



Postgraduate Certificate Ultrasound-Guided Procedures 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.techtitute.com/us/nursing/postgraduate-certificate/ultrasound-guided-procedures-other-applications-ultrasound-primary-care-nursing

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tech 06 | Introduction to the Program

A recent study conducted by the World Health Organization indicates that the use of Ultrasound-Guided Procedures can reduce complications in venous cannulation by up to 70% compared to traditional techniques. Given this reality, nurses need to stay at the forefront of ultrasound interventions such as punctures, infiltrations, or drainage procedures. Only then can specialists obtain high-resolution images for the early detection of complex conditions. This will also enable them to promote a safer, more effective care model aligned with international best practices.

In this context, TECH presents an innovative Postgraduate Certificate in Ultrasound-Guided Procedures in Primary Care for Nursing. Designed by true experts in the field, the syllabus will address topics ranging from the fundamentals of informed consent to performing ultrasound-guided biopsies and abscess drainage. The course will also delve into assisted interventions such as thoracentesis, vascular cannulation, and infiltration techniques for chronic pain management. Moreover, the educational materials will provide various strategies to optimize technical precision, minimize complications, and ensure patient safety throughout the procedures. As a result, graduates will gain advanced competencies in Ultrasound-Guided Procedures and contribute to a more patient-centered care model.

Additionally, this academic offering is supported by the groundbreaking Relearning system to facilitate a natural and progressive knowledge update. Nurses will only need an electronic device with internet access to engage in the Virtual Campus.

Furthermore, a distinguished International Guest Director will provide one in-depth Masterclass.

This Postgraduate Certificate in Ultrasound-Guided Procedures 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 Ultrasound-Guided Procedures 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 distinguished International Guest Director will conduct one rigorous Masterclass on the latest trends in performing Ultrasound-Guided Procedures in Primary Care.

Introduction to the Program | 07 tech

You will enhance diagnostic and therapeutic precision through the handling of ultrasound images"

The program includes a faculty of professionals from the field of Ultrasound-Guided Procedures in Primary Care for Nursing, who bring their extensive real-world experience, as well as renowned specialists from leading organizations 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 be able to meticulously interpret ultrasound images to detect relevant anatomical structures and pathologies.

With the revolutionary Relearning methodology, you will optimally integrate all the knowledge to successfully achieve the results you aim for.







tech 10 | Why Study 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 syllabus





World's
No.1
The World's largest
online university

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.







99% maximun employability guaranteed

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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 toprated 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.





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Module 1. Ultrasound-Guided Procedures in Primary Care

- 1.1. Ultrasound-Guided Fine Needle Aspiration (FNA)
 - 1.1.1. Indications/Contraindications. Material
 - 1.1.2. Informed Consent
 - 1.1.3. Procedure
 - 1.1.4. Results
 - 1.1.5. Complications
 - 1.1.6. Quality Control
- 1.2. Ultrasound-Guided Percutaneous Biopsy
 - 1.2.1. Informed Consent
 - 1.2.2. Biopsy Materials (Types of Biopsy Needles)
 - 1.2.3. Procedure
 - 1.2.4. Complications
 - 1.2.5. Care
 - 1.2.6. Quality Control
- 1.3. Drainage of Abscesses and Fluid Collections
 - 1.3.1. Indications and Contraindications
 - 1.3.2. Informed Consent
 - 1.3.3. Requirements and Materials
 - 1.3.4. Technique and Approach: Direct Puncture (Trocar Technique) vs. Step to Step (Seldinger Technique)
 - 1.3.5. Catheter Management and Patient Care
 - 1.3.6. Side Effects and Complications
 - 1.3.7. Quality Control
- 1.4. Ultrasound-Guided Thoracentesis, Pericardiocentesis, and Paracentesis
 - 1.4.1. Indications and Advantages over the Anatomical Reference Technique
 - 1.4.2. Basic Aspects: Ultrasound Specifications and Ultrasound Anatomy
 - 1.4.3. Ultrasound Specifications and Pericardial Drainage Technique
 - 1.4.4. Ultrasound Specifications and Thoracic Drainage Technique
 - 1.4.5. Ultrasound Specifications and Abdominal Drainage Technique
 - 1.4.6. Common Problems, Complications, and Practical Advice





Syllabus | 15 tech

- 1.5. Ultrasound-Guided Vascular Cannulation
 - 1.5.1. Indications and Advantages over the Anatomical Reference Technique
 - 1.5.2. Current Evidence on Ultrasound-Guided Vascular Cannulation
 - 1.5.3. Basic Aspects: Ultrasound Specifications and Ultrasound Anatomy
 - 1.5.4. Ultrasound-Guided Central Venous Cannulation Technique
 - 1.5.5. Single Peripheral Catheter and Peripherally Inserted Central Catheter (PICC) Cannulation Technique
 - 1.5.6. Arterial Cannulation Technique
- 1.6. Ultrasound-Guided Infiltrations and Chronic Pain Treatment
 - 1.6.1. Infiltrations and Pain
 - 1.6.2. Large Joints: Intra-Articular and Myotendinous
 - 1.6.3. Small Joints: Intra-articular and Myotendinous
 - 1.6.4. Spinal Column



Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"





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General Objectives

- Acquire the necessary knowledge in the use of ultrasound for handling common situations in your clinical practice
- Apply the skills learned in performing the functions of a specialist in Ultrasound
- Employ the latest clinical innovations in the daily duties of nursing professionals
- Understand the indications and limitations of Clinical Ultrasound, and its application in the most frequent clinical situations





Teaching Objectives | 19 tech



Specific Objectives

- Gain expertise in performing ultrasound-guided techniques such as punctures, drainage, and central and peripheral venous access
- Improve precision and safety in executing invasive procedures through the use of ultrasound
- Learn to recognize key anatomical structures to optimize the effectiveness of interventional techniques
- Minimize complications in clinical procedures by applying real-time ultrasound



You will have access to didactic materials and multimedia capsules to facilitate the process of knowledge updating"



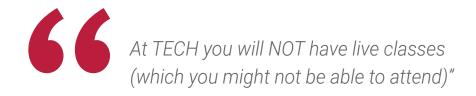


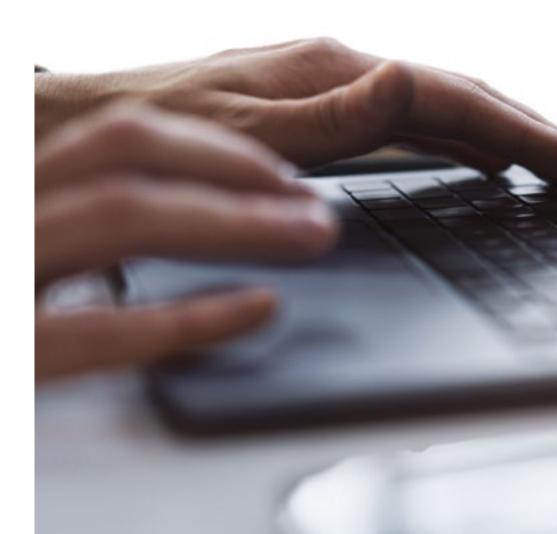
The student: the priority of all TECH programs

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.







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"

tech 24 | Study Methodology

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.

Study Methodology | 27 tech

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

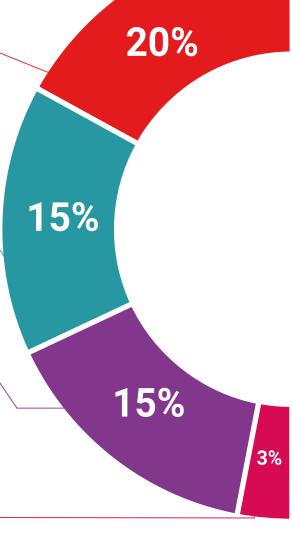
You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



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.

Case Studies

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.

Testing & Retesting



We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.

Classes



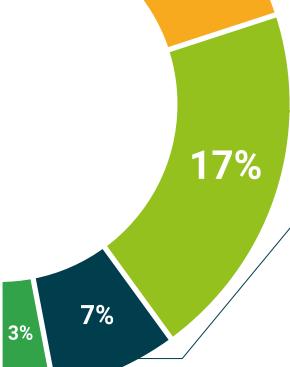
There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an expert strengthens knowledge and memory, and generates confidence for 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.





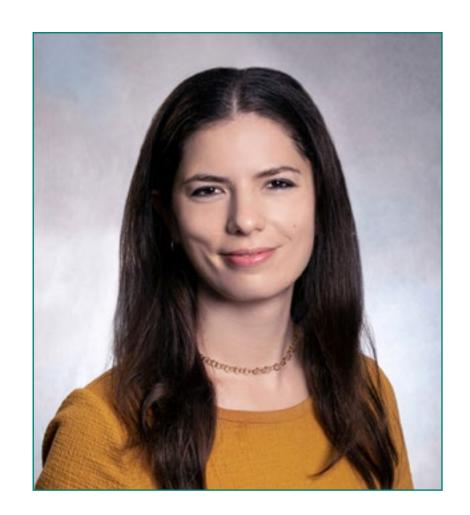
International Guest Director

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 Montpelier
- 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).
- ullet 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 Catalá de la Salut

Teachers

Dr. Sánchez Sánchez, José Carlos

- Director of the Ultrasound Tasks Group of the Spanish Society of General and Family Physicians.
- Specialist in Radiodiagnosis at the Poniente Hospital, El Ejido
- Master's Degree in Updating in Diagnostic and Therapeutic Techniques in Radiology by the Cardenal Herrera University.
- University Expert in Technique and instrumentation, radiology emergencies and Interventional neuro radiology by Francisco de Vitoria University.
- University Expert in Cardiothoracic Radiology and Vascular and Interventional Radiology by the Francisco de Vitoria University
- Expert in Imaging Techniques in Breast Pathology and Breast Radiology by the University of Barcelona.

Dr. Herrera Carcedo, Carmelo

- Head of the Ultrasound Unit at the Briviesca Health Center
- Physician at San Juan de Dios Hospital
- Family Physician of the Ultrasound Unit at the Briviesca Health Center
- Tutor at the Family and Community Medicine Teaching Unit in 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)

Dr. Argüeso García, Mónica

- Attending physician of the Intensive Care Medicine Service at the Gran Canaria Island Maternity Hospital
- Doctor of Medicine
- Instructor in Advanced Life Support of the SEMICYUC national CPR plan
- Clinical Simulation Instructor
- Bachelor's Degree in Medicine and Surgery

Dr. Donaire Hoyas, Daniel

- Specialist in Orthopedic Surgery and Traumatology at Virgen de las Nieves Hospital
- Specialist in Orthopedic Surgery and Traumatology at the Hospital de Poniente, El Ejido.
- Orthopedic doctor at the Almeria Institute of Orthopedic Surgery and Traumatology.
- Training in Periprosthetic Hip and Knee Infection at Endoklinic Hospital, Hamburg
- Training in Orthopedics and Traumatology at the Trauma Unit of the John Radcliff Hospital attached to the University of Oxford.





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This private qualification will allow you to obtain a **Postgraduate Certificate in** Ultrasound-Guided Procedures 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 Ultrasound-Guided Procedures in Primary Care for Nursing

Modality: Online

Duration: 6 weeks

Accreditation: 6 ECTS



in Primary Care for Nursing

This is a private qualification 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



^{*}Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

health confidence people
leducation information tutors
guarantee accreditation teaching
institutions technology learning



Postgraduate Certificate Ultrasound-Guided Procedures in Primary Care for Nursing

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

