

Postgraduate Certificate

Update in Advanced Life Support for Nursing





Postgraduate Certificate Update in Advanced Life Support for Nursing

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Global University
- » Accreditation: 12 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/nursing/postgraduate-certificate/update-advanced-life-support-nursing

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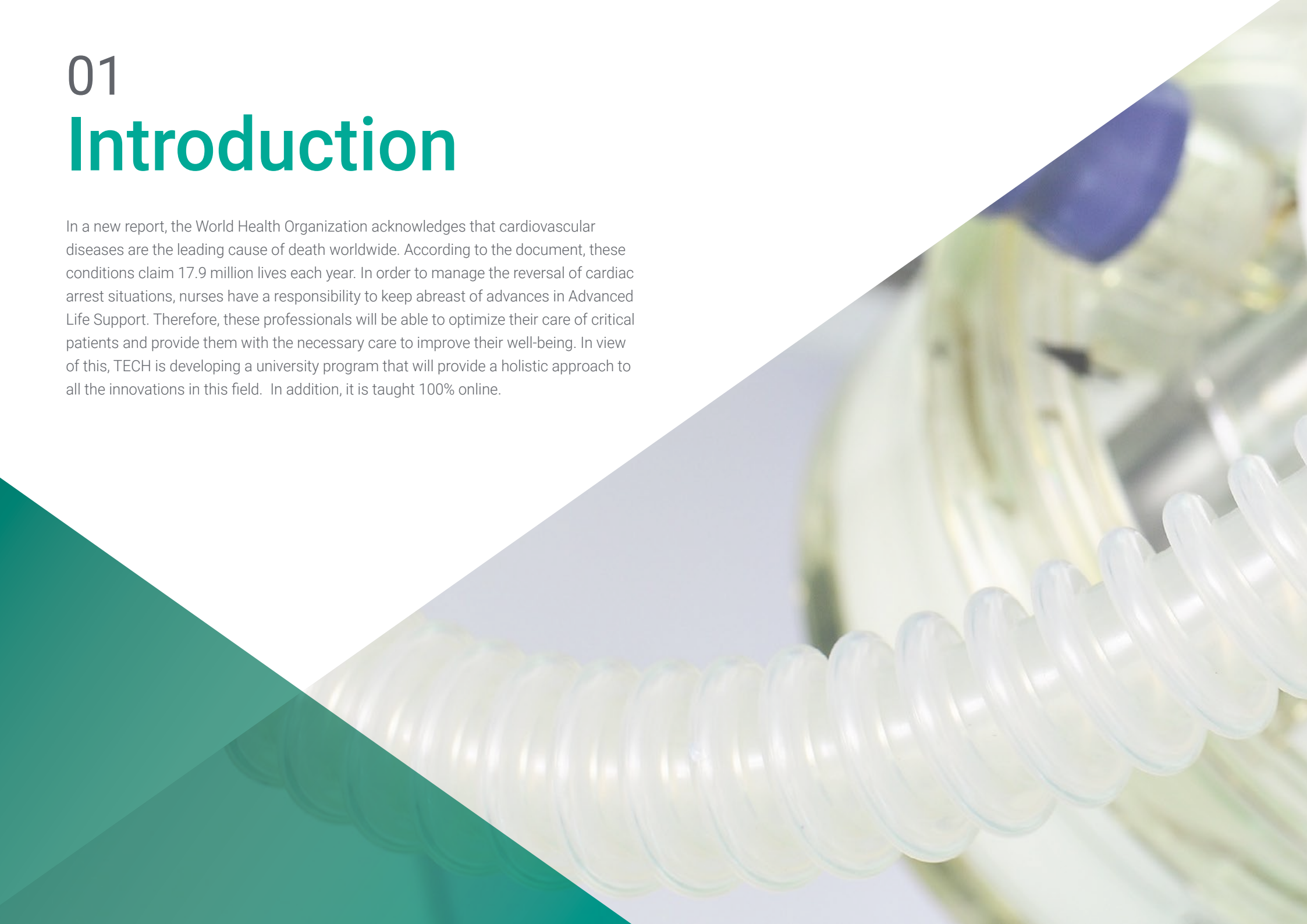
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01

Introduction

In a new report, the World Health Organization acknowledges that cardiovascular diseases are the leading cause of death worldwide. According to the document, these conditions claim 17.9 million lives each year. In order to manage the reversal of cardiac arrest situations, nurses have a responsibility to keep abreast of advances in Advanced Life Support. Therefore, these professionals will be able to optimize their care of critical patients and provide them with the necessary care to improve their well-being. In view of this, TECH is developing a university program that will provide a holistic approach to all the innovations in this field. In addition, it is taught 100% online.



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Thanks to this Postgraduate Certificate, based on Relearning, you will acquire advanced skills to optimize your care for patients going through life-threatening emergencies”

Industry 4.0. has led to a positive impact for the Critical Care Unit, where nurses provide comprehensive clinical care to ensure the improvement of the health status of users. In turn, this has led to constant updates in the established protocols, causing professionals to have to implement them in their day-to-day work very quickly. This can have negative consequences, as these changes require regular specialization of nursing staff to keep abreast of the latest recommendations and practices.

For this reason, TECH implements a revolutionary Postgraduate Certificate in Update in Advanced Life Support for Nursing. Designed by experts in this area, the academic itinerary will delve into the initial assessment of the scenes, so that professionals can take the necessary safety measures to safeguard the health of users. Likewise, the syllabus will provide keys for the management of difficult venous access, as well as for the proper administration of drugs or fluids. In relation to this, the didactic materials will provide innovative techniques for graduates to provide first-rate clinical care to postoperative cardiovascular patients and perform adequate monitoring to assess how they respond to therapeutic treatments.

To consolidate all this content, TECH uses the avant-garde method of Relearning, which consists of the progressive reiteration of key concepts for their correct assimilation. In addition, the university program provides graduates with a variety of real case studies, allowing professionals to exercise in simulated environments to bring them closer to the reality of emergency care. In this sense, to access the educational resources nurses will only require an electronic device capable of connecting to the Internet.

This **Postgraduate Certificate in Update in Advanced Life Support for Nursing** 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 Advanced Life Support and Monitoring in the Critical Patient for Nursing
- ♦ The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable for professional practice
- ♦ Practical exercises where the self-assessment process can be carried out 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



A university program that will give you flexibility thanks to its 100% online format. TECH adapts to the schedules of busy professionals!"

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You will delve into Pharmacodynamics to understand how drugs interact with the body to produce their therapeutic effects”

The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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 immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

You will learn the most innovative techniques for establishing and maintaining an adequate airway in patients whose clinical situation makes this fundamental process difficult.

Specialized readings will allow you to further extend the scrupulous information provided in this academic option.



02 Objectives

Upon completion of this program, nurses will acquire advanced skills in the management of critical situations and will be able to respond in a timely manner to serious events such as cardiorespiratory arrest. Therefore, professionals will provide safer care, helping both to prevent complications and to improve the clinical conditions of users. Likewise, graduates will keep abreast of the latest advances in this field of specialization. This will allow them to preserve their skills and adapt with immediacy to changes in the health status of patients.



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You will meet your most ambitious professional goals thanks to the distinctive approach of this program, which will provide you with the latest trends in the management of polytraumatized patients”



General Objectives

- ◆ Establish the key lines of the update in Advanced Life Support for Nursing
- ◆ Analyze the most complex critical situations and their forms of action
- ◆ Specify the differences of Advanced Life Support in the adult patient with respect to the pediatric patient
- ◆ Evaluate the different specialization courses that exist in Advanced Life Support
- ◆ Develop common diagnoses that require assistance with Advanced Life Support for Nursing
- ◆ Analyze special circumstances requiring Advanced Life Support for Nursing care
- ◆ Propose ways to identify the causes that originate the need for Advanced Life Support for Nursing
- ◆ Build confidence in nursing professionals to act in emergency circumstances



You will develop multiple skills to optimize your care of pregnant women and prevent critical complications”





Specific Objectives

- ◆ Establish the most recent protocols for hypoxemia, hypovolemia, cases of ionic alteration and thrombotic episodes
- ◆ Identify the differences in the protocols of action for pregnant women for Nursing
- ◆ Examine the differences in the protocols for Nursing in polytraumatized patients
- ◆ Develop protocols for action in particularly different situations such as cardiac surgery patients or traumatic accidents
- ◆ Establish the most recent protocols for hypoxemia, hypovolemia, cases of ionic alteration and thrombotic episodes
- ◆ Identify the differences in the protocols of action for pregnant women for Nursing
- ◆ Examine the differences in the protocols for Nursing in polytraumatized patients
- ◆ Develop protocols for action in particularly different situations such as cardiac surgery patients or traumatic accidents

03

Course Management

TECH's priority is to provide its students with high-level educational experiences, which is why it carries out an exhaustive process to select its teaching staff. For this Postgraduate Certificate, TECH has enlisted the services of professionals specialized in Advanced Life Support and Critical Patient Monitoring.

These experts have years of work experience behind them, where they have been part of renowned hospitals and have contributed to improving the quality of life of their patients. Therefore, they pour into the didactic materials all their knowledge to contribute to raise the professional horizons of the graduates.



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You will have the support of the best teaching staff and the most avant-garde didactic materials, so that you will enjoy a pleasant learning process”

Management



Dr. Ramirez Torres, Carmen Amaia

- Nurse of the Intensive Care Unit at the San Pedro University Hospital
- Nurse of the Intensive Care Unit at the Hospital Viamed Los Manzanos
- Radiodiagnostic Nurse at Alliance Medical
- Nurse at the Residence for Elderly People of La Rioja
- Nurse in Gynecology and Obstetrics Operating Room at La Paz University Hospital
- Doctor in Nursing Sciences by the University Jaime I of Castellón
- Master's Degree in Management and Direction of Nursing Units from the University of La Rioja
- Master's Degree in Surgical Nursing, Medical Practice Group
- Graduate in Nursing from the Autonomous University of Madrid

Professors

Ms. Giménez Luzuriaga, Marta

- ◆ Emergency Nurse at SES 061 La Rioja
- ◆ Nurse Assistant in Helicopter Emergency Medical Service (HEMS)
- ◆ Hospital Nurse in the Aragonese Health Service
- ◆ CPR-DESA Instructor
- ◆ University Diploma in Traffic Accidents: Emergencies, Resuscitation and Medical Transport by the University of Zaragoza
- ◆ University diploma in Emergency Health Care from the Public University of Navarra
- ◆ Diploma in Nursing from the University of Zaragoza

Ms. Oserín Pérez, María Teresa

- ◆ Nurse of the 061 Service for Urgencies and Health Emergencies of the Community of La Rioja
- ◆ Nurse at Policlínico Riojano Nuestra Señora de Valvanera
- ◆ Nurse at the Hospital of La Rioja
- ◆ University Diploma in Nursing from the University of La Rioja
- ◆ Member of: Professional College of Nursing, Spanish Society of Emergency Medicine (SEMES)

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A unique, crucial and decisive learning experience to boost your professional development"

04

Structure and Content

Through this Postgraduate Certificate, nursing professionals will equip their daily practice with the skills and knowledge required to provide high quality emergency care. To achieve this, the syllabus will address in detail issues such as the management of difficult venous access, drug administration or out-of-hospital sample analyzers. In line with this, the syllabus will focus on the clinical approach to pregnant women, since they are considered a high-risk group. In this way, the didactic materials will provide graduates with advanced techniques to respond quickly and safely to critical situations.



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You will have access to an academic itinerary designed by a distinguished teaching team, which will guarantee you a fruitful learning process”

Module 1. Update in Advanced Life Support for Nursing

- 1.1. Advanced Life Support Infrastructure for Nursing
 - 1.1.1. Human Resources in Out-of-Hospital
 - 1.1.2. Out-of-Hospital Material Resources
 - 1.1.3. In-Hospital Human Resources
 - 1.1.4. In-Hospital Material Resources
- 1.2. Initial Assessment of the Context for Nursing
 - 1.2.1. Scene Assessment
 - 1.2.2. Safety Assessment
 - 1.2.3. Situation Assessment
- 1.3. Difficult Airway Management for Nursing
 - 1.3.1. Initial Assessment and Indications
 - 1.3.2. Equipment and Management
 - 1.3.3. Monitoring and Follow-Up
- 1.4. Management of Difficult Venous Access for Nursing
 - 1.4.1. Initial Assessment and Indications
 - 1.4.2. Equipment and Management
 - 1.4.3. Monitoring and Follow-Up
- 1.5. Administration of Drugs and Fluids in Advanced Life Support for Nursing
 - 1.5.1. Pharmacodynamics
 - 1.5.2. Pharmacokinetics
 - 1.5.3. Administration Management and Patient Safety
- 1.6. Management of Advanced Life Support in the Adult Patient for Nursing
 - 1.6.1. Indications and Epidemiology
 - 1.6.2. Management of Tachycardias
 - 1.6.3. Management of Bradycardias
- 1.7. Management of Advanced Life Support in the Pediatric Patient for Nursing
 - 1.7.1. Indications and Epidemiology
 - 1.7.2. Management of Advanced Life Support in Neonates
 - 1.7.3. Management of Advanced Life Support in Pediatric Patients



- 1.8. Out-of-hospital specimen Analyzers for Nursing
 - 1.8.1. Types of Out-of-Hospital Analyzers
 - 1.8.2. Indications
 - 1.8.3. Nursing Management
- 1.9. Advanced Life Support Training for Nursing
 - 1.9.1. American Heart Association (AHA)
 - 1.9.2. European Resuscitation Council (ERC)
 - 1.9.3. Differences and Similarities
- 1.10. Community Education in Advanced Life Support by Nursing
 - 1.10.1. Applications and Smart Phones
 - 1.10.2. Special Cardiac Arrest Days
 - 1.10.3. First Aid in the Community

Module 2. Advanced Life Support in the Adult Patient and Pregnant Woman for Nursing

- 2.1. Hypoxemia Management for Nursing
 - 2.1.1. Asthma and COPD
 - 2.1.2. Foreign Body Airway Obstruction (FBAO)
 - 2.1.3. Tension Pneumothorax
- 2.2. Hypovolemia Management for Nursing
 - 2.2.1. Traumatic Cardiac Arrest
 - 2.2.2. Cardiac Arrest due to Anaphylaxis
 - 2.2.3. Cardiac Arrest due to Sepsis
- 2.3. Nursing Management of Ionic Disturbance
 - 2.3.1. Cardiac Arrest due to Hyperkalemia
 - 2.3.2. Cardiac Arrest due to Hypokalemia
 - 2.3.3. Cardiac Arrest due to Hypoglycemia
- 2.4. Temperature Management for Nursing
 - 2.4.1. Temperature Management
 - 2.4.2. Cardiac Arrest due to Hypothermia
 - 2.4.3. Cardiac Arrest due to Hyperthermia
- 2.5. Nursing Management of Thrombotic Episodes
 - 2.5.1. Cardiac Arrest due to Pulmonary Thromboembolism
 - 2.5.2. Cardiac Arrest due to Coronary Thrombosis
 - 2.5.3. Cardiac Arrest due to Cardiac Tamponade
- 2.6. Management of Postoperative Cardiovascular Patients (Cardiac Surgical Unit-Advanced Life Support (CALs) for Nursing)
 - 2.6.1. Indications
 - 2.6.2. Recommendations and Differences
 - 2.6.3. Emergency Resternotomy
- 2.7. Nursing Management of the Pregnant Woman
 - 2.7.1. Epidemiological and Pathophysiological Analysis
 - 2.7.2. Special Considerations in CPR
 - 2.7.3. Ethical and Legal Aspects
- 2.8. Management of the Polytraumatized Patient for Nursing
 - 2.8.1. Evolution
 - 2.8.2. Initial Assessment: ABCDE and CPR
 - 2.8.3. Secondary Assessment: Cranioencephalic, Thoracic, Abdominal, Pelvis, Vertebral, Limb Fracture Trauma
- 2.9. Accident Management for Nursing
 - 2.9.1. Dysbaric Accident
 - 2.9.2. Drowning
 - 2.9.3. Crush Syndrome
 - 2.9.4. Impalement
- 2.10. Management in Different Locations for Nursing
 - 2.10.1. Medical Transport
 - 2.10.2. Sports
 - 2.10.3. Multiple Casualty Incidents

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. Gervas, 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 adapted in 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

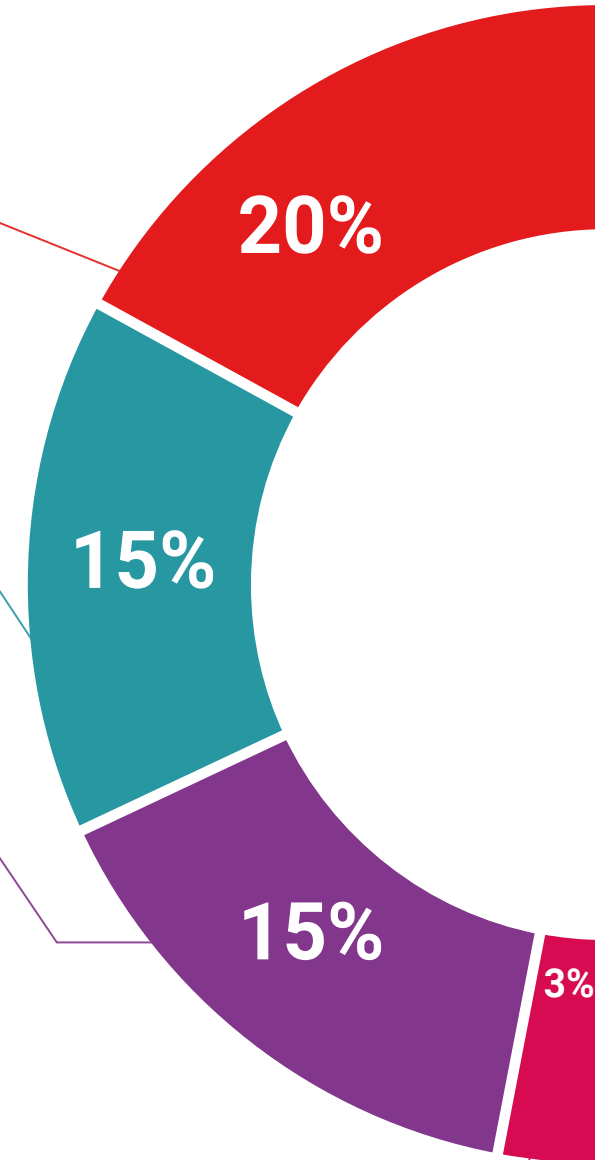
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

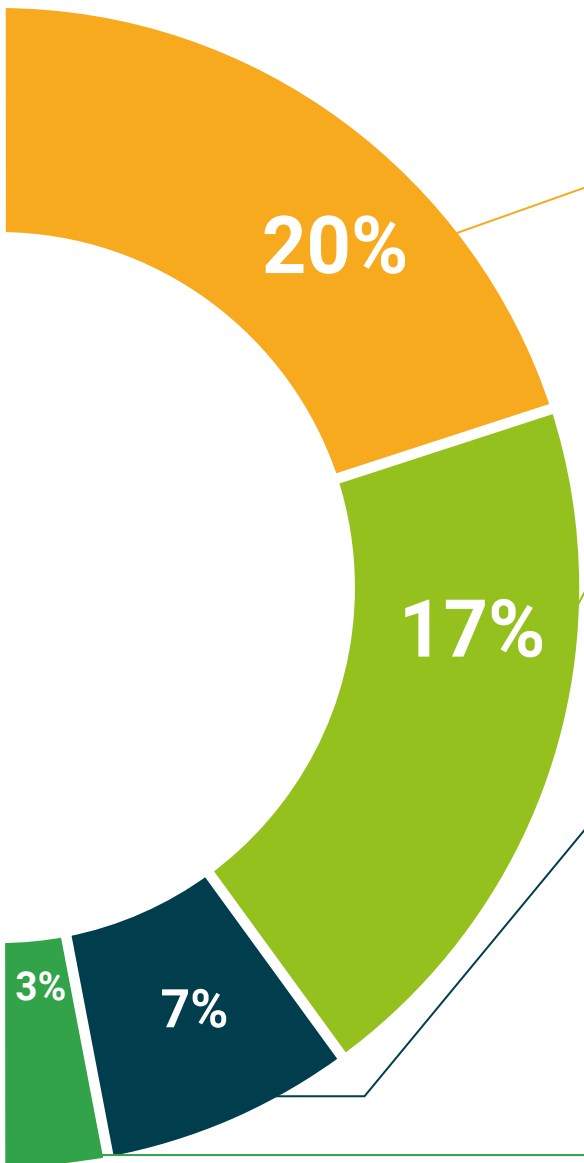
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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

The student's knowledge is periodically assessed and re-assessed throughout the program, through evaluative and self-evaluative activities and exercises: in this way, students can check how they are doing in terms of 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 in Advanced Life Support for Nursing guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”

This private qualification will allow you to obtain a **Postgraduate Certificate in Update in Advanced Life Support for 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** private qualification 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 Update in Advanced Life Support for Nursing**

Modality: **online**

Duration: **12 weeks**

Accreditation: **12 ECTS**





Postgraduate Certificate Update in Advanced Life Support for Nursing

- » Modality: online
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Postgraduate Certificate

Update in Advanced Life Support for Nursing