

Postgraduate Certificate

Interventional Procedures in Lower Limb Arteries



Postgraduate Certificate Interventional Procedures in Lower Limb Arteries

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

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

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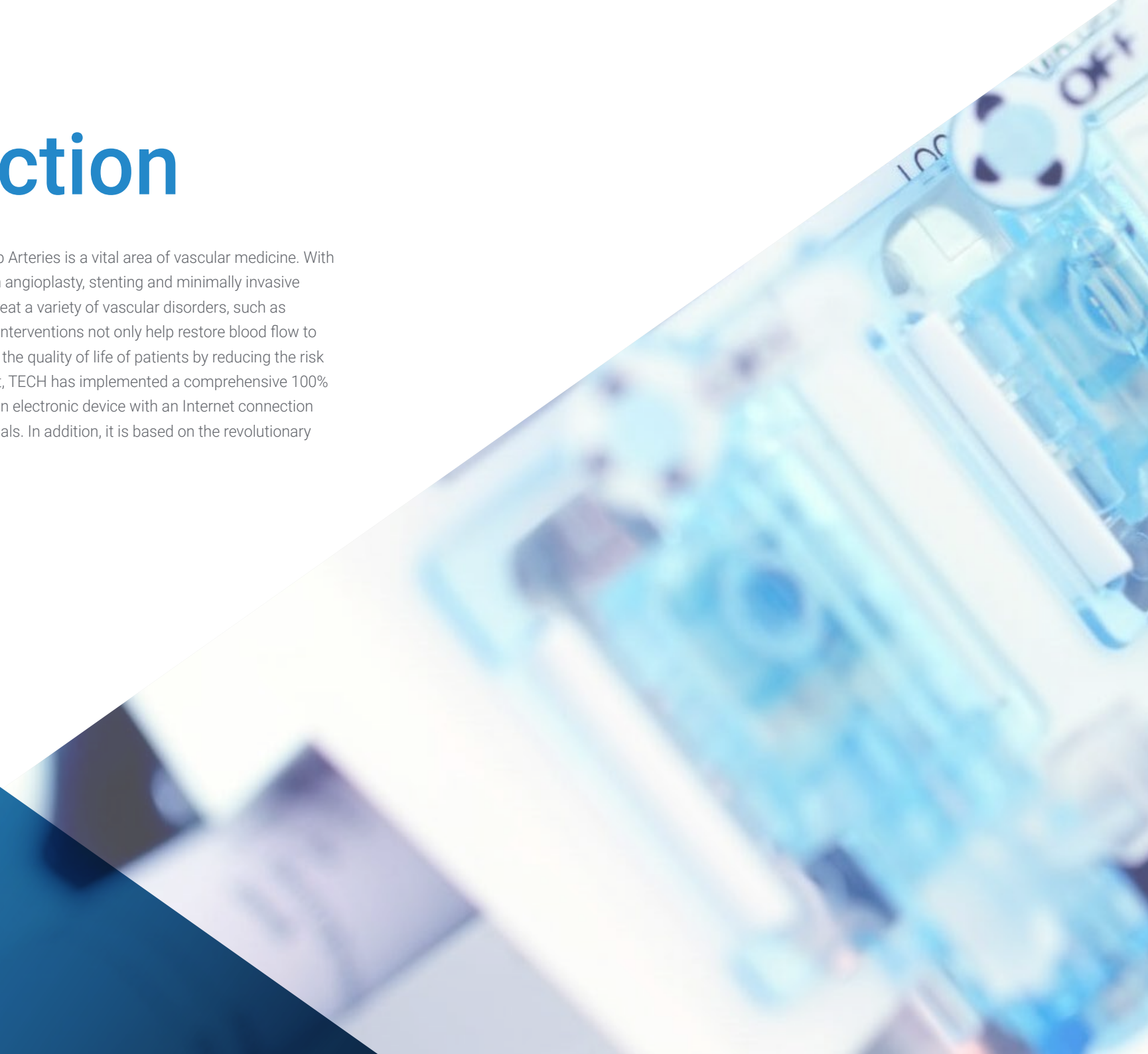
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01

Introduction

Interventional Procedures in Lower Limb Arteries is a vital area of vascular medicine. With technological advances such as balloon angioplasty, stenting and minimally invasive techniques, specialists can effectively treat a variety of vascular disorders, such as Peripheral Artery Disease (PAD). These interventions not only help restore blood flow to the limbs, but also significantly improve the quality of life of patients by reducing the risk of serious complications. In this context, TECH has implemented a comprehensive 100% online university program, so that only an electronic device with an Internet connection is needed to access the teaching materials. In addition, it is based on the revolutionary Relearning methodology.



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Thanks to this 100% online Postgraduate Certificate, you will gain an in-depth understanding of the latest techniques, technologies and practices in the treatment of peripheral vascular diseases"

Interventional Procedures in Lower Limb Arteries has undergone significant advances in the last decade, revolutionizing the treatment of diseases. From balloon angioplasty to stenting and more complex procedures, the field offers safer and more effective therapeutic options to improve blood circulation in patients with vascular problems in the lower limbs.

This Postgraduate Certificate was created to specialize health professionals in the comprehensive management of peripheral vascular diseases. First of all, indications for Interventional Procedures in Lower Limb Arteries will be addressed, including stenosis, occlusions and peripheral arterial disease (PAD). In addition, advanced imaging techniques, such as digital arteriography and Doppler ultrasound, which are essential for accurate diagnosis and monitoring of disease progression.

In addition, procedures such as balloon angioplasty and stent placement will be discussed in detail, providing physicians with the skills necessary to perform these interventions safely and effectively. Surgical and endovascular revascularization techniques will also be examined, providing a comprehensive overview of the therapeutic options available.

Ultimately, the program will provide a platform to explore and understand the latest research and advances in the field of Interventional Procedures in Lower Limb Arteries. In this way, graduates will have the opportunity to update their knowledge on new techniques, emerging technologies and best clinical practices, providing optimal and evidence-based care to patients with peripheral vascular disease.

At this juncture, this complete program is presented, fully online and adaptable to the personal needs of students, so that they can avoid traveling to a physical center and adjust to a pre-established schedule. Additionally, the program is based on the Relearning methodology, pioneer in TECH, which consists of the repetition of key concepts for an optimal and organic assimilation of the contents.

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

- ♦ The development of case studies 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 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



You will delve into the most advanced techniques in the treatment of peripheral vascular disease, acquiring specialized skills in procedures such as angioplasty and stenting"

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From digital arteriography to Doppler ultrasound, you'll become familiar with the most advanced diagnostic tools, accurately interpreting images to assess the severity of peripheral arterial disease"

The program's teaching staff includes professionals from the sector who contribute their work experience to this specializing 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 be immersed in the techniques of surgical and endovascular revascularization, all through the best teaching materials on the market, at the forefront of technology and education.

You will identify disorders in the arteries of the lower limbs through the analysis of symptoms, imaging studies and specific diagnostic tests. With all the quality guarantees that TECH offers you!



02 Objectives

This program will enable graduates to identify indications for intervention in lower extremity arteries, including Stenosis, Occlusions and Peripheral Artery Disease (PAD), as well as to select the appropriate imaging techniques for the diagnosis and follow-up of these conditions. In addition, professionals will be familiarized with the therapeutic options available, from interventional procedures, such as balloon angioplasty and stenting, to surgical and endovascular revascularization techniques, in order to improve the quality of care offered to patients and to optimize the quality of care offered to patients and optimize clinical outcomes.





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This Postgraduate Certificate aims to equip you with the knowledge and skills necessary to provide comprehensive and effective treatment to patients with peripheral arterial disease"



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

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You will be specialized in the accurate identification of indications for intervention, the appropriate use of imaging techniques for diagnosis and follow-up, and the selection and execution of the most appropriate therapeutic options”





Specific Objectives

- ◆ Identify the indications for intervention in lower extremity arteries, including Stenosis, Occlusions and Peripheral Arterial Disease
- ◆ Determine the imaging techniques used in the diagnosis and follow-up of lower extremity artery disease, such as digital arteriography and Doppler ultrasound
- ◆ Discuss the therapeutic options for Stenosis and Occlusions in the lower extremity arteries, including balloon angioplasty and stent placement
- ◆ Explore surgical and endovascular revascularization techniques in the treatment of Peripheral Artery Disease

03

Course Management

The teachers of this Postgraduate Certificate are highly qualified and experienced professionals in the field of vascular medicine. In fact, they come from specialties such as Angiology and Vascular Surgery, which will allow them to offer an interdisciplinary and comprehensive perspective on the subject. In addition, these mentors possess not only in-depth theoretical knowledge, but also extensive practical experience in performing interventional procedures on the arteries of the lower extremity arteries.





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Thanks to their experience and dedication, the faculty of this Postgraduate Certificate will play a key role in preparing you to address peripheral vascular diseases”

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



04

Structure and Content

This Postgraduate Certificate in Interventional Procedures in Lower Limb Arteries will cover a wide range of fundamental topics. Beginning with a detailed understanding of the indications for intervention in lower extremity arteries, including Stenosis, Occlusions and Peripheral Artery Disease (PAD), professionals will examine crucial imaging techniques for diagnosis and follow-up, such as digital arteriography and Doppler ultrasound. In addition, advanced therapeutic options for Stenosis and Occlusions, such as balloon angioplasty and stenting, will be addressed, along with a thorough exploration of surgical and endovascular revascularization techniques.





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You will cover vascular anatomy and physiology, identification of indications for intervention, such as Stenosis and Occlusions, and diagnosis using imaging techniques, such as digital arteriography and Doppler ultrasound”

Module 1. Interventional Procedures in Lower Extremity Arteries

- 1.1. Interventional Procedures in Chronic Occlusive Disease
 - 1.1.1. Occlusive Disease in the Arteries of the Lower Limbs
 - 1.1.2. Clinical Evaluation and Diagnosis of Chronic Occlusive Disease
 - 1.1.3. Endovascular Therapeutic Strategies for the Management of Chronic Occlusive Disease
- 1.2. Percutaneous Interventions in the Superficial Femoral and Popliteal Artery
 - 1.2.1. Percutaneous Interventions in the Superficial and Popliteal Arteries
 - 1.2.2. Angioplasty and Stenting Techniques in the Superficial Femoral and Popliteal Artery
 - 1.2.3. Complications and Postoperative Management of Percutaneous Interventions
- 1.3. Angioplasty and Stents in the Tibial Artery
 - 1.3.1. Evaluation and Diagnosis of Arterial Disease in the Tibial Arteries
 - 1.3.2. Techniques of Angioplasty and Stenting in the Tibial Artery
 - 1.3.3. Clinical Outcome and Prognosis After Tibial Angioplasty and Stenting
- 1.4. Interventional Procedures in Acute Limb Ischemia
 - 1.4.1. Acute Ischemia in the Lower Limbs
 - 1.4.2. Diagnostic Evaluation and Differential Diagnosis of Acute Ischemia
 - 1.4.3. Emergency Management and Endovascular Treatment of Acute Ischemia of the Limbs
- 1.5. Endovascular Treatment of Popliteal Artery Aneurysm
 - 1.5.1. Development of Popliteal Aneurysms
 - 1.5.2. Diagnosis and Evaluation of Popliteal Artery Aneurysms
 - 1.5.3. Endovascular Treatment Options and Management of Popliteal Aneurysms
- 1.6. Interventional Procedures in the Common Femoral Artery Aneurysm
 - 1.6.1. Common Femoral Artery Aneurysms
 - 1.6.2. Diagnostic Evaluation and Diagnostic Imaging of Common Femoral Aneurysms
 - 1.6.3. Endovascular Therapeutic Approaches and Surgical Considerations for Common Femoral Aneurysms





- 1.7. Interventional Procedures in Penetrating Trauma. Knee Dislocation
 - 1.7.1. Penetrating Trauma in the Lower Limbs
 - 1.7.2. Vascular Complications Associated with Knee Dislocation
 - 1.7.3. Endovascular Treatment Strategies and Postoperative Rehabilitation
- 1.8. Interventional Procedures in Vasculitis. Ergotism
 - 1.8.1. Vasculitis in the Lower Limbs
 - 1.8.2. Ergotism: Etiology, Clinical Presentation and Vascular Manifestations
 - 1.8.3. Endovascular Management and Treatment of Vasculitis and Ergotism in the Context of the Lower Limbs
- 1.9. Interventional Procedures in Popliteal Artery Entrapment Adventitial Cystic Disease
 - 1.9.1. Popliteal Artery Entrapment
 - 1.9.2. Adventitial Cystic Disease of the Popliteal Artery
 - 1.9.3. Endovascular Treatment and Management of Popliteal Artery Entrapment and Cystic Adventitial Disease
- 1.10. Use of Artificial Intelligence in Intervention in Lower Extremity Arteries
 - 1.10.1. AI Applications in Vascular Image Analysis
 - 1.10.2. Outcome Prediction and Treatment Selection
 - 1.10.3. Integration of AI in Endovascular Procedures



From basic concepts to advanced procedures, this program will provide you with a solid foundation, upgrading your ability to effectively treat patients with peripheral arterial disease"

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.



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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.

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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.

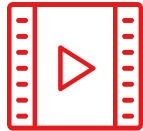
Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

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

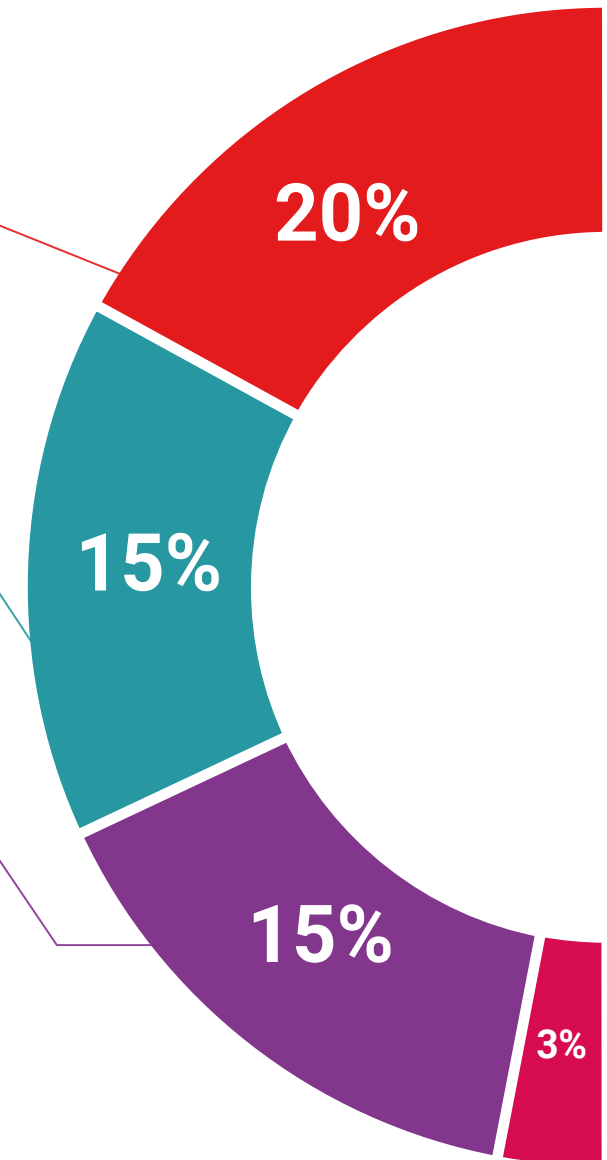
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

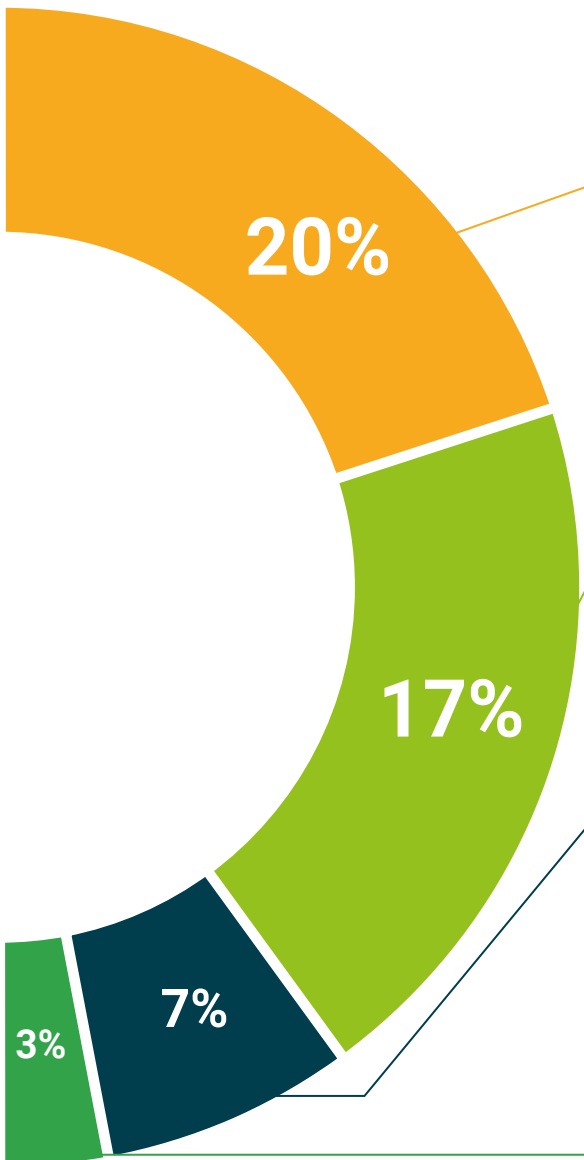
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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 Arteries guarantees, in addition to the most accurate and up-to-date knowledge, access to a 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 Interventional Procedures in Lower Limb Arteries** 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 Arteries**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**





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