



# Postgraduate Certificate

Other Uses of Clinical Ultrasound in Primary Care

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/other-uses-clinical-ultrasound-primary-care

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# tech 06 | Introduction

With the Postgraduate Certificate in Other Uses of Clinical Ultrasound in Primary Care, students will update their knowledge on the subject and will obtain the skills required to use ultrasound in their daily medical practice.

Clinical Ultrasound or point-of-care ultrasound is the technique of ultrasound exploration of the body that is used for the practical practice of medicine, related to the direct observation of the patient.

The use of clinical ultrasound in primary care facilitates the work of healthcare professionals, allowing them to develop a thorough diagnosis of the pathology presented by the patient for subsequent treatment. There are numerous uses for clinical ultrasound in primary care, such as the monitoring or detection of abnormalities such as diabetes, breast tumors, dermatological problems and even brain problems.

With this Postgraduate Certificate, students have the opportunity to take a teaching program that brings together the most advanced and in-depth knowledge of the use of clinical ultrasound in Primary Care, where a group of teachers of high scientific standing and extensive international experience offers you the most complete and up-to-date information on the use of ultrasound as a complement to physical examinations.

It endorses the latest advances in ultrasound with a robust and educational teaching program, which positions it as a product of the highest scientific rigor aimed at health professionals at the international level. In addition, the program is based on a multidisciplinary approach to its subjects, which allows for training and professional development in different areas.

This Postgraduate Certificate in Other Uses of Clinical Ultrasound in Primary Care contains the most complete and up-to-date scientific program on the market. The most important features include:

- Numerous clinical cases presented by ultrasound experts
- The graphic, schematic, and practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional
- · New diagnostic-therapeutic developments on evaluation, diagnosis, and intervention in problems or disorders that can be addressed with ultrasound
- It contains practical exercises where the self-evaluation process can be carried out to improve learning
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- Special emphasis on evidence-based medicine and research methodologies in ultrasound processes
- Content that is accessible from any fixed or portable device with an Internet connection
- All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments



Update your knowledge on the different utilities and uses of ultrasound in primary care, with the help of distinguished experts in the field"



You will have distinguished tutored in the field, who will guide you throughout the learning process"

The teaching staff is made up of prestigious and renowned professionals who have extensive experience in healthcare, teaching, and research in various countries, contributing their professional expertise to this Postgraduate Certificate.

The methodological design, developed by a multidisciplinary team of e-learning experts, integrates the latest advances in educational technology in order to create numerous multimedia tools that allow professionals to solve real-life situations in their daily practice. These will enable you to advance by both acquiring knowledge and developing new skills in your future professional work.

The contents generated for this Postgraduate Certificate, as well as the videos, self-exams, clinical cases, and modular exams, have been thoroughly reviewed, updated, and integrated by the professors and the team of experts that make up the course working group, in order to gradually and educationally facilitate a learning process that allows for the objectives of the teaching program to be achieved.

Thanks to the e-learning methodology, on which this Postgraduate Certificate is based, you will assimilate the contents more quickly and for a longer period of time.

As it is 100% online, you will be able to update your knowledge on the advances in ultrasound diagnostics in a practical way adapted to your needs.





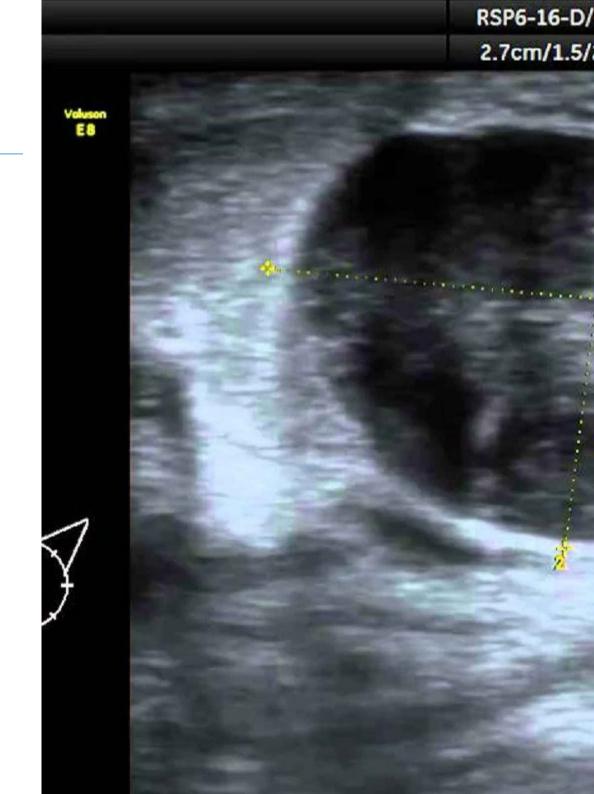


# tech 10 | Objectives



# **General Objectives**

- Acquire the necessary knowledge in the use of ultrasound, in order to manage the routine situations of their practical use in healthcare.
- Apply the skills acquired while performing the duties of an ultrasound specialist.
- Use the latest clinical developments in the day-to-day work of a medical professional.



# Objectives | 11 tech



# **Specific Objectives**

- Optimize ultrasound imaging through in-depth knowledge of the physical principles of ultrasound and the controls and operation of ultrasound scanners
- Master the basic and advanced procedures in ultrasound, both at the diagnostic and therapeutic levels
- Determine the indications and limitations of ultrasound and its application in the most common clinical situations
- Predict the results of invasive diagnostic procedures non-invasively by using ultrasound, with the possibility of replacing them.
- Guide invasive therapeutic procedures to minimize their risks
- Understand how to extend the concept of ultrasound to healthcare, research, and academic environments





# tech 14 | Course Management

# Management



# Dr. Fumadó Queral, Josep

- Family physician at Els Muntells Primary Care Center (Amposta, Tarragona).
- Graduate in Clinical Ultrasound and Training of Trainers, University of Montpelier-Nîmes, France
- Lecturer at the Associació Mediterrània of General Medicine
- Teacher at the Spanish School of Ultrasound of the Spanish Society of General and Family Physicians (SEMG)
- · Honorary Member of the Canary Society of Ultrasound (SOCANECO) and Professor of its Annual Symposium
- Lecturer on the Master's Degree in Clinical Ultrasound for Emergencies and Critical Care, CEU Cardenal Herrera University



# Dr. Pérez Morales, Luis Miguel

- Family physician at the Primary Care Center of Arucas (Gran Canaria, Canary Islands).
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- Expert in Abdominal and Musculoskeletal Clinical Ultrasound for Emergency and Critical Care, CEU Cardenal Herrera University
- President and Professor of the Canary Society of Ultrasound (SOCANECO) and Director of its Annual Symposium
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# **Scientific Committee**

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- Tutor at the Family and Community Medicine Teaching Unit, Burgos
- Teacher at the Spanish School of Ultrasound of the Spanish Society of General and Family Physicians (SEMG)
- Member of the Spanish Society of Ultrasound (SEECO) and the Spanish Association of Prenatal Diagnosis (AEDP)

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- Director of the International Chair of Musculoskeletal Ultrasound, Catholic University of Murcia
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# **Professors**

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# Course Management | 17 tech

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# **Structure and Content**

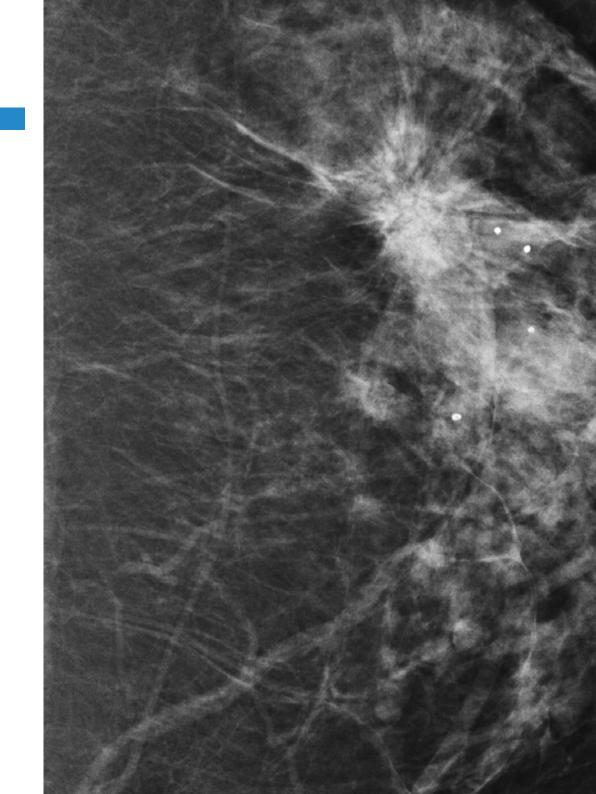
The structure of the contents has been designed by a team of professionals from leading hospitals, who have taken into account the need to update the content that will be taught, as well as the use of quality teaching through new educational technologies.



# tech 20 | Structure and Content

# Module 1 Other Uses of Clinical Ultrasound

- 1.1. Radial Breast Ultrasound
  - 1.1.1. Anatomy Recap
  - 1.1.2. Technical Requirements
  - 1.1.3. Ultrasound Slices
  - 1.1.4. Ultrasound Features Breast Pathology
  - 1.1.5. Breast Elastography
- 1.2. Dermatological Ultrasound
  - 1.2.1. Echoanatomy of the Skin and Appendages
  - 1.2.2. Ultrasound of Skin Tumors
  - 1.2.3. Ultrasound of Inflammatory Skin Diseases
  - 1.2.4. Ultrasound in Dermoesthetics and its Complications
- 1.3. Ultrasound in Diabetes
  - 1.3.1. Aortic/Carotid Atheromatosis in Diabetics
  - 1.3.2. Parenchymal Echogenicity in Diabetic Patients
  - 1.3.3. Biliary Lithiasis in Diabetic Patients
  - 1.3.4. Neurogenic Bladder in Diabetic Patients
  - 1.3.5. Cardiomyopathy in Diabetic Patients
- 1.4. Ultrasound Report
  - 1.4.1. Ultrasound Note
  - 1.4.2. Ultrasound Derivation
  - 1.4.3. Ultrasound Report in PC
- 1.5. Ultrasound Safety during the COVID-19 Pandemic



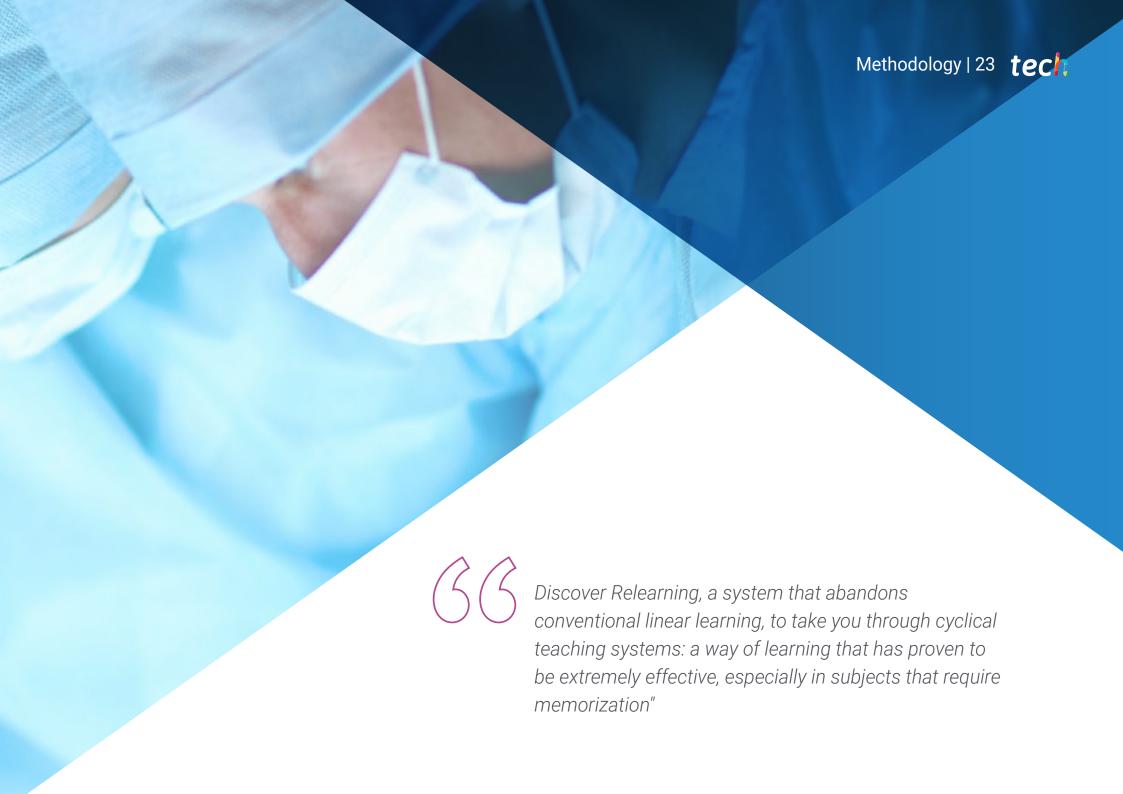






A unique, key, and decisive training experience to boos training experience to boost your professional development"





# tech 24 | Methodology

### At TECH we use the Case Method

What should a professional do in a given situation? 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. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning 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, trying to recreate the real conditions in the physician's professional 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. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
- 2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
- 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

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-theart software to facilitate immersive learning.



# Methodology | 27 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, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. 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.

# tech 28 | Methodology

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 highly 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.



# **Surgical Techniques and Procedures on Video**

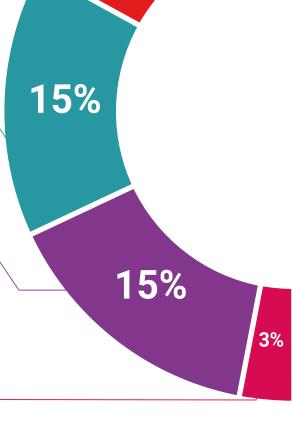
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



### **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 on the usefulness of learning by observing experts.

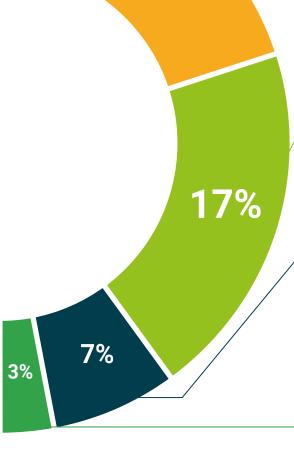
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



### **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.









# tech 32 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Other Uses of Clinical Ultrasound in Primary Care** 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 Other Uses of Clinical Ultrasound in Primary Care

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

# Postgraduate Certificate in Other Uses of Clinical Ultrasound in Primary Care

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



health

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university

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