

Ultrasonographic Approach to Major Syndromes for Nursing





Ultrasonographic Approach to Major Syndromes for Nursing

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

We bsite: www.techtitute.com/us/nursing/postgraduate-certificate/ultrasonographic-approach-major-syndromes-nursing

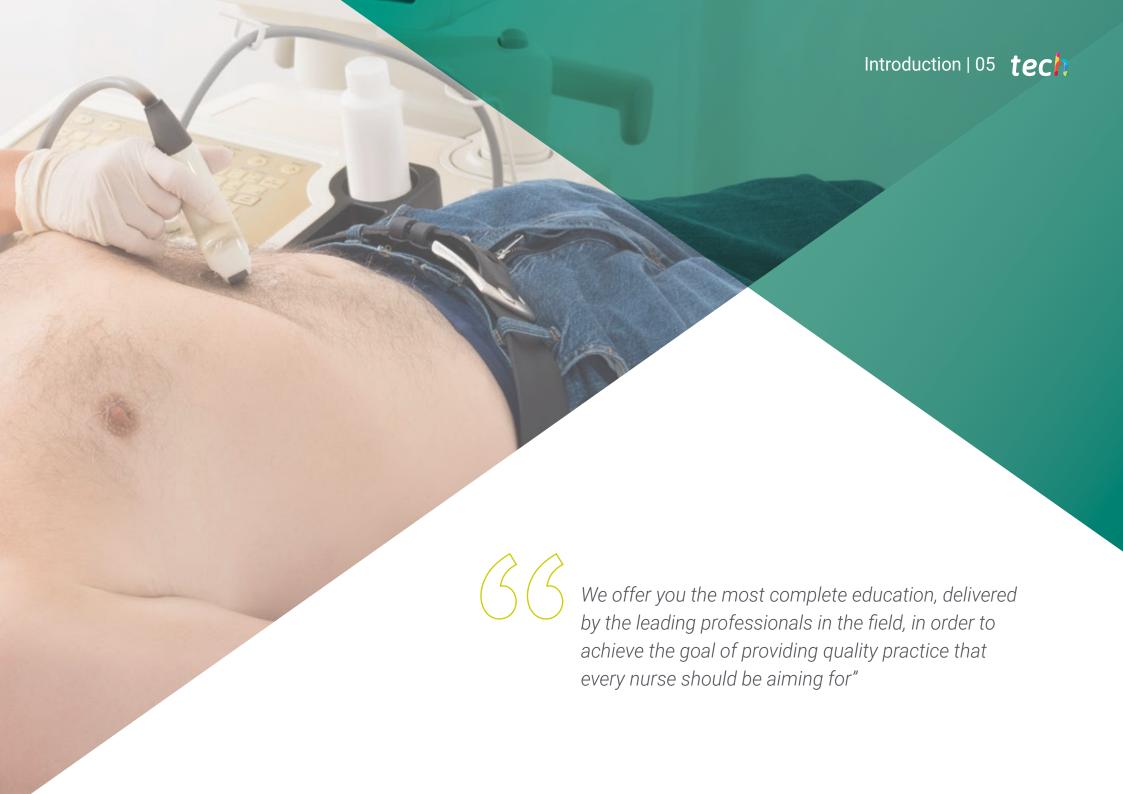
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06

Certificate





### tech 06 | Introduction

Clinical ultrasound has gone from being reserved for certain aspects of healthcare to being used in practically all healthcare areas. This is largely due to the technological advances that have led to it being used by different specialists. On this occasion, TECH offers this Postgraduate Certificate for nurses who wish to specialize in the ultrasonographic approach to major syndromes. It is a program created by the leading specialists in this field that will help you achieve job success.

It must be taken into account that clinical ultrasound is a tool that helps to diagnose and treat patients in emergency situations or with intensive care needs. Today, it is one of the most popular and valuable tools for guiding diagnostic and therapeutic interventions. In addition, it has the advantages of portability, accuracy, real-time display, reproducibility and efficiency.

Technological advances have made it possible to reduce the size of the equipment, making it cheaper and more portable, and have increased the capacity of clinical ultrasound, leading to a notable increase in its applications. Nowadays, more accurate ultrasound diagnosis, safe ultrasound-guided interventions, precise non-invasive hemodynamic evaluations and rapid assessment of traumatic injuries are all possible.

In this Postgraduate Certificate, TECH offers students the most complete specialization program on clinical ultrasound, specifying its use in the care of patients who find themselves in emergency situations or those who need intensive care. Additionally, as it is a 100% online training, the student will have the opportunity to balance their studies with the rest of their daily commitments, so that they will be able to improve their training in a comfortable way.

This Postgraduate Certificate in Ultrasonographic Approach to Major Syndromes for Nursing contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- Clinical cases presented by experts in clinical ultrasound in emergencies and intensive care
- 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
- Latest information on ultrasonographic approach to major syndromes
- Practical exercises where self-assessment can be used to improve learning
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- 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



Technological advances have led to improved ultrasound scanners, which are becoming more useful and can be used in more situations"



This Postgraduate Certificate is the best investment you can make when choosing a specialist course for two reasons: you will acquire the best and most up-to-date education in ultrasound imaging, and you will obtain a qualification from TECH Technological University"

The teaching staff includes professionals from the field of clinical ultrasound, who contribute 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.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. In order to achieve this, the professional will be assisted by an innovative interactive video system developed by recognized experts in the field of Ultrasonographic Approach to Major Syndromes for Nursing, with extensive teaching experience.

Our trainings have the best teaching methodology and the latest didactic tools, which will allow you to study from home, but without losing the possibilities offered by on-site classes.

We offer you the opportunity to study with a multitude of practical cases in such a way that you can learn new skills as if you were dealing with real patients.







## tech 10 | Objectives

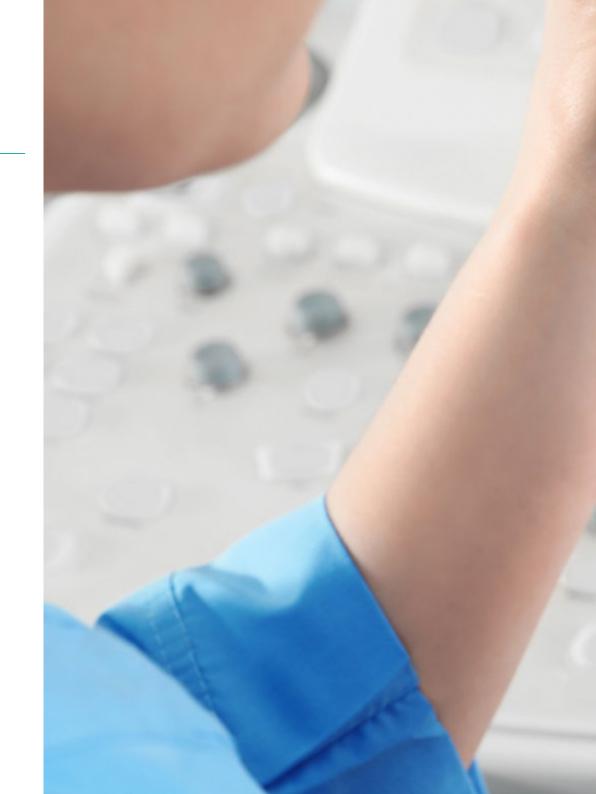


### General Objective

• Ensure that nurses become masters in the use of ultrasound in emergency situations and with critically ill patients, regardless of the situation in which they find themselves



Acquire the most up-to-date knowledge in this field of work and apply advanced protocols in this intervention in your day-to-day work"







## Specific Objectives

- Explain the use of ultrasounds in cardiac arrest
- Describe the use of ultrasound in cases of shock
- Explain the use of ultrasounds in respiratory failure
- Describe the use of ultrasound in cases of sepsis
- Explain the use of ultrasounds in abdominal pain
- Describe the use of ultrasound in trauma cases
- Explain the use of ultrasounds in strokes







### tech 14 | Course Management

#### Management



### Dr. Álvarez Fernández, Jesús Andrés

- Doctor of Medicine (PhD)
- Degree in Medicine and Surgery
- Specialist in Intensive Care Medicine.
- $\cdot$  Attending Physician of Intensive Care Medicine and Major Burns University, Getafe University Hospital (Madrid)
- Collaborating Professor of the Master's Degree in Update on Intensive Care Medicine at the CEU Cardenal Herrera University of Valencia.
- Founding Member of the Ecoclub of SOMIAMA
- Collaborating Professor of SOCANECO

#### **Professors**

#### Dr. López Cuenca, Sonia

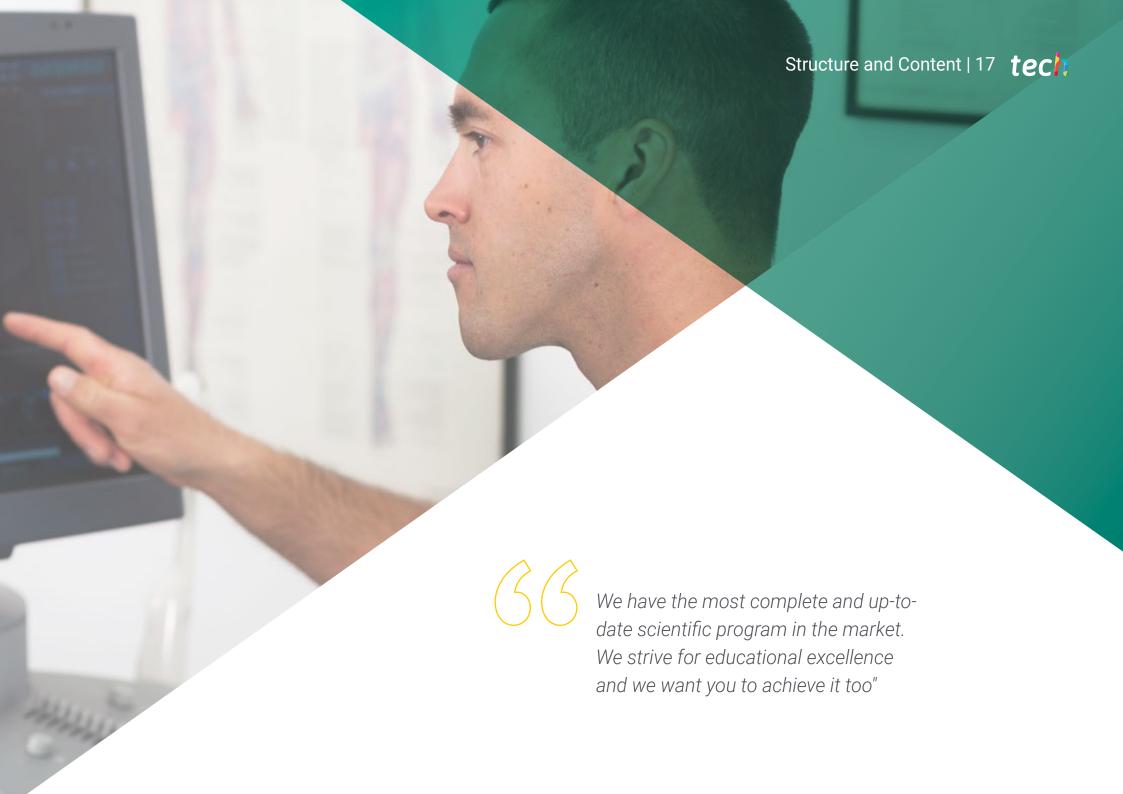
- Degree in Medicine and Surgery
- \* Specialist in Intensive Care Medicine.
- Attending Physician of Intensive Care Medicine and Major Burns Unit.
- University Hospital of Getafe, (Madrid)
- Member of the Ecoclub of SOMIAMA.

#### Dr. Igeño Cano, José Carlos

- Degree in Medicine and Surgery
- Specialist in Intensive Care Medicine.
- Head of Intensive Care and Emergency Services.
- San Juan de Dios Hospital, Cordoba
- Member of the HU-CI Project
- Creator and Director of Course of Ultrasound-guided Venous Canalization (CAVE)







### tech 18 | Structure and Content

#### **Module 1**. Ultrasonographic Approach to Major Syndromes

- 1.1. Cardiac Arrest
  - 1.1.1. Cerebral Hemodynamics
  - 1.1.2. Brain Damage in Cardiac Arrest
  - 1.1.3. Usefulness of Ultrasound in Resuscitation
  - 1.1.4. Usefulness of Ultrasound After Recovery of Spontaneous Circulation
- 1.2. Shock
  - 1.2.1. Ventricular Filling Pressure
  - 1.2.2. Heart Failure
  - 1.2.3. Prediction of the Hemodynamic Response to Intravascular Volume Administration
  - 1.2.4. Ultrasonographic Evaluation of Pulmonary Edema
  - 1.2.5. Ultrasonographic Search for Sources of Sepsis
- 1.3. Respiratory Failure
  - 1.3.1. Acute Respiratory Failure: Diagnosis
  - 1.3.2. Abrupt Hypoxemia in Patients on Mechanical Ventilation
  - 1.3.3. Monitoring of Recruitment Maneuvers
  - 1.3.4. Evaluation of Extravascular Lung Water
- 1.4. Acute Renal Failure
  - 1.4.1. Hydronephrosis
  - 1.4.2. Lithiasis
  - 1.4.3. Acute Tubular Necrosis
  - 1.4.4. Doppler Ultrasound in Acute Renal Failure
  - 1.4.5. Seminal Vesicle Ultrasound in Acute Renal Failure





### Structure and Content | 19 tech

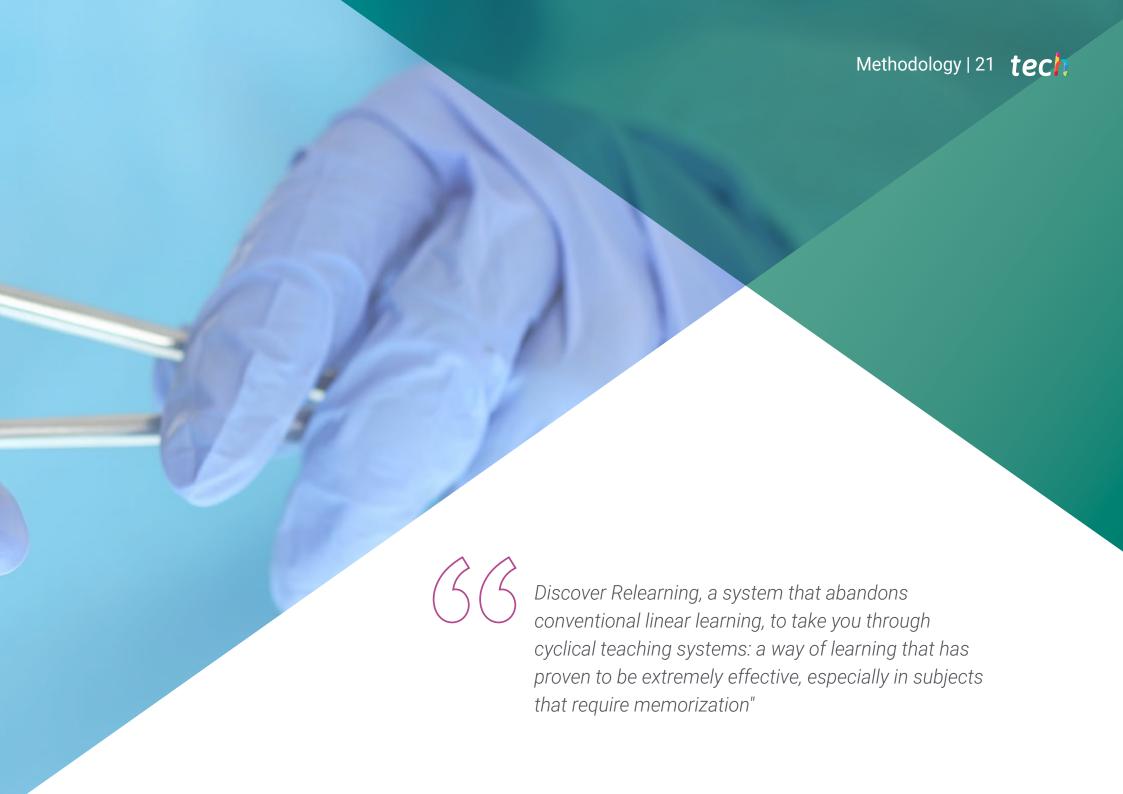
- 1.5. Trauma
  - 1.5.1. FAST and e-FAST (Hemo and Pneumothorax)
  - 1.5.2. Ultrasonographic Evaluation in Special Situations
  - 1.5.3. Hemodynamic Evaluation Focused on Trauma
- 1.6. Stroke
  - 1.6.1. Justification
  - 1.6.2. Initial Assessment
  - 1.6.3. Ultrasonographic Assessment
  - 1.6.4. Ultrasound-Guided Management





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.

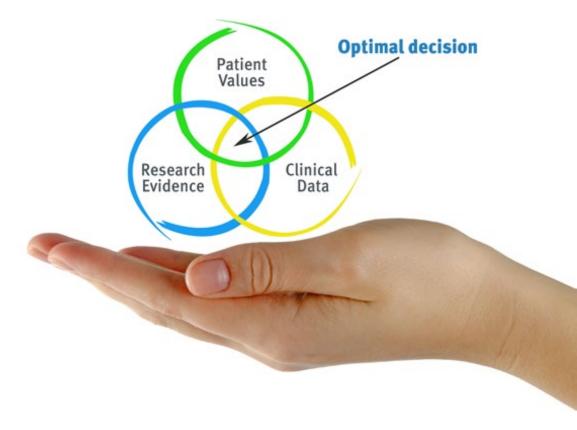


### tech 22 | Methodology

#### 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:

- 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.



### Methodology | 25 tech

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.



### **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.





20%

17%





### tech 30 | Certificate

This **Postgraduate Certificate in Ultrasonographic Approach to Major Syndromes for Nursing** 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 Ultrasonographic Approach to Major Syndromes for Nursing

Official N° of Hours: 150 h.



<sup>\*</sup>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.

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