆ Examine the importance of intensive care unit management
- ◆ Describe the different types of medical transport
- ◆ Determine and describe the stages of inter-hospital transport
- ◆ Develop the necessary skills to effectively communicate with the patient and their relatives
- ◆ Comply with safety rules for working with helicopters
- ◆ Interpret the results of the ISOBAR model
- ◆ Define the basic concepts of pharmacology
- ◆ Explain the differences between incompatibility and drug interaction
- ◆ Appreciate the importance of proper intensive care unit management
- ◆ List the most commonly used drugs in the Intensive Care Unit, as well as their effects, the most important side effects and rules for correct administration
- ◆ Understand measurement units and equivalences

03

Course Management

The teaching staff includes leading nursing professionals from the field of medical transport and care for critically ill patients, who bring their professional experience to this program. In addition, other renowned specialists have participated in the creation of the contents, completing the program in an interdisciplinary manner.





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Learn about the latest advances in Critical Patient Transport and Pharmacotherapy Used in the ICU, from leading professionals”

Guest Director



Ms. Díez Sáenz, Cristina

- ♦ Nursing supervisor at Gregorio Marañón ICU
- ♦ Head of Adult Intensive Care Unit from October 16, 2014 to present
- ♦ Collaborating teacher at the International School of Health Sciences
- ♦ Attending Nurse since 1993 in different hospitalization areas, from May 1999 in Intensive Care until appointment as Head of Unit
- ♦ University Diploma in Nursing at the "Salus Infirmorum" school, attached to the Pontifical University of Salamanca
- ♦ Participation as collaborating researcher in the multicenter project "National Validation of the Scale of Satisfaction with Nursing Care from the Perspective of the Critical Patient"

Management



Dr. Lospitao Gómez, Sara

- ♦ Intensive Care Nurse at University Hospital in Fuenlabrada, Madrid
- ♦ Cardiac Surgery Post-Surgical Intensive Care Unit 12 de Octubre Hospital
- ♦ Coronary Intensive Care Unit 12 de Octubre Hospital
- ♦ Master's Degree in Critical Care Rey Juan Carlos I University
- ♦ Bachelor's Degree in Humanities European University of Madrid
- ♦ Advanced Nursing Degree European University of Madrid
- ♦ Postgraduate Diploma in Continuing Education Complutense University of Madrid
- ♦ Internship tutor for undergraduate and graduate students in Nursing at the European University of Madrid (UEM) and Juan Carlos I University (URJC)
- ♦ Instructor in SVA by the National CPR Plan of SEMICYUC



Professors

Ms. Álvarez Carrascal, Inmaculada

- ◆ Attending Nurse in ICU, Gregorio Marañón General University Hospital
- ◆ Consultant Nurse for safety in ICU, Gregorio Marañón General University Hospital
- ◆ Critical Care Attending Nurse at Gregorio Marañón Hospital
- ◆ Instrumentalist nurse in operating rooms of different specialisms Churchill Hospital, Oxford, United Kingdom
- ◆ Attending Nurse in various hospital and health center services in the Andalusian Health Service (SAS)

Mr. González Palacios, Rubén

- ◆ Attending Nurse in the Internal Medicine Unit of the 12 de Octubre General University Hospital, Madrid
- ◆ Attending Nurse in different Primary Care centers in the Community of Madrid
- ◆ Attending Nurse in ICU Gregorio Marañón General University Hospital, Madrid
- ◆ Developer of the mobile application "Compatibility drugs" for intravenous compatibility of drugs
- ◆ 5 communications in international congresses

Mr. Ruiz Henestrosa Campos, Manuel Jesús

- ◆ Attending Nurse Puerta del Mar General University Hospital, Cádiz
- ◆ Head of the Emergency Unit Gregorio Marañón General University Hospital
- ◆ Attending Nurse, Gregorio Marañón General University Hospital
- ◆ Associate Professor Nursing Practicum III
- ◆ Collaborating teacher at the International School of Health Sciences
- ◆ Nebrija University Collaborating Professor
- ◆ Esforem Collaborating Teacher

04

Structure and Content

The syllabus has been designed by a team of professionals who are aware of the importance of professional development in order to provide expertise leading to excellent patient care in the Emergency Care unit and committed to teaching using new educational technologies.





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Module 1. Pharmacology in Intensive Care

- 1.1. Basic Concepts in Pharmacology
- 1.2. Drug Administration Safety
- 1.3. Most Frequently Used Drugs: Analgesia, Sedation and Muscle Relaxants
- 1.4. Most Frequently Used Drugs: Antiarrhythmics, Vasodilators and Inotropes
- 1.5. Most Frequently Used Drugs: Respiratory System and Antibiotics
- 1.6. Drug Administration Precautions: Oral and Enteral, Parenteral, and Transfusion
- 1.7. Drug Administration Precautions: Cytostatics, Epidural, PCA and Insulin Pumps
- 1.8. Formulae and Dose Calculation
- 1.9. Enteral and Parenteral Nutrition
- 1.10. Pediatric Pharmacology

Module 2. Hospital Transport

- 2.1. Intrahospital Transfer of the Critically Ill Patient
- 2.2. Out-of-hospital Transfer and ISOBAR
- 2.3. Intrahospital Neonatal Transport
- 2.4. Ambulance Equipment
- 2.5. Cardiopulmonary Resuscitation Trolleys and Backpacks
- 2.6. Driving and Road Safety
- 2.7. Immobilization and Transfer





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A unique, key, and decisive educational 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 Update on Critical Patient Transport and Pharmacotherapy Used in the ICU 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 Postgraduate Certificate without having to travel or fill out laborious paperwork"

This **Postgraduate Certificate in Update on Critical Patient Transport and Pharmacotherapy Used in the ICU** 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 diploma 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 Update on Critical Patient Transport and Pharmacotherapy Used in the ICU**

Official N° of Hours: **100 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
online training
development languages
classroom



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