

# Postgraduate Certificate

## Venous Diseases





## Postgraduate Certificate Venous Diseases

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-certificate/venous-diseases](http://www.techtute.com/us/medicine/postgraduate-certificate/venous-diseases)

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# 01

# Introduction

The technological revolution has brought with it new advances in medicine, being the treatment of Venous Diseases one of the most affected due to its constant updates. In this way, new procedures have been implemented for the management of cases such as varicose veins, thrombosis and pelvic congestion syndrome. Therefore, it is essential that the professional in the area update their knowledge in this field and be trained correctly to offer their patients a more specialized care. In view of this, TECH has created the following 100% online program, in which it will provide rigorous information through audiovisual materials, complementary readings and practical exercises. All this provided by the best minds in the industry, experts and specialists with several years of experience at the top of the profession.





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*A program that allows you to combine  
your daily routine with the acquisition  
of new knowledge”*

Venous Diseases affect approximately half of the population, preventing them from standing or sitting for a certain period of time. For this reason, several physicians and entities have had to focus their study on these pathologies, finding in recent years new ways of approach and medical treatment. In this sense, less invasive alternatives have been found, as well as new oral anticoagulants that are more effective and safer than the traditional ones. For this reason, the medical professional must be aware of all these advances in order to offer his patients the best specialized care.

In view of this situation, TECH has created the following program, which will allow the graduate to delve into the most relevant and up to date aspects of the approach to Venous Diseases. During 6 weeks of intensive updating, you will learn the non-invasive and invasive techniques for the diagnosis of conditions, deepening in turn in the use of drugs and oral anticoagulants. All this through audiovisual materials, complementary readings and practical exercises.

Therefore, thanks to this program, the professional will be trained quickly and effectively in a booming and constantly growing sector. They will have 24-hour access to the virtual campus to develop the proposed activities, so they will only need a device with an internet connection. In addition, you will not have to go to an on-site center and you will be able to accommodate your course load to the time of your choice.

This **Postgraduate Certificate in Venous Diseases** 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 Venous Diseases
- ♦ 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 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



*Be able to detect the perfected Stripping procedures for the surgical management of Venous Diseases"*



*You will delve into the different risk factors for the development of Venous Diseases"*

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 academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*You will face real and simulation cases, having to test your acquired knowledge.*

*The 100% online format is complemented by the most innovative audiovisual material in the educational market. What are you waiting for? Enroll now!*





# 02 Objectives

In order to guarantee a rigorous training focused on the demands of the labor field, the design of this Postgraduate Certificate has been carried out with the intention of providing professionals with the latest advances in the management of Venous Diseases. Throughout this educational experience, students will be able to update their knowledge regarding the diagnosis of these conditions and their pharmacological and non-pharmacological treatments. In addition, students will have access to audiovisual resources and complementary readings, having access to valuable information of great impact.







*Adopt in your medical practice  
the latest advances in Venous  
Diseases in only 6 weeks"*



## General Objectives

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- ♦ Learn about the structure and function of blood vessels, both arterial and venous, and the regulation of blood flow in the microcirculation
- ♦ Delve into the epidemiology and Risk Factors
- ♦ Update knowledge on the main risk factors for the development of vascular diseases and the strategies for primary and secondary prevention
- ♦ Gain in-depth understanding of the pathophysiology of vascular diseases
- ♦ Inquire into the different diagnostic methods
- ♦ Delve into the diagnostic techniques used in vascular pathology, including clinical examination and vascular semiology, imaging methods, laboratory diagnosis and study of vascular function and hemodynamics
- ♦ Explain the different research methods and advances in vascular pathology, especially those focused on vascular pathology, including the development of new drug therapies, genetics and genomics in vascular diseases, and the development of new imaging techniques for the diagnosis and follow-up of vascular diseases





## Specific Objectives

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- ♦ Delve into the anatomy and physiology of veins
- ♦ Describe the etiology of venous diseases, including risk factors and hereditary causes
- ♦ Delve into the clinical assessment and diagnostic imaging of venous diseases, such as deep vein thrombosis and chronic venous insufficiency
- ♦ Update knowledge in pharmacological and non-pharmacological treatments of venous diseases
- ♦ Delve into surgical and minimally invasive procedures to treat venous disease, such as phlebectomy and endovenous ablation

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*You will develop broad skills for the diagnosis of Venous Diseases, using ultrasound, Doppler and echo-Doppler techniques”*



# 03

# Course Management

One of TECH's priorities when designing its programs is the formation of a teaching staff that provides knowledge and experience. Therefore, for this Postgraduate Certificate, TECH has selected professionals specialized in the management of Venous Diseases, who in addition to standing out in the health field, have worked together in the syllabus. Therefore, professionals will have access to exclusive material that will allow them to train under the guidance of the best.





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*TECH has selected for you, a first class teaching staff committed to your professional updating”*

## Management



### Dr. Del Río Sola, María Lourdes

- ♦ Head of the Angiology and vascular surgery at Valladolids Clinical University Hospital
- ♦ Specialist in Angiology and Vascular Surgery
- ♦ European Board in Vascular Surger
- ♦ Permanent Correspondents of the Royal Academy of Medicine and Surgery
- ♦ Professor at Miguel de Cervantes European University
- ♦ Associate Teacher in Health Sciences, University of Valladolid

## Professors

### Dr. Flota Medina, Cintia

- ♦ Head of the Angiology and vascular surgery at Valladolids Clinical University Hospital
- ♦ Specialist in Angiology and Vascular Surgery
- ♦ PhD Cum Laude in Surgery from the University of Valladolid
- ♦ Member of Scientific Committee of the Endovascular Surgery Chapter of the Spanish Society of Angiology and Vascular Surgery (SEACV)





# 04

## Structure and Content

The syllabus of this program consists of an educational compendium through which the student will delve into the most advanced aspects related to the management of Venous Diseases. In all its subjects, there are a wide number of didactic resources available in a variety of textual and multimedia formats, which allows you to adapt your study to your educational preferences. In addition, its 100% online mode will enable you to combine your learning with your personal and professional obligations.





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*Download the content of this program to your preferred device, be it tablet, computer or mobile and review it as many times as you need"*

## Module 1. Venous Diseases

- 1.1. Venous Diseases
  - 1.1.1. Classification of Venous Diseases according to their origin: primary and secondary
  - 1.1.2. Venous diseases according to their anatomical location: superficial and deep varicose veins
  - 1.1.3. Definition and differences between acute and chronic Venous Diseases
- 1.2. Etiology of Venous Diseases
  - 1.2.1. Risk factors for the development of Venous Diseases: age, gender, obesity, sedentary lifestyle
  - 1.2.2. Etiology of secondary venous diseases: trauma, thrombosis, tumors
  - 1.2.3. Relationship between diseases and chronic venous insufficiency
- 1.3. Symptoms and Signs of Venous Diseases
  - 1.3.1. Early symptoms of Venous Diseases: fatigue, heaviness and pain in the legs
  - 1.3.2. Visible signs of Venous Diseases: dilated veins, edema and skin changes
  - 1.3.3. Advanced symptoms of Venous Diseases: ulcers, infections and bleeding
- 1.4. Diagnosis of Venous Diseases: methods and techniques
  - 1.4.1. Non-invasive techniques for the diagnosis of Venous Diseases: ultrasound, Doppler and echo-Doppler
  - 1.4.2. Invasive methods for the diagnosis of Venous Diseases: phlebography and angiotomography
  - 1.4.3. Clinical evaluation of the patient with Venous Diseases: clinical history, physical examination and laboratory tests
- 1.5. Medical treatment of Venous Diseases: phlebotonic drugs, anticoagulants
  - 1.5.1. Phlebotonic drugs for the treatment of Venous Diseases: action and side effects
  - 1.5.2. Anticoagulants for the treatment of Venous Diseases: types and duration of treatment
  - 1.5.3. Combination of phlebotonic and anticoagulant drugs in the treatment of Venous Diseases
- 1.6. Endovascular treatment of Venous Diseases: sclerosis, phlebectomy, catheterization
  - 1.6.1. Sclerosis as a technique for endovascular treatment of venous diseases: types and procedure
  - 1.6.2. Phlebectomy as an endovascular treatment technique for venous disease: types and procedure
  - 1.6.3. Catheters for endovascular treatment of venous disease: types and clinical use







- 1.7. Surgical treatment of Venous Diseases: stripping, ligation
  - 1.7.1. Stripping as a surgical technique for the treatment of Venous Diseases: types and procedure
  - 1.7.2. Ligation as a surgical technique for the treatment of Venous Diseases: types and procedure
  - 1.7.3. Comparison between endovascular and surgical techniques for the treatment of Venous Diseases
- 1.8. Management of venous ulcers
  - 1.8.1. Local care in the management of venous ulcers: cleaning and bandage
  - 1.8.2. Medical treatment of venous ulcers: compressive therapy and topical drugs
  - 1.8.3. Surgical treatment of venous ulcers: skin grafts
- 1.9. Venous rehabilitation
  - 1.9.1. Exercises for vascular rehabilitation: walking, cycling, and swimming
  - 1.9.2. Massages for vascular rehabilitation: techniques and benefits
  - 1.9.3. Physical therapy techniques for vascular rehabilitation: electrostimulation and ultrasound
- 1.10. Prognosis and follow-up of Venous Diseases
  - 1.10.1. Factors influencing the prognosis of Venous Diseases: type of disease, age of the patient and presence of complications
  - 1.10.2. Evaluation of the prognosis of Venous Diseases: imaging tests and clinical follow up
  - 1.10.3. Long-term follow-up of patients with venous disease: frequency and purpose of follow-up visits



*You will be guaranteed dynamic learning focused on the current demands of the professional field, so you will find a high-impact syllabus"*

# 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. Gervas, 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 Venous Diseases guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”*



This **Postgraduate Certificate in Venous Diseases** contains the most complete and up-to-date scientific on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in Venous Diseases**

Official N° of Hours: **150 h.**



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

future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
development languages  
virtual classroom



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- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

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