

# Postgraduate Certificate

## Intensive Care in Patients with Cardiocirculatory Disorders

Endorsed by:





## Postgraduate Certificate Intensive Care in Patients with Cardiocirculatory Disorders

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techitute.com/pk/nursing/postgraduate-certificate/intensive-care-patients-cardiocirculatory-disorders](http://www.techitute.com/pk/nursing/postgraduate-certificate/intensive-care-patients-cardiocirculatory-disorders)

# Index

01

Introduction

---

p. 4

02

Objectives

---

p. 8

03

Course Management

---

p. 12

04

Structure and Content

---

p. 16

05

Methodology

---

p. 20

06

Certificate

---

p. 28

# 01

# Introduction

The service of clinical care to patients with acute or critical cardiovascular disease is a constant challenge in Intensive Care Units. For this reason, Nursing professionals in that area must be aware of the advances in the management and care of the various existing cardiocirculatory pathologies and the protocols for action. To promote this process of getting up-to-date, TECH has designed this 100% online academic proposal that will lead students to delve into the approach to ischemic heart disease, cardiogenic shock, aneurysm or techniques for performing ECG and monitoring. A 6-week process with the most advanced syllabus, developed by an excellent team of health professionals with extensive experience in this field.



“

*Achieve a complete refresher in Intensive  
Care in Patients with Cardiocirculatory  
Disorders in only 6 weeks”*

There are currently numerous scientific studies on the various cardiac pathologies and their management in critically ill patients. In this way, from acute coronary syndrome, acute heart failure, acute cardiac arrhythmias, aortic dissection, pulmonary thromboembolism to cardiac trauma are addressed due to their incidence and severity.

In this scenario it is necessary that Nursing professionals are aware of all the advances in care and assistance in Intensive Care Units, as well as the most accurate and appropriate procedures, depending on the various pathologies. In this way, this Postgraduate Certificate in Intensive Care in Patients with Cardiocirculatory Disorders of only 6 weeks long is born.

It is an advanced program that allows students to obtain in a short time a complete update of their knowledge on procedures for the detection of Fibrinolysis, Pericarditis, the care of people with Valvulopathies, among other conditions. In addition, you will delve into electrical Therapies, ECG and monitoring or hypertensive emergencies.

All this, in addition, through multimedia pills, specialized readings and simulations of clinical case studies, accessible 24 hours a day, from any digital device with internet connection. Likewise, thanks to the Relearning method, based on the continuous reiteration of the content throughout the academic itinerary, the graduate will be able to easily consolidate the concepts covered.

This is an ideal academic option for those who wish to complete a complete update through a quality university proposal that is perfectly compatible with their daily responsibilities. And with no in-person attendance, no classes with fixed schedules, the graduate has greater freedom to self-manage their time to access this cutting-edge program.

This **Postgraduate Certificate in Intensive Care in Patients with Cardiocirculatory Disorders** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ The development of practical cases presented by experts in Nursing in Intensive Care Units
- ♦ 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



*Get up to date with a university that adapts its programs to the real needs of healthcare professionals"*

“

*The multimedia pills in this program give you a much more dynamic view of anatomy and the cardiocirculatory system”*

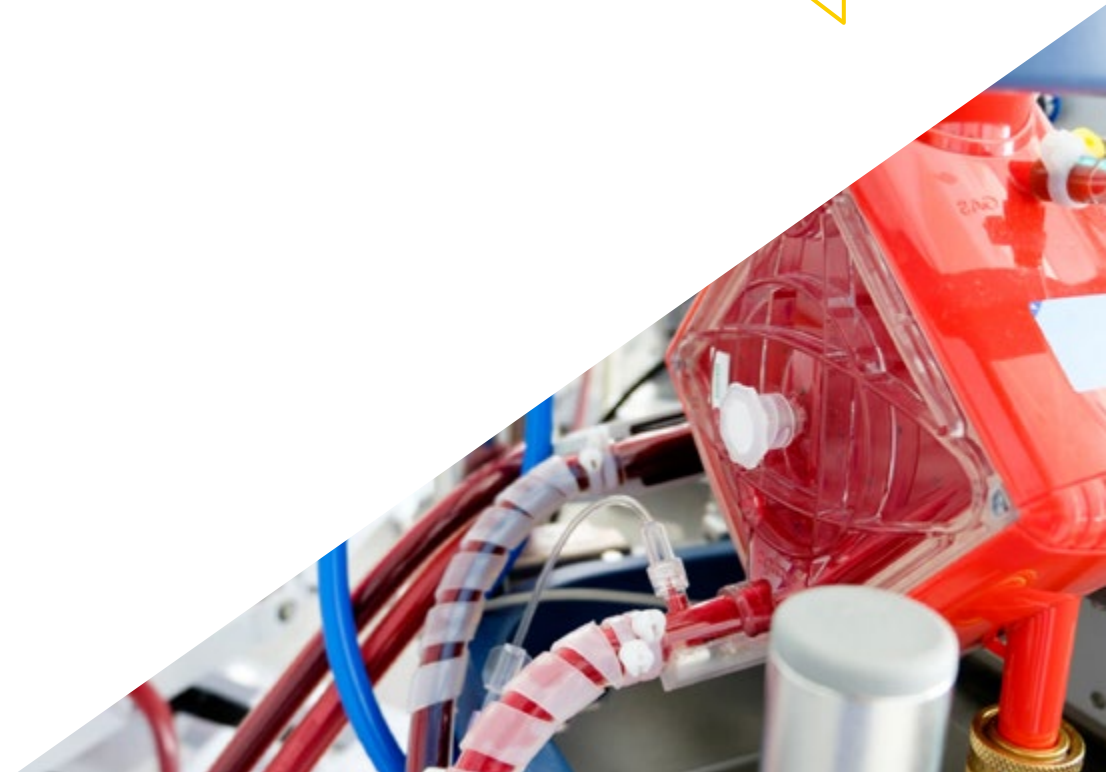
The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. This will be done with the help of an innovative system of interactive videos made by renowned experts.

*Learn more about hypertensive emergencies with the best didactic material.*

*The flexibility of this university program will allow you to study it without neglecting your daily professional responsibilities.*



# 02 Objectives

Upon completion of this Postgraduate Certificate, students will have obtained an effective refresher on Intensive Care in Patients with Cardiocirculatory Disorders. In this way, the graduate will achieve in a short time to enhance their skills to carry out integrated procedures in the care of patients with critical pathologies. For this purpose, TECH has innovative pedagogical tools in which the latest technology applied to the university academic environment has been used.



“

*In only 6 weeks you will be up to date in  
the most notorious advances in ICU care  
in patients with acute pulmonary edema”*



## General Objectives

---

- ♦ Update the necessary knowledge in the nursing care of critical patients, in order to increase the quality and safety of nursing practice in the Intensive Care Unit
- ♦ Acquire the necessary skills to provide comprehensive care to the critical patient with criteria of speed, efficiency and quality
- ♦ Review the fundamental principles of critical care nursing





## Specific Objectives

---

- ♦ In-depth knowledge of the anatomy and physiology of the cardiocirculatory system
- ♦ Identify the most frequent cardiocirculatory pathologies in the ICU
- ♦ Recognize different conditions and learn how to manage them in depth



*Delve into the care of patients with ischemic heart disease from the comfort of your Tablet"*

03

# Course Management

In order to provide a quality and first class refresher, TECH has carried out a rigorous selection process of each and every one of the teachers that make up this program. In this way, students will have access to a syllabus developed by nursing professionals with experience in ICU and Interventional Cardiology Unit. In addition, thanks to its proximity, the graduate will be able to resolve any doubts they might have about the content throughout this academic process.





“

*Get an effective refresher on Intensive Care  
with nurses with accumulated professional  
experience in such units”*

## Guest Director



### Ms. Díez Sáenz, Cristina

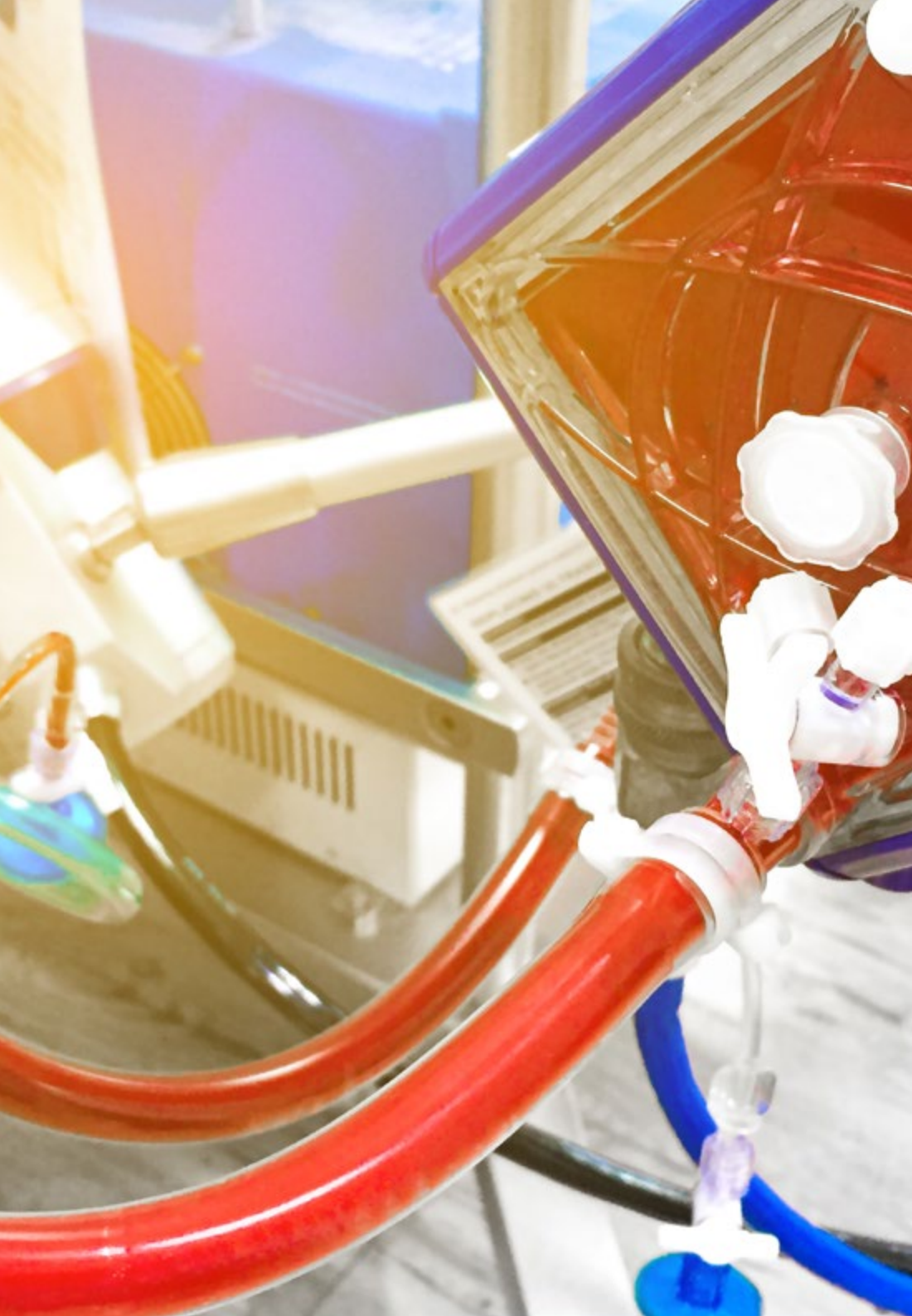
- Head Nurse of the Adult Intensive Care Unit at Gregorio Marañón General University Hospital
- Nursing supervisor at Gregorio Marañón ICU
- Nurse Assistant in different hospitalization areas in different health centers and hospitals
- Participation as collaborating researcher in the multicenter project "National validation of the scale of satisfaction with nursing care from the perspective of the critically ill patient"

## Co-Direction



### Ms. Lospitao Gómez, Sara

- Intensive Care and Interventional Cardiology at University Hospital of Fuenlabrada (UHF)
- Nurse in the Post Surgical Intensive Care Unit Cardiac Surgery UPC 12 de Octubre Hospital
- Coronary Intensive Care Unit Nurse. 12 de Octubre Hospital
- Nurse of the Interventional Cardiology Unit (Hemodynamics, EEF and Implants)
- PR Manager of #TEAyudamos and Member of the group #JuntosxEICáncer
- Instructor for SVA by the National CPR Plan of SEMICYUC
- Member of: Care Sub-Commission (HUF), Care Commission (HUF), Secretary of the Ulcers and Wounds Working Group (HUF)



## Professors

### **Ms. Álvarez Carrascal, Inmaculada**

- ◆ Nurse referent of Security in ICU of the Gregorio Marañón General Univeristy Hospital
- ◆ Instrumentalist nurse in the operating room of Churchill Hospital
- ◆ Nurse assistant in various hospital and health center services in the Andalusian Health Service
- ◆ Diploma in Nursing from the University of Seville
- ◆ Expert in and Intensive Care from the Complutense University of Madrid

### **Ms. González Palacios, Rubén**

- ◆ Nurse assistant in the Intensive Care Unit of Gregorio Marañón Univeristy Hospital
- ◆ Attending Nurse in the Internal Medicine Unit of the 12 de Octubre General University Hospital
- ◆ Nurse assistant in different Primary Care centers in the Community of Madrid
- ◆ Developer of the mobile application "Compatibility drugs" for intravenous compatibility of drugs

### **Dr. Ruiz Henestrosa Campos, , Manuel Jesús**

- ◆ Head of the Emergency Unit in GUH Gregorio Marañón
- ◆ Nurse Assistant in GUH Gregorio Marañón Hospital
- ◆ Nurse Assistant in GUH Puerta del Mar de Cadiz
- ◆ Associate Professor Practicum III of Nursing
- ◆ Collaborating teacher at the International School of Health Sciences
- ◆ Nebrija University Collaborating Professor
- ◆ Esforem Collaborating Teacher
- ◆ Diploma in Nursing

04

# Structure and Content

The faculty of this university program has developed a program that responds to the real needs of ICU Nursing professionals. The syllabus is especially oriented to the assistance and care of patients with Cardiocirculatory Disorders. For this reason, students will find an exhaustive content on the main cardiac pathologies and their approach through an eminently theoretical-practical approach. Likewise, the scientific literature of this academic option will allow you to further extend the information provided in this university proposal.



“

*A study plan that provides you with a theoretical-practical approach on the approach to various Cardiocirculatory Disorders in ICU patients”*

## Module 1. Critical Care in Patients with Cardiocirculatory Disorders

- 1.1. Anatomy of the Cardiocirculatory System
- 1.2. Cardiocirculatory System Physiology
- 1.3. Heart Failure and Acute Pulmonary Edema
- 1.4. Ischemic Heart Disease
- 1.5. Cardiac Arrhythmias
- 1.6. Cardiogenic Shock
- 1.7. Valvulopathies
- 1.8. Pericarditis
- 1.9. Aneurysm and Aortic Dissection
- 1.10. Hypertensive Emergencies
- 1.11. ECG and Monitoring
- 1.12. Electrical Therapies: Cardioversion and Defibrillation
- 1.13. Fibrinolysis
- 1.14. Percutaneous Coronary Intervention
- 1.15. Aortic Counterpulsation Balloon Pump
- 1.16. Pacemaker





“

*The scientific studies of this program provide you with the latest information on cardioversion and defibrillation techniques”*

# 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

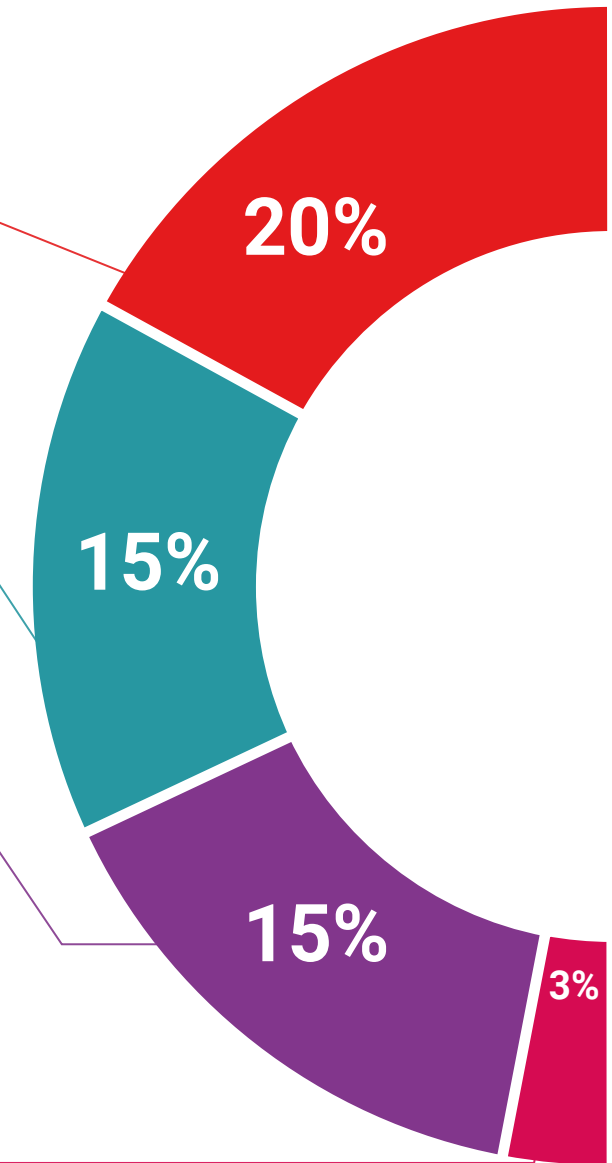
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

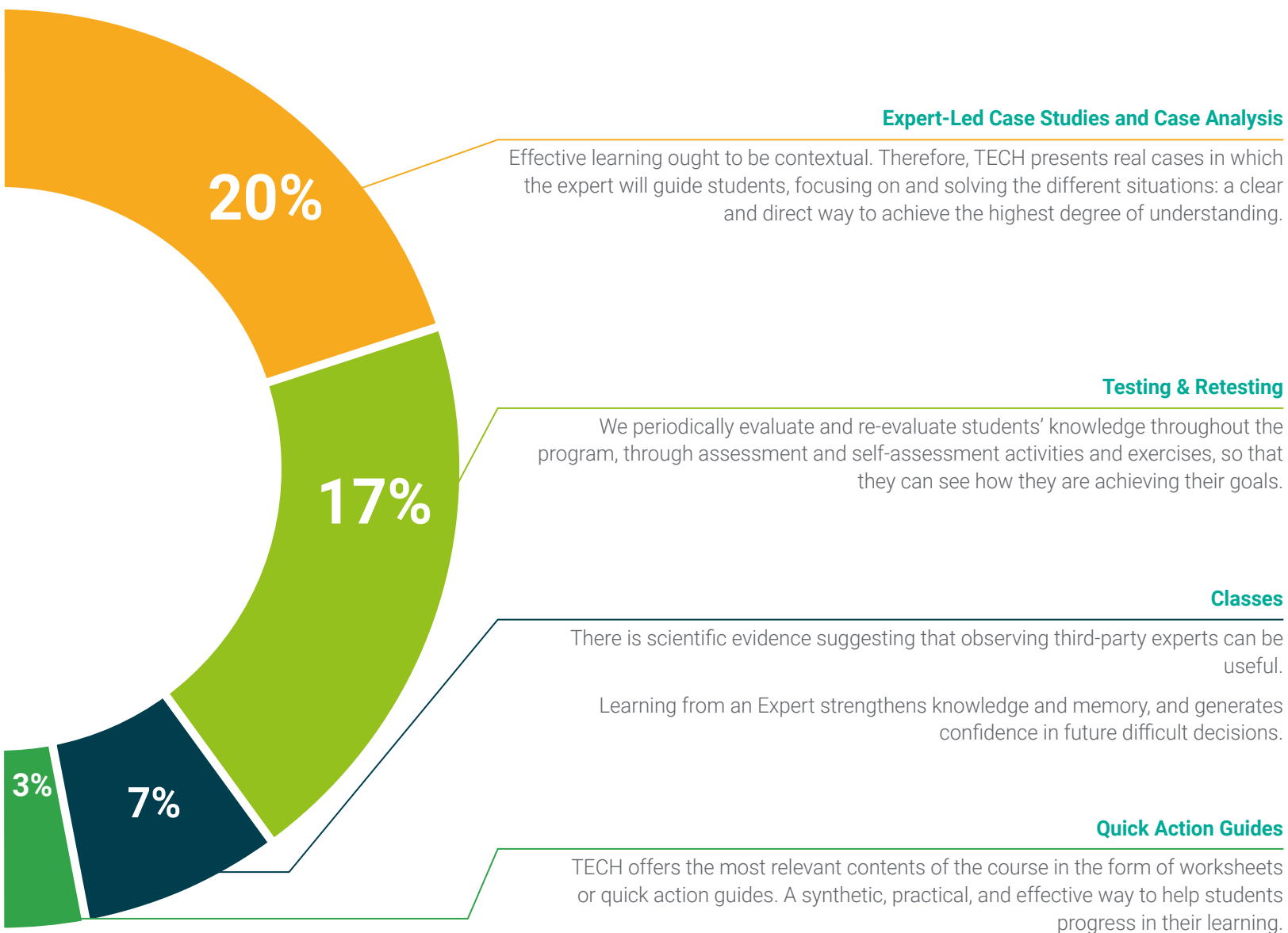
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### 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.





# 06 Certificate

The Postgraduate Certificate in Intensive Care in Patients with Cardiocirculatory Disorders guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



“

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

This **Postgraduate Certificate in Intensive Care in Patients with Cardiocirculatory Disorders** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in Intensive Care in Patients with Cardiocirculatory and Disorders**

Official N° of Hours: **250 h.**

Endorsed by: The Spanish Society of Intensive Care Nursing and Coronary Units.



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



**Postgraduate Certificate**  
Intensive Care in Patients  
with Cardiocirculatory Disorders

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

# Postgraduate Certificate

## Intensive Care in Patients with Cardiocirculatory Disorders

Endorsed by:

A photograph of a female nurse in a clinical setting, wearing a blue surgical cap, a white face mask, and white gloves. She is holding a clear plastic drip chamber connected to an IV line. In the background, an IV bag is visible on a stand. The image is partially obscured by a large green diagonal graphic element on the left and bottom.

**tech** technological  
university