

Postgraduate Certificate

Interventional Procedures in Lower Limb Veins





Postgraduate Certificate Interventional Procedures in Lower Limb Veins

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

Website: www.techtute.com/us/medicine/postgraduate-certificate/interventional-procedures-lower-limb-veins

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Methodology

p. 20

06

Certificate

p. 28

01

Introduction

Interventional Procedures in Lower Limb Veins have undergone significant advances in recent years. With increasingly sophisticated and less invasive techniques, specialists can treat a variety of venous conditions, such as varicose veins and chronic venous insufficiency, with greater precision and safety. From procedures such as radiofrequency ablation and laser treatment to venous stenting, the range of therapeutic options available has expanded the possibilities for improving patients' vascular health. In this scenario, TECH has introduced a complete 100% online program, requiring only an electronic device with an Internet connection to access the educational resources. In addition, is based on by the Relearning methodology.



“

With this 100% online Postgraduate Certificate, you will gain an in-depth understanding of peripheral venous conditions and the intervention techniques available, addressing these conditions effectively"

Interventional Procedures in Lower Limb Veins is crucial in contemporary medical practice. With advances in technology and minimally invasive techniques, specialists can offer more effective and less invasive therapeutic options for patients experiencing debilitating symptoms.

This is how this program was born, which will delve into the identification of indications for Interventional Procedures, highlighting Deep Venous Thrombosis, Obstructions and chronic venous syndromes as key conditions. In this regard, professionals will recognize the signs and symptoms of these conditions and determine when it is appropriate to intervene, either by advanced diagnostic techniques or specific therapeutic treatments.

Also, a crucial aspect of the program will be a detailed description of the imaging techniques used in the diagnosis and follow-up of peripheral venous disease. In addition, emphasis will be placed on venous Doppler ultrasound and phlebography, fundamental tools for evaluating the structure and function of the veins of the lower limbs. In this way, physicians will acquire practical skills in image interpretation, making accurate diagnoses and establishing effective treatment plans.

Finally, available therapeutic options such as Deep Venous Thrombosis, chronic obstructions and venous syndromes will be addressed. From thrombectomy to venous angioplasty and stenting, graduates will examine a variety of surgical and endovascular interventions designed to restore blood flow and relieve symptoms. In addition, endovenous ablation and sclerotherapy techniques in the treatment of varicose veins and venous malformations will be discussed in detail, providing a comprehensive understanding of the therapeutic options available for a wide range of peripheral venous disorders.

Now, a comprehensive online program is offered that is tailored to the individual needs of the student, avoiding travel to a physical location and adherence to set schedules. In addition, the program is based on TECH's pioneering Relearning methodology, which involves the repetition of key concepts for a better and more natural assimilation of the contents.

This **Postgraduate Certificate in Interventional Procedures in Lower Limb Veins** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ The development of practical cases presented by experts in Angiology and Vascular Surgery
- ♦ The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable for professional practice
- ♦ Practical exercises where self-assessment can be used to improve learning.
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



Upon completion of this Postgraduate Certificate you will be better equipped to effectively address the needs of patients with venous disorders, thereby improving their quality of life and overall well-being"

“

You will master endovenous ablation and sclerotherapy techniques, especially in the context of the treatment of varicose veins and venous malformations, thanks to an extensive library of multimedia resources”

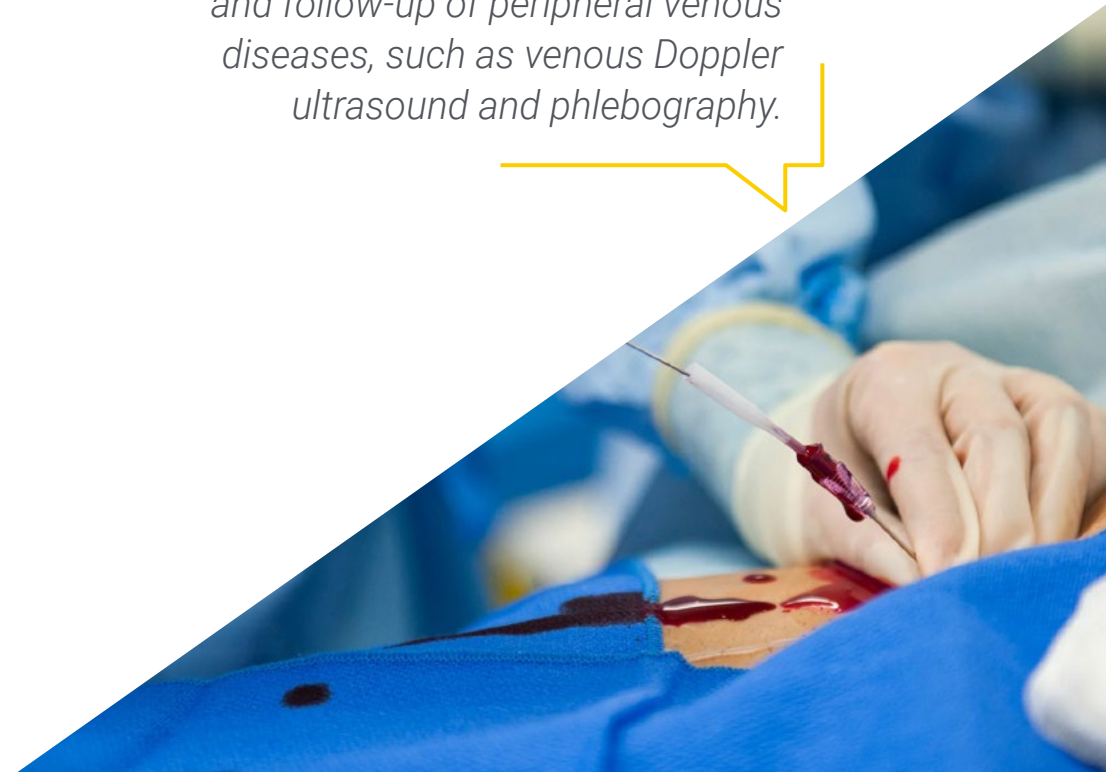
The program’s teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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 immersive education programmed to learn 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 during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

You will delve into the identification of indications for Interventional Procedures, ranging from Deep Venous Thrombosis to obstructions and chronic venous syndromes. What are you waiting for to enroll?

Take advantage of this unique TECH opportunity! You will cover essential imaging techniques for the diagnosis and follow-up of peripheral venous diseases, such as venous Doppler ultrasound and phlebography.



02 Objectives

The main objective of this Postgraduate Certificate in Interventional Procedures in Lower Limb Veins will be to provide graduates with the theoretical knowledge and practical skills necessary to effectively diagnose, treat and manage a wide range of peripheral venous disorders. This will involve understanding the indications for Interventional Procedures in conditions such as Deep Venous Thrombosis, Obstructions and chronic venous syndromes, as well as mastering the imaging techniques used in diagnosis and follow-up, such as venous Doppler ultrasound and phlebography.





“

You will acquire practical and theoretical skills to apply appropriate therapeutic options, including thrombectomy, venous angioplasty, stenting, endovenous ablation and sclerotherapy”



General Objectives

- ♦ Develop the technical skills necessary to accurately perform and analyze angiographic studies
- ♦ Promote an appreciation of the importance of multidisciplinary teamwork in the interpretation and management of vascular angiographic results
- ♦ Acquire skills to apply techniques such as angioplasty, Stent placement, and other minimally invasive procedures
- ♦ Determine the procedures and protocols for performing and interpreting computed tomography angiography (CTA) in the context of vascular interventional procedures



You will become familiar with the therapeutic options available, from thrombectomy and venous angioplasty, to endovenous ablation and sclerotherapy. With all the quality guarantees that TECH offers you!"





Specific Objectives

- ◆ Identify the indications for Interventional Procedures in Lower Limb Veins, including Deep Venous Thrombosis, obstructions and chronic venous syndromes
- ◆ Describe imaging techniques used in the diagnosis and follow-up of lower limb vein disease, such as venous Doppler ultrasound and phlebography
- ◆ Determine the therapeutic options for Deep Venous Thrombosis, chronic obstructions and venous syndromes, including Thrombectomy, Venous Angioplasty and Stenting
- ◆ Explore endovenous ablation and sclerotherapy techniques in the treatment of varicose veins and venous malformations

03

Course Management

The lecturers behind this Postgraduate Certificate are highly qualified and experienced professionals in the field of vascular medicine. In fact, these experts have a solid academic background and extensive clinical experience in the diagnosis and treatment of peripheral venous disorders. In addition, they are up to date with the latest advances in technology and interventional techniques, which will enable them to provide graduates with up-to-date and relevant specialization. Therefore, they will not only impart theoretical knowledge, but also guide students in the development of practical skills.





“

The clinical experience of the lecturers enables them to effectively convey the fundamental principles and technical skills necessary to perform venous interventions safely and effectively"

Management



Dr. Del Río Solá, María Lourdes

- ♦ Chief from the Vascular Angiology and Surgery Service at the Valladolid University Clinical Hospital
- ♦ Specialist in Angiology and Vascular Surgery
- ♦ European Board in Vascular Surgery
- ♦ Academic Correspondent of the Royal Academy of Medicine and Surgery
- ♦ Full Professor at the European University Miguel de Cervantes
- ♦ Associate Professor in Health Sciences at the University of Valladolid

Professors

Dr. Boada Sandoval, Pablo Martin

- ♦ Medical Angiologist of the National Institute of Rehabilitation "Luis Guillermo Ibarra Ibarra", Mexico
- ♦ Specialist Physician in Angiology, Vascular and Endovascular Surgery
Medical Surgeon at the Monterrey Institute of Technology and Higher Education (ITESM), Mexico
- ♦ Specialty in Angiology and Vascular Surgery from the National Autonomous University of Mexico
- ♦ Residency in Angiology and Vascular Surgery at the La Raza National Medical Center Specialty Hospital
- ♦ Vascular Doppler Echo Course of the International Association of Non-invasive Vascular Diagnosis



04

Structure and Content

This Postgraduate Certificate will include indications for interventions in veins of the lower limbs, such as Deep Venous Thrombosis, obstructions and chronic venous syndromes, and advanced imaging techniques, such as venous Doppler ultrasound and phlebography, for diagnosis and follow-up. In addition, therapeutic options such as thrombectomy, venous angioplasty, stenting, endovenous ablation and sclerotherapy will be explored, providing graduates with the practical and theoretical skills necessary to effectively address these clinical conditions and improve the quality of life of patients.





“

This Postgraduate Certificate will provide you with a balanced combination of theoretical knowledge and practical skills, preparing you to effectively address clinical challenges in vascular medicine"

Module 1. Interventional Procedures in Lower Limb Veins

- 1.1. Interventional Procedures in Acute Deep Vein Thrombosis (DVT)
 - 1.1.1. Etiology and Risk Factors for DVT
 - 1.1.2. Endovascular Treatment of DVT
 - 1.1.3. Prevention and Complications of Endovascular Treatment of DVT
- 1.2. Interventional Procedures in Chronic Venous Obstruction and Post-Phlebotic Syndrome
 - 1.2.1. Pathophysiology and Clinical Manifestations
 - 1.2.2. Multidisciplinary Treatment
 - 1.2.3. Pain Management and Quality of Life
- 1.3. Interventional Procedures in Chronic Venous Valvular Disease
 - 1.3.1. Pathophysiology and Clinical Manifestations
 - 1.3.2. Endovascular Treatment and Management of Valve Insufficiency
 - 1.3.3. Rehabilitation and Prevention of Complications of Interventional Procedures in Chronic Venous Valve Insufficiency
- 1.4. Interventional Procedures in Superficial Venous Thrombosis
 - 1.4.1. Etiology and Clinical Characteristics
 - 1.4.2. Endovascular Treatment of Septic Superficial Venous Thrombosis
 - 1.4.3. Complications and Follow-up of Endovascular Treatment of Superficial Venous Thrombosis
- 1.5. Interventional Procedures in Klippel-Trenaunay and Parkes-Weber Syndromes
 - 1.5.1. Klippel-Trenaunay and Parkes-Weber Syndromes Diagnosis
 - 1.5.2. Endovascular Therapeutic Approach and Clinical Management
 - 1.5.3. Quality of Life and Long-Term Follow-Up in Klippel-Trenaunay and Parkes-Weber Syndromes after Endovascular Treatment
- 1.6. Venous Malformations
 - 1.6.1. Types of Venous Malformations
 - 1.6.2. Endovascular Therapeutic Approach to Venous Malformations.
 - 1.6.3. Follow-up and Rehabilitation after Endovascular Treatment of Venous Malformations
- 1.7. Venous Aneurysms
 - 1.7.1. Venous Aneurysms
 - 1.7.2. Endovascular Treatment and Clinical Management of Venous Aneurysms
 - 1.7.3. Follow-up after Endovascular Treatment of Venous Aneurysms





- 1.8. Applications of AI in the Diagnosis of Venous Pathology of the Lower Limbs
 - 1.8.1. AI Algorithms for Vascular Image Analysis in Lower Limb Venous Pathology
 - 1.8.2. AI-Assisted Diagnosis: Improvements in Accuracy and Efficiency in Lower Limb Venous Pathology
 - 1.8.3. Clinical Cases of AI in the Identification of Anomalous Patterns in Lower Limb Venous Pathology
- 1.9. AI in the Planning of Diagnostic Treatments in Lower Limb Venous Pathology
 - 1.9.1. Predictive AI Models in the Choice of Endovascular Interventions in Lower Limb Veins
 - 1.9.2. Optimization of Personalized Therapies with AI after Endovascular Interventions in Lower Limb Veins
 - 1.9.3. Simulation of AI Procedures: Reducing Errors and Improving Outcomes in Endovascular Interventions in Lower Limb Veins
- 1.10. Monitoring and Prediction of Outcomes in Endovascular Interventions in the Veins of the Lower Limbs
 - 1.10.1. AI Tools in Continuous Monitoring of Patients undergoing Endovascular Treatment for Lower Limb Venous Pathology
 - 1.10.2. Prognosis of Recurrence and Complications with Predictive AI Models in Interventional Procedures in the Lower Limb Veins
 - 1.10.3. Use of AI in the Research and Development of New Vascular Therapies in Interventional Procedures in the Lower Limb Veins

“*The contents of this Postgraduate Certificate will enable you to offer comprehensive and high-quality care to patients with peripheral venous disorders, therefore improving their well-being and quality of life*”

05

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.



“

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH 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

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 the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

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



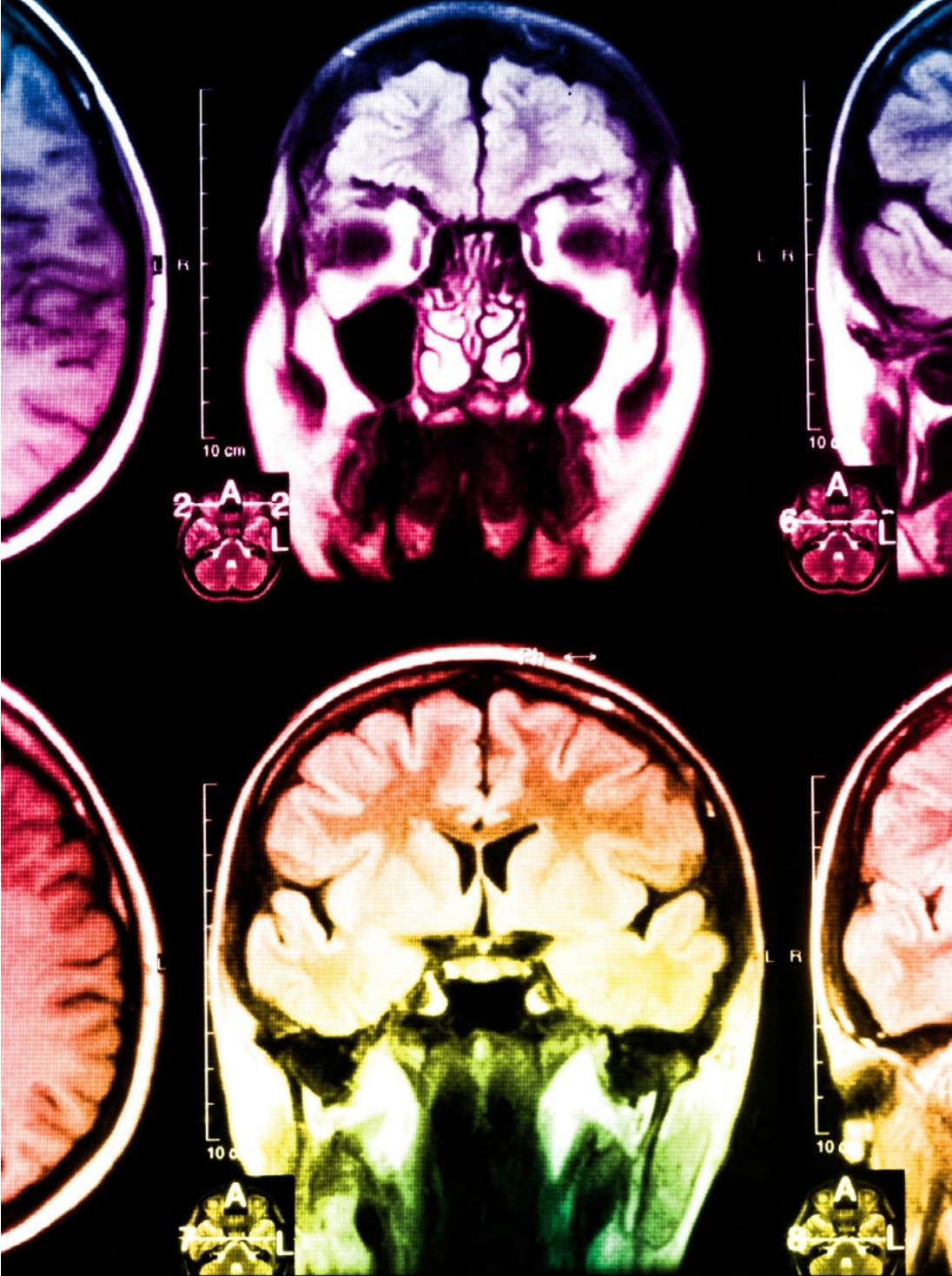
At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, 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.

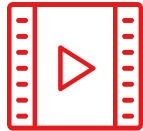
Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

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.



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

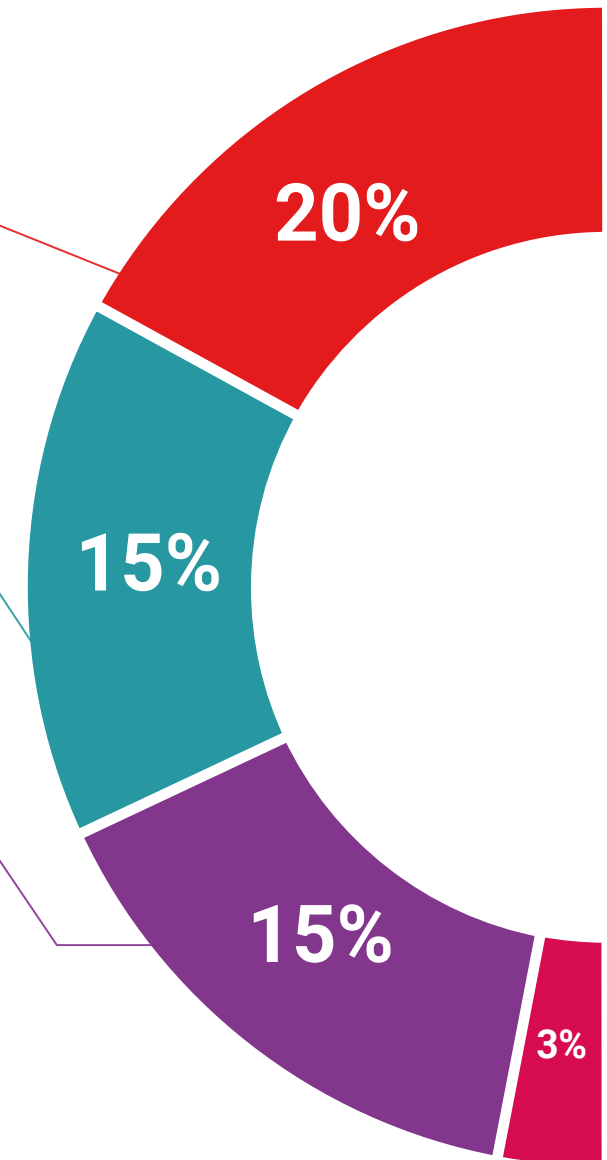
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

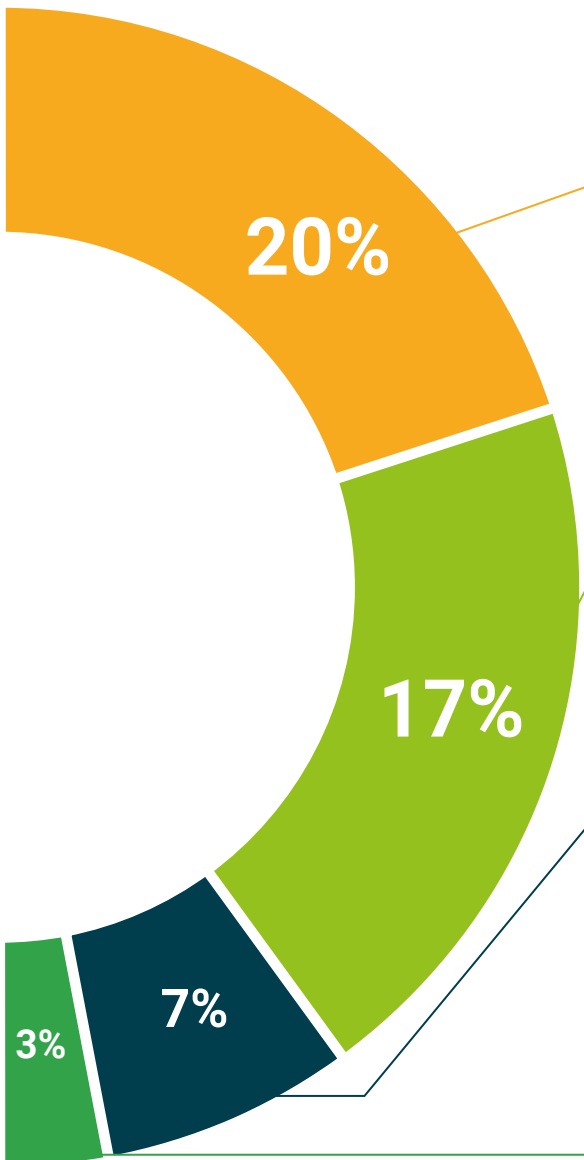
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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.



06 Certificate

The Postgraduate Certificate in Interventional Procedures in Lower Limb Veins guarantees students, in addition to the most accurate and up-to-date knowledge, access to a Postgraduate Certificate issued by TECH Global University.



“

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 Interventional Procedures in Lower Limb Veins** 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 Interventional Procedures in Lower Limb Veins**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**





Postgraduate Certificate Interventional Procedures in Lower Limb Veins

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

Postgraduate Certificate

Interventional Procedures in Lower Limb Veins

