

Postgraduate Certificate Vascular Ultrasound in Primary Care for Nursing



Postgraduate Certificate Vascular Ultrasound in Primary Care for Nursing

- » Modality: Online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitude.com/us/nursing/postgraduate-certificate/primary-care-vascular-ultrasound-nursing

Index

01

Introduction to the Program

p. 4

02

Why Study at TECH?

p. 8

03

Syllabus

p. 12

04

Teaching Objectives

p. 16

05

Study Methodology

p. 20

06

Teaching Staff

p. 30

07

Certificate

p. 36

01

Introduction to the Program

The growing use of Vascular Ultrasound in Primary Care responds to the need for fast, safe, and accessible diagnoses. In this regard, the ability of nursing professionals to perform assessments such as venous Doppler, locating vascular access points, and studying Peripheral Edemas has been strengthened by specialized training. For this reason, it is crucial for professionals to stay at the forefront of the latest vascular ultrasound techniques to ensure effective care. Additionally, this will allow them to detect complex pathologies at an early stage and reduce the risk of complications. To support this effort, TECH University has launched a pioneering university qualification focused on the use of vascular ultrasound tools. Furthermore, the program is offered in a 100% online format.





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Thanks to this Postgraduate Certificate, entirely online, you will master Ultrasound efficiently to identify Vascular Alterations using non-invasive techniques.

According to a new study published by the World Health Organization, 72% of European countries have implemented Vascular Ultrasound as a diagnostic tool in Primary Care. This technique not only speeds up care but also improves safety in procedures such as ultrasound-guided venous cannulation or even the screening of Deep Vein Thrombosis. In light of this reality, experts need to incorporate this tool into their daily clinical practice to optimize the early diagnosis and treatment of Vascular Diseases such as Chronic Venous Insufficiency, Peripheral Arteriosclerosis, and Thrombosis.

In this context, TECH presents an exclusive Postgraduate Certificate in Vascular Ultrasound in Primary Care for Nursing. Designed by renowned experts in this field, the academic path will delve into topics ranging from the fundamentals of ultrasonography and its technical requirements to the optimal interpretation of results. In this regard, the syllabus will explore the basics of anatomical recall in the venous system of the upper limbs. At the same time, the didactic content will cover multiple strategies for the early identification of Thrombosis and hemodynamic assessment using Doppler. As a result, graduates will acquire advanced skills to use Vascular Ultrasound in real Primary Care settings, enabling them to detect Venous Alterations with greater precision.

Additionally, this program is taught using the disruptive Relearning methodology, which guarantees a progressive and natural update of knowledge. Furthermore, professionals will have the freedom to set their own schedules and will only need a device with internet access to enter the Virtual Campus.

It is worth noting that this academic offering includes a detailed Masterclass led by a prestigious International Guest Director.

This **Postgraduate Certificate in Vascular Ultrasound in Primary Care for Nursing** contains the most complete and up-to-date university program on the market. Its most notable features are:

- ♦ The development of practical cases presented by experts in Vascular Ultrasound in Primary care for 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 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 renowned International Guest Director will deliver a comprehensive Masterclass on the latest advances in the use of Vascular Ultrasound in Primary Care"

“

You will delve into the use of the ultrasound machine in vascular examinations, including Doppler for the detection of Deep Vein Thrombosis”

The teaching staff includes professionals from the field of Vascular Ultrasound in Primary Care for Nursing, who bring their work experience to this program, alongside 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 an immersive learning experience designed to prepare for real-life situations.

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

You will encourage clinical decision-making based on ultrasound findings, which will improve patient recovery.

A syllabus based on the groundbreaking Relearning system will help you assimilate complex concepts quickly and flexibly.



02

Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs, available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it has a huge faculty of more than 6,000 professors of the highest international prestige.



“

Study at the largest online university in the world and ensure your professional success. The future begins at TECH”

The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.



The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

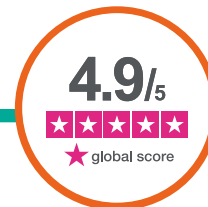
Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.



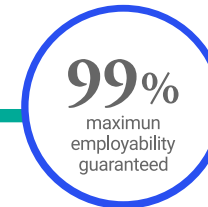
Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.



The top-rated university by its students

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.



03 Syllabus

The teaching resources that make up this Postgraduate Certificate have been developed by a team of specialists with extensive experience in diagnostic ultrasound. Thanks to this, the syllabus delves into aspects such as Vascular Anatomy, the use of Doppler in its various modalities, and the correct interpretation of ultrasound findings. Additionally, the program explores the identification of common pathologies such as Venous Thrombosis and Chronic Venous Disease, including functional diagnostic techniques. All of this will enable graduates to conduct accurate assessments and generate clinical reports using technical and up-to-date language.



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*You will actively collaborate
in multidisciplinary teams,
optimizing care workflows through
the use of Vascular Ultrasound”*

Module 1. Clinical Vascular Ultrasound in Primary Care

- 1.1. Vascular Ultrasound
 - 1.1.1. Description and Applications
 - 1.1.2. Technical Requirements
 - 1.1.3. Procedure
 - 1.1.4. Interpretation of Results. Risks and Benefits
 - 1.1.5. Limitations
- 1.2. Doppler
 - 1.2.1. Fundamentals
 - 1.2.2. Applications of SOFCs
 - 1.2.3. Types of Eco-Doppler
 - 1.2.4. Color Doppler
 - 1.2.5. Power Doppler
 - 1.2.6. Dynamic Doppler
- 1.3. Normal Ultrasound of the Venous System
 - 1.3.1. Anatomy Recap: Venous System of the Upper Extremities
 - 1.3.2. Anatomy Recap: Venous System of the Lower Extremities
 - 1.3.3. Normal Physiology
 - 1.3.4. Regions of Interest
 - 1.3.5. Functional Tests
 - 1.3.6. Report. Vocabulary
- 1.4. Chronic Venous Disease of the Lower Limbs
 - 1.4.1. Definition
 - 1.4.2. CEAP Classification
 - 1.4.3. Morphological Criteria
 - 1.4.4. Examination Technique
 - 1.4.5. Diagnostic Manoeuvres
 - 1.4.6. Sample Report





- 1.5. Acute/Subacute Venous Thrombosis of the Upper Limbs
 - 1.5.1. Anatomical Review
 - 1.5.2. Manifestations of Venous Thrombosis of the Upper Limbs
 - 1.5.3. Ultrasound Characteristics
 - 1.5.4. Examination Technique
 - 1.5.5. Diagnostic Manoeuvres
 - 1.5.6. Technical Limitations
- 1.6. Acute/Subacute Venous Thrombosis of the Lower Limbs
 - 1.6.1. Description
 - 1.6.2. Manifestations of f Venous Thrombosis of the Lower Limbs
 - 1.6.3. Ultrasound Characteristics
 - 1.6.4. Examination Technique
 - 1.6.5. Differential Diagnosis
 - 1.6.6. Vascular Report

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You will be able to access the Virtual Campus at any time and download the contents to consult them whenever you wish. Enroll now!”

04

Teaching Objectives

This Postgraduate Certificate will provide advanced skills to perform ultrasound assessments of the venous system and interpret Doppler images. Graduates will also be able to early detect pathologies such as Venous Thrombosis and Chronic Venous Insufficiency. Furthermore, it will equip professionals to perform diagnostic maneuvers, prepare technical reports, and operate ultrasound equipment with precision. All of this will enhance nursing autonomy in care settings, improving diagnostic capacity and patient safety.



“

*You will execute ultrasound-guided
vascular cannulation procedures
with precision and safety”*



General Objectives

- ♦ Acquire the necessary knowledge in the use of ultrasound to handle common situations in your clinical practice
- ♦ Apply the skills acquired in the performance of the duties of a Ultrasound Specialist
- ♦ Use the latest clinical developments in the daily tasks of nursing professionals
- ♦ Understand the indications and limitations of Clinical Ultrasound, and its application in the most common clinical situations





Specific Objectives

- ♦ Identify vascular anatomy and physiology using Doppler Ultrasound in the context of Primary Care
- ♦ Apply ultrasound in the evaluation of common Vascular Pathologies such as Venous Insufficiency, Deep Vein Thrombosis, and Peripheral Arterial Disease
- ♦ Interpret ultrasound findings to differentiate between Functional and Structural Alterations in the vascular system
- ♦ Develop skills in using ultrasound for the monitoring and follow-up of Chronic Vascular Diseases

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Incorporate biosecurity and hygiene criteria for ultrasound equipment, especially in post-COVID-19 scenarios”

05 Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



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TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”

The student: the priority of all TECH programs

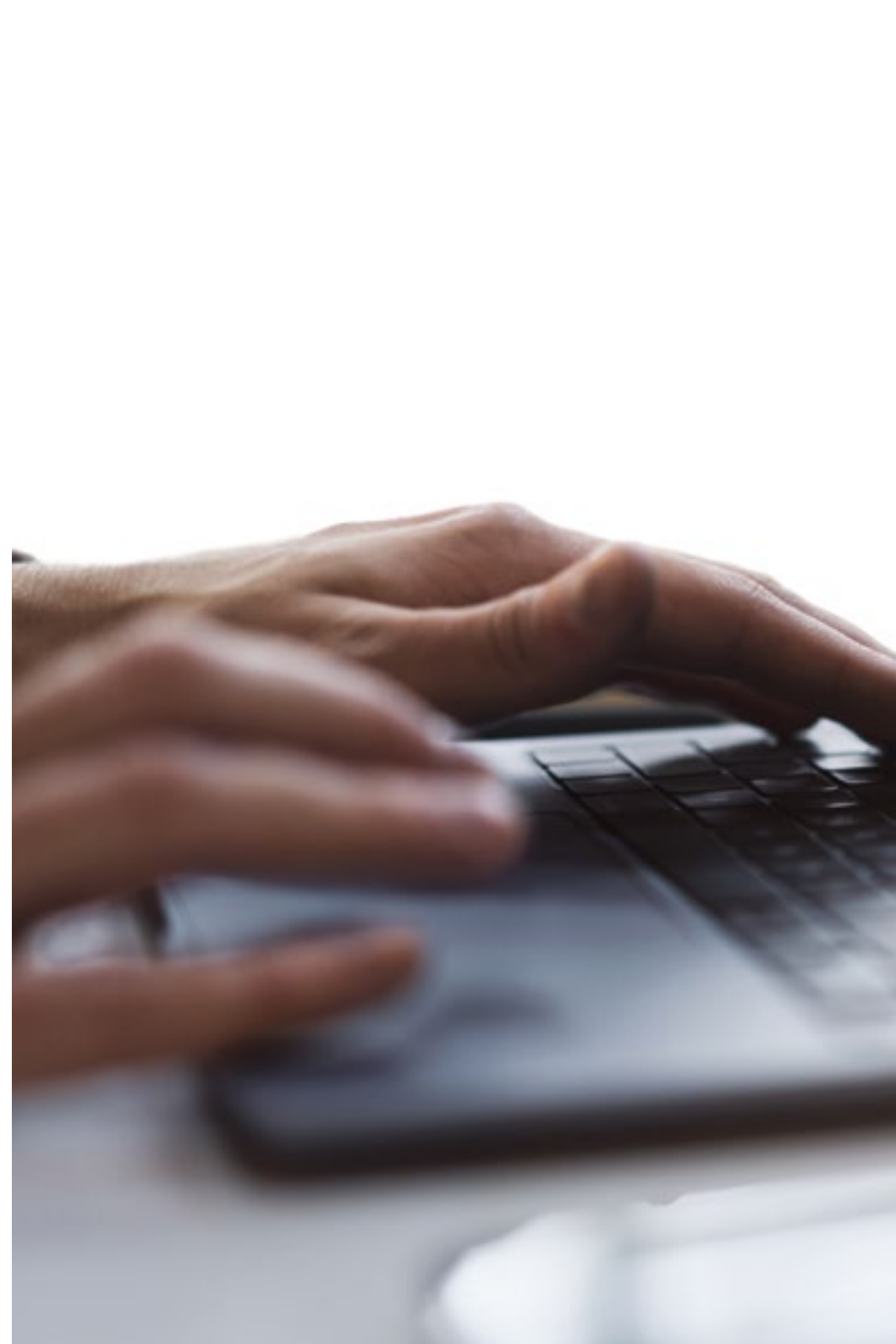
In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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*At TECH you will NOT have live classes
(which you might not be able to attend)”*



The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

“*TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want*”

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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.



A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule”

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 assess 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.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

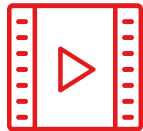
The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



As such, the best educational materials, thoroughly prepared, will be available in this program:



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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



Interactive Summaries

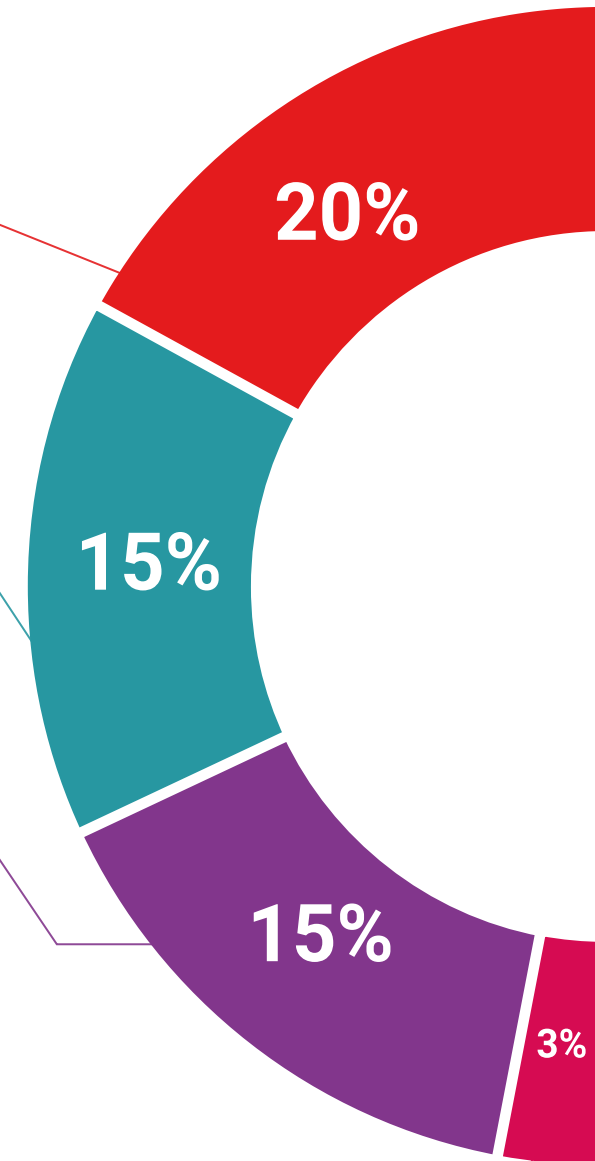
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

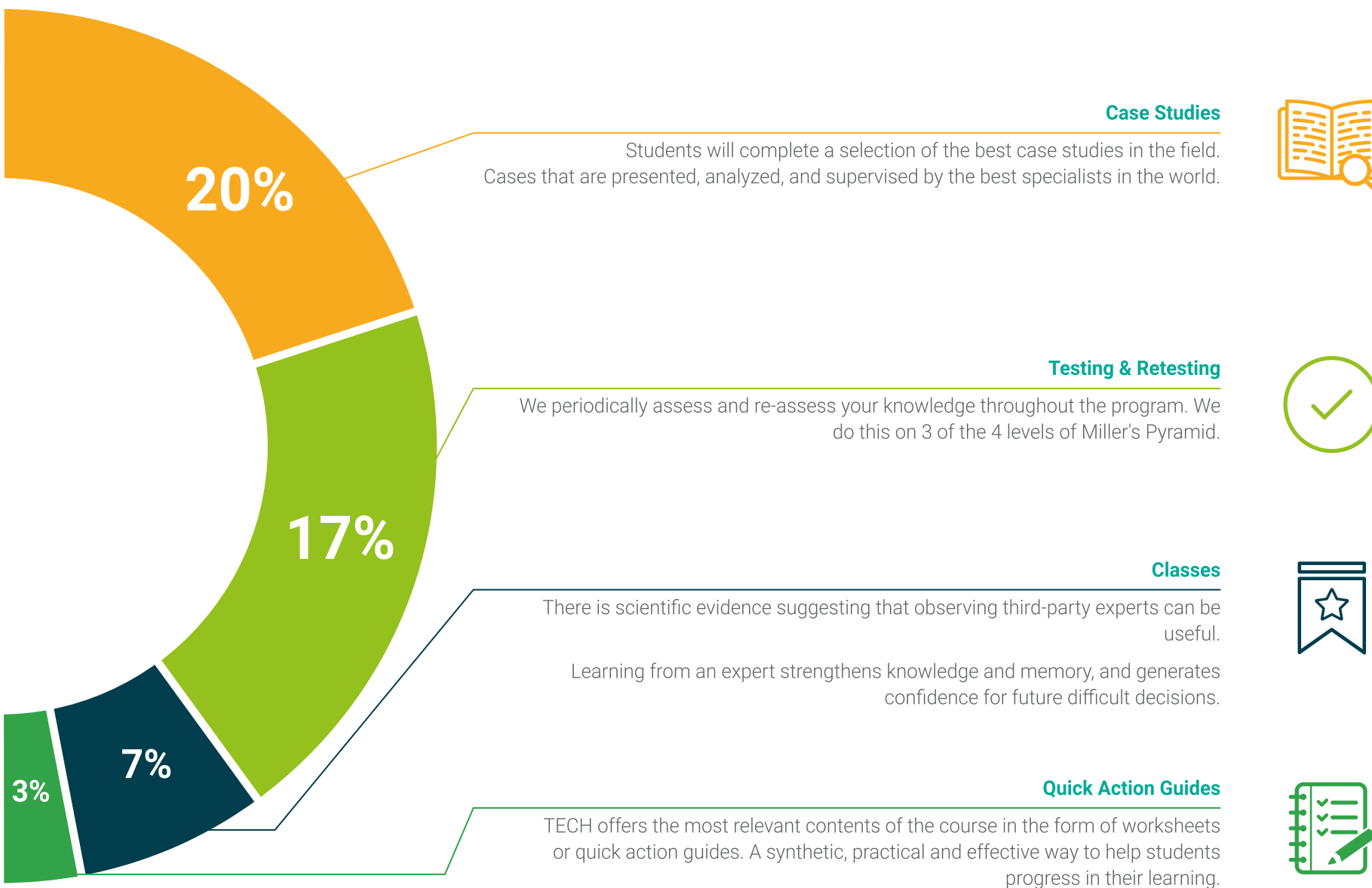
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





06

Teaching Staff

True to its commitment to make the most holistic and up-to-date university degrees accessible to anyone, TECH undertakes a rigorous process to establish its teaching staff. Thanks to this, the present Postgraduate Certificate has been designed by true experts in the use of Vascular Ultrasound in Primary Care settings. This has enabled them to create a variety of teaching materials defined by their high quality and relevance to current labor market requirements.



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You will enjoy personalized guidance from the teaching team, composed of prestigious experts in the use of Vascular Ultrasound in Primary Care”

International Guest Director

Dr. Lauren Ann J. Selame is a recognized professional in the field of **Medicine**, specializing in **Clinical Ultrasound**. Her expertise focuses on the application of ultrasound in **emergency medical, diagnostic imaging, simulation and public health**. With a deep interest in **procedural competence** and in the development of **advanced techniques** to detect various disorders, she has contributed significantly to the use of **Anatomical Ultrasound** to improve response times and accuracy in emergency treatments.

Throughout his career, he has played key roles in prestigious institutions. At **Brigham Women's Hospital**, recognized among the best hospitals in the world by Newsweek magazine, she has been **Director of Ultrasound Education in Emergency Medicine**, in addition to serving as an emergency physician. Her experience also includes her time at **Massachusetts General Hospital** as an Emergency Ultrasound Assistant, and at **Thomas Jefferson Hospital**, where she was a **resident in Emergency Medicine**, after training at the Sidney Kimmel School of Medicine of Thomas Jefferson University.

At the international level, she is noted for her contributions, especially in **Emergency Medicine**. She has worked in some of the most prestigious healthcare centers in the United States, which has allowed her to hone her skills and bring significant advances to the medical community. Her work has earned her a reputation for her expertise in **diagnostic ultrasound**, and she is a reference in the use of this **technology in emergencies**.

As a researcher associated with university institutions, she has written **numerous scientific articles** on its emphasis, addressing both its application in critical situations and its advances in medical diagnosis. Her publications are consulted by professionals worldwide, consolidating her role as one of the most influential voices in the field of **clinical ultrasound**.



Dr. Selame, Lauren Ann J.

- Director of Ultrasound in Emergency Medicine at Brigham Women's Hospital, Boston, United States
- Emergency Medicine Physician Specialist at Brigham Women's Hospital
- Emergency Ultrasound Physician Specialist at Massachusetts General Hospital, Massachusetts
- Resident Physician in Emergency Medicine at Thomas Jefferson University Hospital
- Research Assistant at the Perelman School of Medicine, University of Pennsylvania
- M.D., Thomas Jefferson University
- Medical Degree, Sidney Kimmel School of Medicine at the Thomas Jefferson University

“

Thanks to TECH, you will be able to learn with the best professionals in the world"

Management



Dr. Fumadó Queral, Josep

- ♦ Family Physician at the Primary Care Center of Els Muntells.
- ♦ Head of the Emergency Ultrasound Group of the Spanish Society of General and Family Physicians (SEMG).
- ♦ Graduate in Clinical Ultrasound and Training of Trainers from the University of Montpellier
- ♦ 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.
- ♦ Professor on the Master's Degree in Clinical Ultrasound for Emergencies and Critical Care at the CEU Cardenal Herrera University.



Dr. Pérez Morales, Luis Miguel

- ♦ Primary Care Physician in the Canarian Health Service
- ♦ Family physician at the Primary Care Center of Arucas (Gran Canaria, Canary Islands).
- ♦ President and Professor of the Canary Society of Ultrasound (SOCANECO) and Director of its Annual Symposium
- ♦ Professor on the Master's Degree in Clinical Ultrasound for Emergency and Critical Care at the CEU Cardenal Herrera University
- ♦ Expert in Thoracic Ultrasound by the University of Barcelona
- ♦ Expert in Clinical Abdominal and Musculoskeletal Ultrasound for Emergencies and Critical Care by the University CEU Cardenal Herrera
- ♦ Diploma of the Curs d'Ecografia en Atenció Primària by the University Rovira i Virgili from the Institut Català de la Salut



Teachers

Dr. De Varona Frolov, Serguei

- ♦ Medical Specialist in Angiology and Vascular Surgery of the Canary Islands Institute of Advanced Medicine
- ♦ Angiologist at Dr. Negrin University Hospital of Gran Canaria
- ♦ Master's Degree in Endovascular Techniques by Boston Scientific P.L.

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A unique, essential and decisive learning experience to boost your professional development”

07 Certificate

The Postgraduate Certificate in Vascular Ultrasound in Primary Care for Nursing guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the 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 Vascular Ultrasound in Primary Care 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.

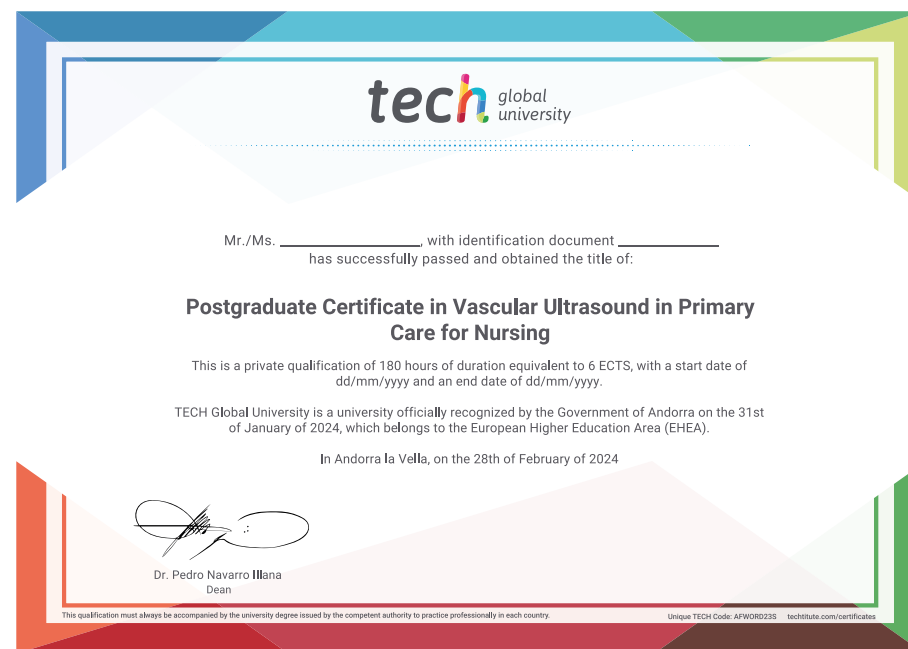
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Vascular Ultrasound in Primary Care for Nursing**

Modality: **Online**

Duration: **6 weeks**

Accreditation: **6 ECTS**





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