Postgraduate Certificate

Control of Electrolyte Balance in Intensive Care Nursing

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Postgraduate Certificate

Control of Electrolyte Balance in Intensive Care Nursing

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

Website: **www.techtitute.com/us/nursing/postgraduate-certificate/control-electrolyte-balance-intensive-care-nursing**

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Introduction

Acute renal failure and the difficulties that can affect the correct electrolyte balance are very present in Intensive Care Unit patients. It is a very frequent side effect, as well as a recurrent clinical picture in renal diseases and its causes are diverse, as well as its counteracting treatments, in which the nurse plays a fundamental role. Therefore, they have the need to be updated on the latest advances in monitoring and support for the hydroelectric balance, something that can be supplied with the course of this Postgraduate Certificate. This is a 100% online degree that will provide you with the latest information related to advanced care of the patient with elimination problems through 180 hours of the best content.

TECH presents the best Postgraduate Certificate in the current academic panorama to bring you up to date with the latest strategies in the management of patients with renal problems from the hand of the best experts in Nursing"

Although the patient's clinical picture is fundamental in determining the causes of the development of a pathology, admission to the ICU and its limitations often have negative consequences on the patient's health. Lack of mobility, mechanical ventilation, stress or changes in daily habits are factors that affect the control of electrolyte balance, causing a deterioration in fluid elimination and favoring acute renal failure. In this type of context, extrarenal depuration and imbalance management therapies carried out by nursing professionals are essential to avoid intoxication and worsening of health.

Based on this, and with the aim of providing these specialists with the possibility of keeping up to date with the latest developments in this field, TECH has designed this Postgraduate Certificate in Control of Electrolyte Balance in Intensive Care Nursing, a 180-hour qualification distributed in 6 weeks, during which the graduate will be able to delve into the latest developments in Nursing from a practical, multidisciplinary, dynamic and critical approach. Thanks to this, they will be able to work on perfecting their competencies in patient monitoring and support, implementing the most innovative management strategies for advanced care in contexts where there are problems with in elimination.

This is an academic experience designed by the best experts in the field, who will be part of the teaching team that includes this Postgraduate Certificate. In addition, you will have unlimited access to a state-of-the-art virtual platform where the material will be hosted from the beginning of the course. Everything can be downloaded to any device with an internet connection for offline consultation or, even, for when you have completed the academic experience.

This **Postgraduate Certificate in Control of Electrolyte Balance in Intensive Care Nursing** 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

Working with the best theoretical, practical and additional material to perfect your skills in the management of water balance in the ICU patient"

Getting up to date on the complications associated with patients with elimination problems will allow you to avoid them by making use of the best strategies to do so"

Access to a specific section where you will find the special considerations to be taken into account for the correct assessment and management of the renal patient in the ICU.

You will be able to access the 180 hours of content through any device with internet connection, as well as downloading it for consultation, even when you do not have coverage.

The program's teaching staff includes professionals from the sector who bring to this training the experience of their work, as well as renowned specialists from reference 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.

This program's design focuses on Problem-Based Learning, through which the professional must try to solve the different professional practice situations that arise during the academic program. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

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Objectives

TECH and the teaching team of this Postgraduate Certificate in Control of Electrolyte Balance in Intensive Care Nursing have designed this program with the aim of providing nursing professionals with the best resources to update their practice. Thus, through 180 hours of high quality content, they will be able to work intensively and concisely in the improvement of their competencies, implementing the patient management strategies that are having the best results in the current hospital context.

Regardless of your goals, in this Postgraduate Certificate you will find the academic resources you need to achieve them successfully"

General Objectives

- Synthesize data to inform the assessment of the patient
- Collect data to inform patient assessment
- Use data to inform patient assessment
- 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

- Provide nursing care in renal disorders and intoxications
- Correctly recognize electrolyte and acid-base balance disturbances
- Manage continuous renal replacement therapy
- Initiate and carry out monitoring in everything related to and involving variables related to the patient's elimination status

Within the objectives of this degree is to improve your skills in the resolution of problems associated with extrarenal depuration and its nursing care"

03

Course Management

All the professionals who are part of the teaching team of this Postgraduate Certificate are versed in Nursing specialized in the field of Intensive Care. Thanks to this, it has been possible to develop a dynamic, comprehensive and intensive syllabus, but, above all, based on current events. All of them are working in different areas of the ICU, so they are up to date with the clinical strategies that have had the best results so far in the management of patients suffering from uncontrolled electrolyte balance.

A team of nurses of the highest level will guide you during the 6 weeks of this Postgraduate Certificate and will be available to answer any questions you may have along the way"

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. González González, Elena

- Assistant Physician of the Intensive Care Department, Torrejón University Hospital
- Assistant Physician of the Intensive Care Department, Getafe University Hospital
- Transplant Coordinator of the Hospital Universitario de Torrejón
- Pulmonary and Critical Care Division in the Northwestern Memorial Hospital in Chicago
- Clinical Simulation Instructor
- PNRCP SVA SVI Instructor
- Director and teacher of Advanced Life Support courses
- Degree in Medicine from the Autonomous University Madrid
- President of the CPR Committee of the Hospital Universitario de Torrejon

Ms. López Álvarez, Ana María

- Nurse in the Intensive Care Unit of La Paz University Hospital
- Nurse in the 3rd Resuscitation Unit of General Surgery, Maxillofacial, Neurosurgery,
- Urology Hospital La Paz
- Nurse in the Intensive Care Unit, H. Puerta de Hierro H. La Paz
- Nurse in the General Surgery Unit H. La Paz Hospital
- Instructor of ICU Simulation in UFV
- Postgraduate Certificate in Nursing at the University School of Nursing Puerta de Hierro (UAM)

Ms. Alonso Hernández, Vanesa

- Nurse in UCI Henares University Hospital
- Nurse in Clinical Analysis Laboratory at Labipah, S.A
- Intensive Care Unit Nurse at the Príncipe de Asturias University Hospital
- SVB- AED Instructor by the Spanish Society of Intensive Care Medicine, Critical Care and Coronary Units
- Postgraduate Diploma from Nursing in Outpatient
- Postgraduate Certificate Nurse from the University of Alcalá, Spain

Mr. Domínguez García, Sergio

- Surgical ICU nurse at Puerta de Hierro Majhonda University Hospital
- Nurse in Intensive Care Unit of Infanta Elena University Hospital
- Nurse in Acute Geriatrics Unit of the Hospital General Universitario Gregorio Marañon
- 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

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Structure and Content

The syllabus of this degree has been designed by the teaching team, following the guidelines of quality, completeness and thoroughness that characterize and differentiate TECH. Thanks to this, it is possible to guarantee an academic experience of the highest level in which the nursing professional will find a multitude of resources to update their practice in Intensive Care. In addition, its convenient 100% online format makes it easy to combine it with any other activity, providing flexibility to the academic experience.

The Relearnig methodology means you won't have to spend extra hours studying. Don't you believe it? Enroll now and find out how!"

Module 1. Monitoring and support in the elimination and water-electrolyte balance of the patient. Advanced care of the patient with elimination problems

1.1. Water Balance
- 1.1.1. Insensible losses
- 1.1.2. Latest recommendations
- 1.1.3. Special considerations

1.2. Ions and associated problems
- 1.2.1. Ion imbalance
- 1.2.2. pH change
- 1.2.3. Associated Complications

1.3. Management of the most frequent intoxications
- 1.3.1. Drug Intoxications
- 1.3.2. Metal intoxications
- 1.3.3. Drug Poisoning

1.4. Intra-abdominal pressure (IAP)
- 1.4.1. Measuring devices
- 1.4.2. Interpretation and assessment
- 1.4.3. Indications

1.5. Vascular accesses for renal replacement therapy and its nursing care
- 1.5.1. Catheter location and types
- 1.5.2. Nursing Care
- 1.5.3. Resolution of associated problems. Nursing assessment

1.6. Extrarenal depuration therapy
- 1.6.1. Osmosis. Convection and diffusion
- 1.6.2. Most frequent types of therapy
- 1.6.3. Plasmapheresis

1.7. Ostomies Types and nursing care
- 1.7.1. Nursing care
- 1.7.2. Colostomy and ileostomy
- 1.7.3. Ureterostomy and nephrostomy

1.8. Surgical drainage
- 1.8.1. Nursing care
- 1.8.2. Types
- 1.8.3. Special considerations

1.9. Negative pressure system
- 1.9.1. Operation and indications
- 1.9.2. Tipo1
- 1.9.3. Nursing care

1.10. Extracorporeal liver support
- 1.10.1. Indications and Contraindications
- 1.10.2. Types and special considerations
- 1.10.3. Nursing care and assessment

Don't think twice and opt for a degree in line with the level of your professional quality that will allow you to further increase your commitment with the patient management"

05

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

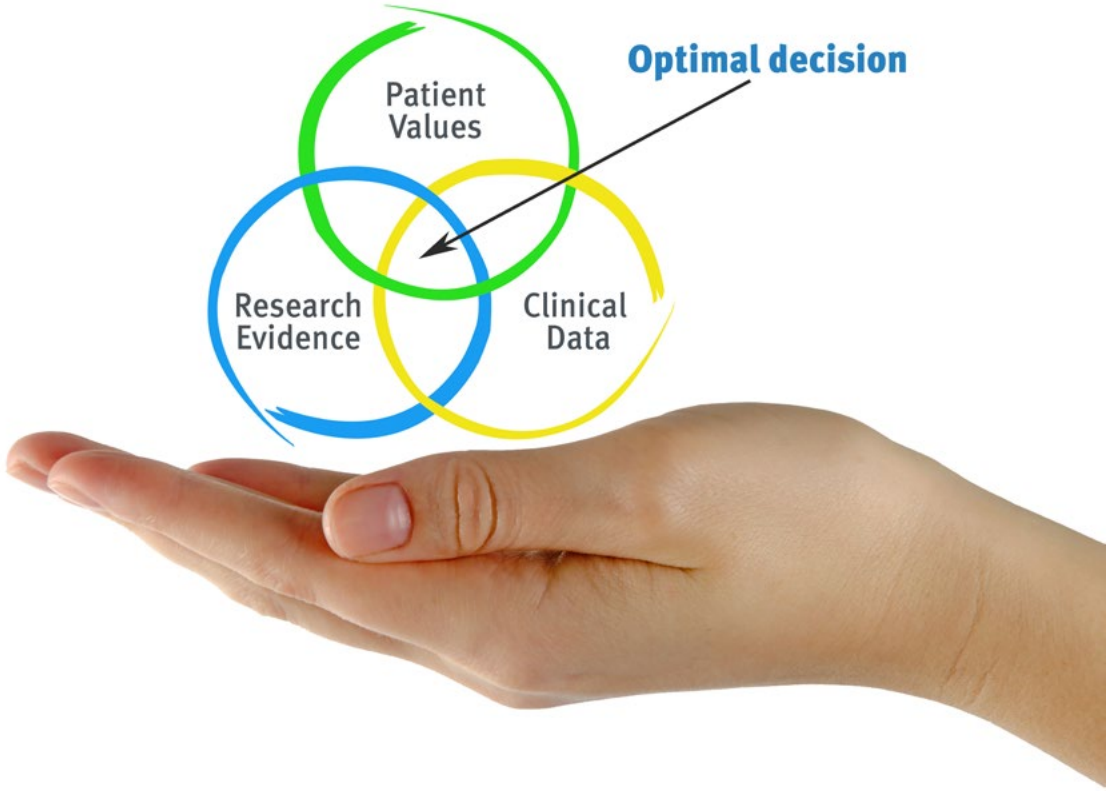
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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.

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:

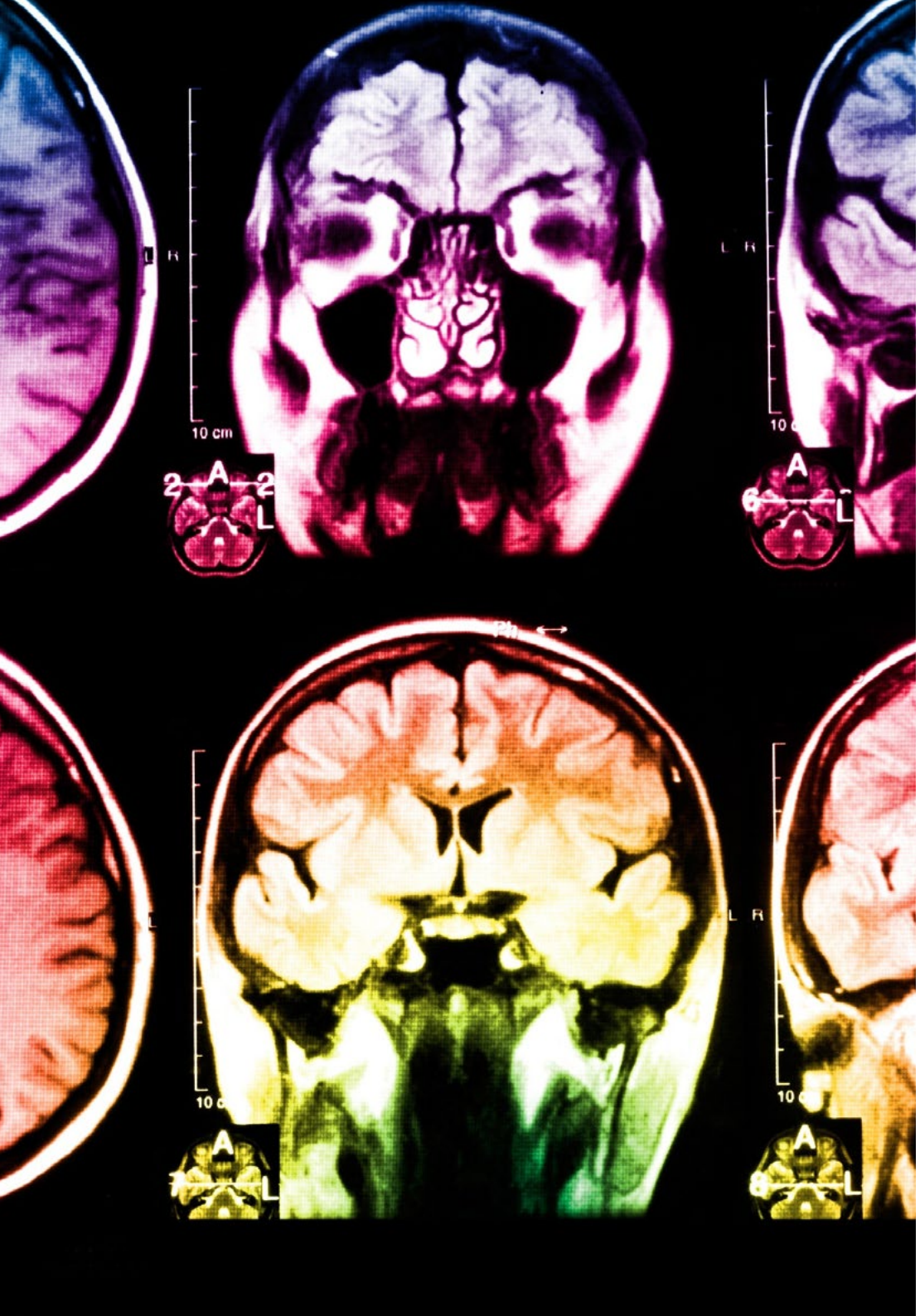
1. Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into 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.

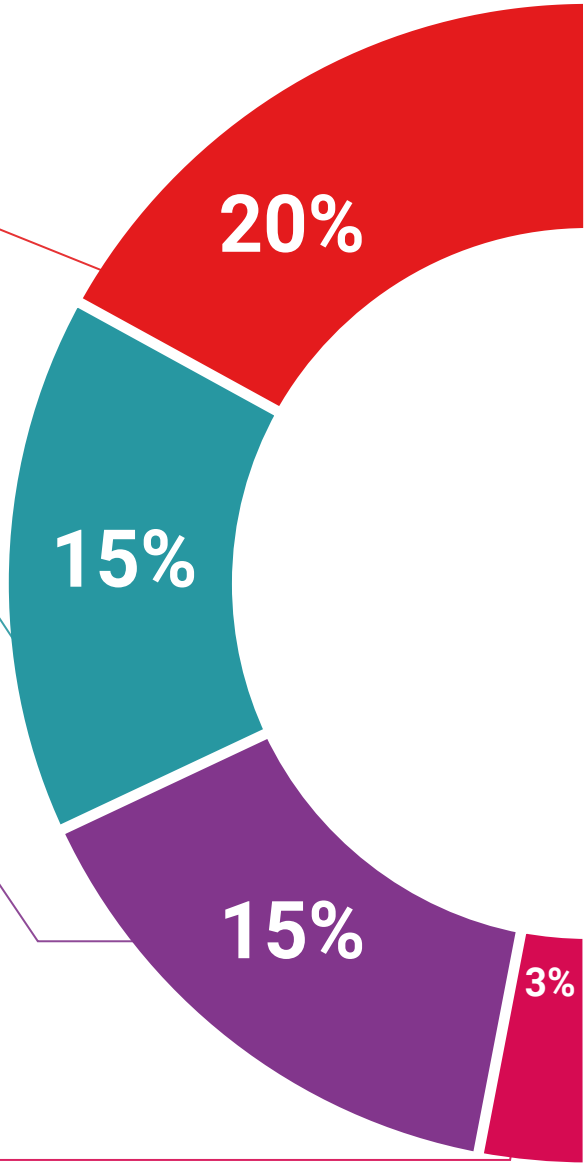
Interactive Summaries

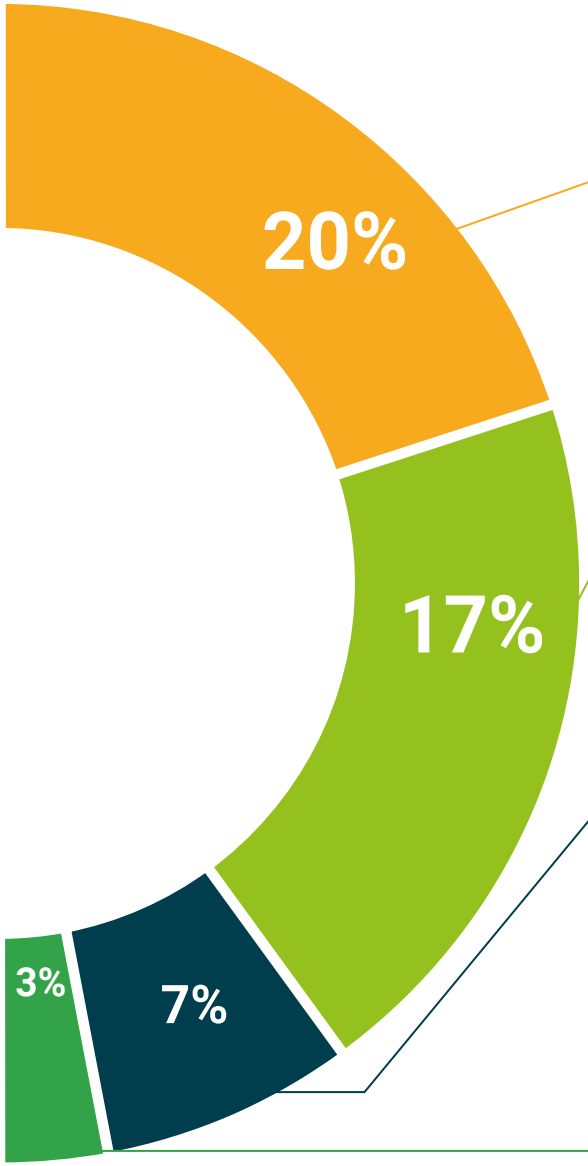
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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 Control of Electrolyte Balance in Intensive Care Nursing guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.

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 Electrolyte Balance in Intensive Care Nursing** 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.

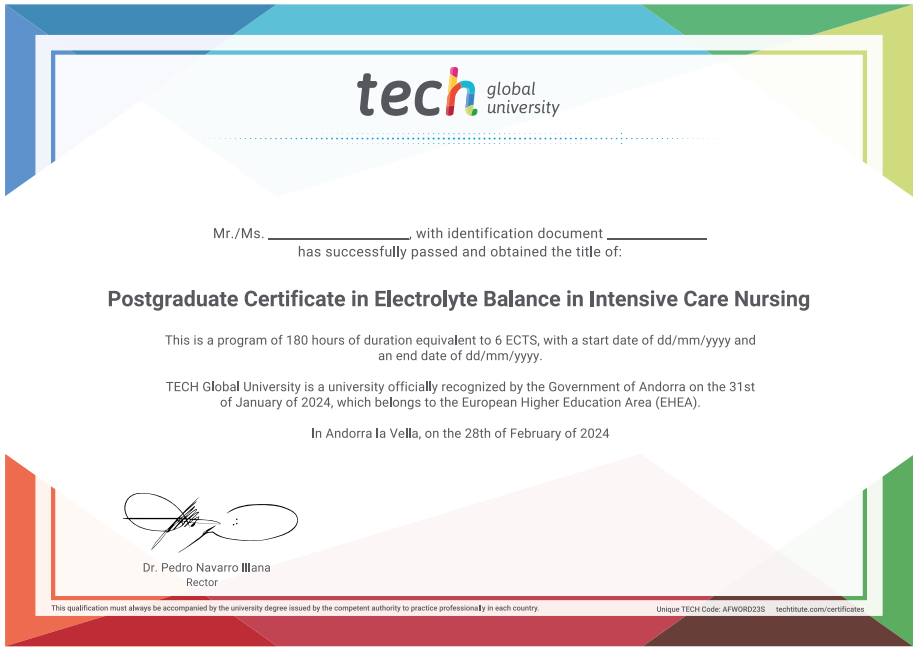
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Electrolyte Balance in Intensive Care Nursing**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**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Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Certificate in Electrolyte Balance in Intensive Care Nursing

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.

Unique TECH Code: AFWORD23S techtitute.com/certificates

*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

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Postgraduate Certificate

Control of Electrolyte Balance in Intensive Care Nursing

- Modality: **online**
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- Exams: **online**

Postgraduate Certificate

Control of Electrolyte Balance in Intensive Care Nursing

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