

# Postgraduate Certificate

Pre and Postoperative Care  
of the Vascular Patient





## Postgraduate Certificate Pre and Postoperative Care of the Vascular Patient

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

Website: [www.techtute.com/in/medicine/postgraduate-certificate/pre-postoperative-care-vascular-patient](http://www.techtute.com/in/medicine/postgraduate-certificate/pre-postoperative-care-vascular-patient)

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# 01

# Introduction

Successful management of vascular disease and recovery from surgical procedures are highly dependent on preoperative and postoperative care in vascular surgery. These practices are critical to ensure adequate patient preparation and recovery, reduce complications and improve outcomes. That is why medical professionals in this field must be constantly up to date on the most advanced care techniques. This TECH program meets these requirements, offering a 100% online compilation of the latest scientific advances in this field. All this, taught through the Relearning methodology by experts of great prestige in the vascular surgical field.





*Master the most advanced techniques in the Pre and Postoperative Care of the Vascular Patient with this Postgraduate Certificate, and become a referent in this field".*

The circulatory system is essential for maintaining human health and well-being, and vascular diseases have become an increasing concern in the global population. With an aging demographic and an increase in risk factors such as obesity, hypertension and diabetes, pathologies ranging from coronary artery disease (CAD) and aortic aneurysms to deep vein thrombosis (DVT) are becoming increasingly common.

These conditions are addressed by vascular surgery, which makes it possible to restore blood flow, preventing serious difficulties and improving the quality of life of patients. However, these surgical procedures require special care before and after admission to the operating room. These care protocols focus on optimizing medical care with the aim of minimizing complications and improving surgical outcomes.

In this perspective, TECH has designed the Postgraduate Certificate in Pre and Postoperative Care of the Vascular Patient, a 100% online educational program that provides students with a comprehensive and up-to-date approach to the management of patients with vascular disease before and after the surgical procedure. This program covers topics such as assessment and management of risk factors, pain control and rehabilitation.

The Relearning pedagogical methodology combines theoretical teaching with practical cases and examples. In addition, the flexibility to organize educational resources provides students with the opportunity to balance their work and personal commitments with their studies. In this way, medical professionals will master the latest advances in this important area, enabling them to provide optimal care and improve outcomes in vascular patients.

This **Postgraduate Certificate in Pre and Postoperative Care of the Vascular Patient** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Clinical Analysis cases presented by experts in vascular surgery
- 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



*Get up to date on surgical wound care techniques and postoperative pain management to improve your patients' quality of care"*

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*Address in just 150 hours the protocols of care focused on minimizing complications and improving outcomes in vascular surgery”*

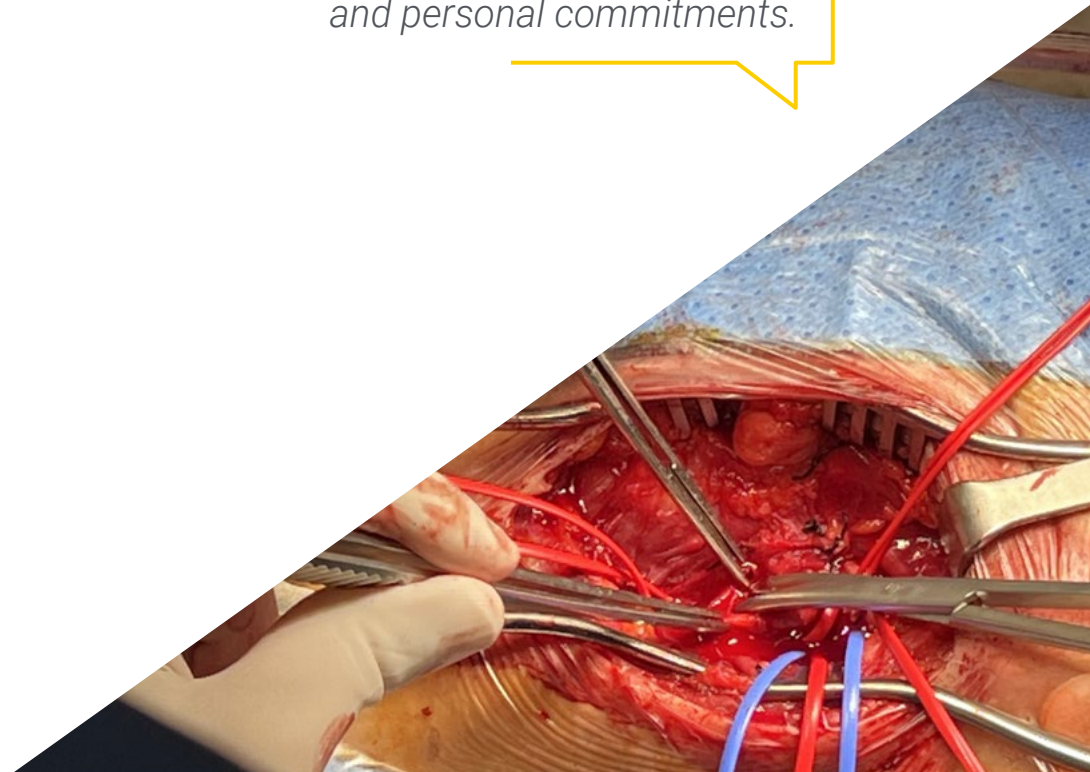
The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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.

*Delve into relevant topics as assessment of risk factors, pain control and rehabilitation in vascular patients.*

*Discover the flexibility of a 100% online program that allows you to adapt your studies to your pace and personal commitments.*



# 02

# Objectives

This program aims to provide medical professionals with an up-to-date and current educational foundation in the Pre and Postoperative Care of the Vascular Patient. Backed by advanced pedagogical approaches, TECH integrates the latest technology in online teaching software and a theoretical-practical syllabus designed by experts in the field. In this way, students will be prepared in the comprehensive management of patients with vascular diseases, improving their skills and knowledge to face current and future clinical challenges in this crucial area of medicine.







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*Strengthen your clinical skills in preoperative evaluation, surgical risk assessment and vascular patient preparation"*



## 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
- 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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- ◆ Update comprehensive patient assessment procedures to determine if the patient is a candidate for vascular surgery, including a thorough evaluation of medical history, family history, medications, and lifestyle habits
- ◆ Be aware of preoperative protocols, including the performance of diagnostic tests, administration of medications and preparation of the surgical team
- ◆ Delve into the periodic assessment and monitoring of the patient's evolution after vascular surgery, including the identification and management of possible complications, such as infections, thrombosis or hemorrhages



*You will be prepared to face clinical challenges in vascular pathology and improve your daily clinical practice"*

03

# Course Management

The teaching team of the Postgraduate Certificate in Pre and Postoperative Care of the Vascular Patient has been carefully selected by TECH, bringing together a group of professionals in the field of vascular surgery and associated medical care. Thanks to their practical approach and vast experience in the area, they will guide students through real clinical cases and practical exercises, allowing them to master the latest postulates and apply them in situations similar to those they will face in their professional practice.

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*Obtain quality learning, supported by experts of great prestige in the vascular surgical field"*

## Management



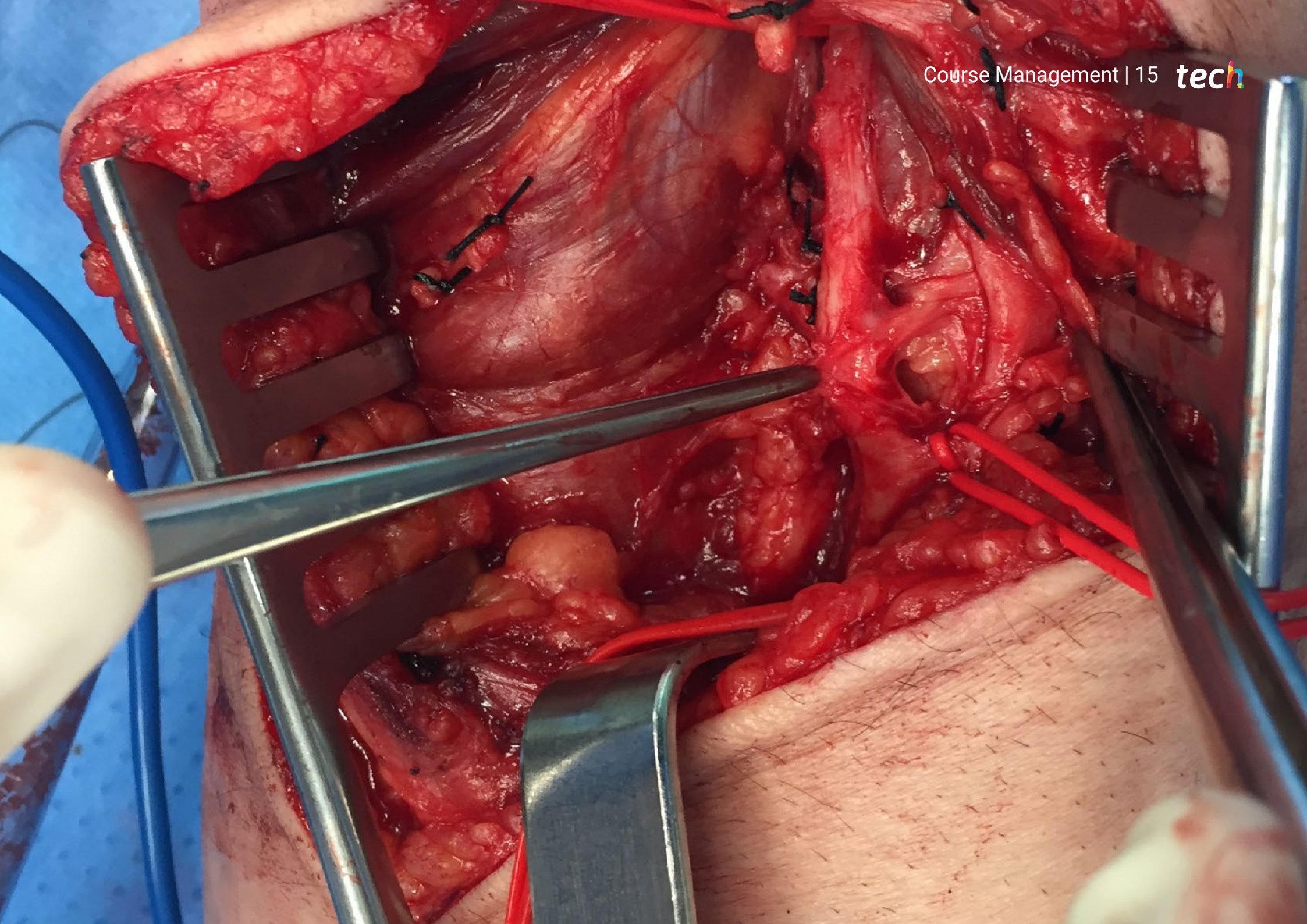
### Dr. Del Río Sola, María Lourdes

- ♦ 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. Martín Pedrosa, José Miguel

- ♦ 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 Postgraduate Certificate has been designed to offer the most advanced techniques in the Pre and Postoperative Care of the Vascular Patient. An educational course of 150 hours that will allow students to be up to date in the methods of preoperative evaluation, monitoring and postoperative control, as well as the care of the surgical wound, postoperative rehabilitation, and long-term follow-up of the patient. All this, in a 100% online format where students can access from any time and place, combining their studies to their personal and professional life.







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*Enroll now and delve into the most innovative techniques in monitoring, control and postoperative rehabilitation of vascular patients”*

## Module 1. Pre and Postoperative Care of the Vascular Patient

- 1.1. Preoperative evaluation: clinical history and physical examination
  - 1.1.1. Importance of the clinical history in the preoperative evaluation: obtaining information on medical history, medications, allergies, lifestyle, etc.
  - 1.1.2. Physical examination in the preoperative evaluation: assessment of cardiovascular, respiratory and neurological function, measurement of blood pressure, auscultation of heart and lung sounds, etc.
  - 1.1.3. Surgical risk assessment based on age, general health status, presence of chronic diseases, etc.
- 1.2. Preoperative evaluation: diagnostic tests and preparation of the patient
  - 1.2.1. Importance of the preoperative evaluation in surgical risk reduction
  - 1.2.2. Types of diagnostic tests used in the preoperative assessment and their relevance in clinical decision making
  - 1.2.3. Preparation of the patient for the preoperative evaluation and its influence on the safety and success of the surgical procedure
- 1.3. Postoperative care planning
  - 1.3.1. Assessment of postoperative care needs: patient dependency, pain level, nutritional needs, mobility, etc.
  - 1.3.2. Planning the transition from hospital to home: preparation of the home, follow-up by a physician or nurse, recommendations for recovery, etc.
  - 1.3.3. Long-term medical follow-up planning: follow-up appointments with surgeon, follow-up testing, lifestyle recommendations to maintain vascular health
- 1.4. Postoperative Monitoring and Control
  - 1.4.1. Importance of postoperative monitoring: early detection of complications, evaluation of treatment efficacy
  - 1.4.2. Postoperative monitoring techniques: monitoring of blood pressure, heart rate, respiratory rate, oxygenation, etc.
  - 1.4.3. Management of postoperative complications: prevention of infections, pain control, management of arterial hypertension, treatment of renal insufficiency, etc.
- 1.5. Postoperative Pain Management
  - 1.5.1. Importance of postoperative monitoring: early detection of complications, assessment of treatment efficacy, monitoring of patient progress, etc.
  - 1.5.2. Postoperative monitoring techniques: monitoring of blood pressure, heart rate, respiratory rate, oxygenation, etc.
  - 1.5.3. Management of postoperative complications: prevention of infections, pain control, management of arterial hypertension, treatment of renal insufficiency, etc.





- 1.6. Management of postoperative complications
  - 1.6.1. Post-Operation Infections
  - 1.6.2. Postoperative bleeding
  - 1.6.3. Venous thromboembolism
- 1.7. Care of Surgical Wounds
  - 1.7.1. Suture Techniques
  - 1.7.2. Use of bandages and dressings
  - 1.7.3. Assessment and prevention of surgical wound infection
- 1.8. Assessment and prevention of surgical wound infection
  - 1.8.1. Types of Diets Post Surgery
  - 1.8.2. Routes of administration of nutrition and fluids
  - 1.8.3. Nutritional and Vitamin Supplements
- 1.9. Nutritional and Vitamin Supplements
  - 1.9.1. Early mobilization exercises
  - 1.9.2. Muscle strengthening
  - 1.9.3. Physical therapy techniques to improve motor function
- 1.10. Long-Term Monitoring of the Vascular Patient
  - 1.10.1. Control of High Blood Pressure
  - 1.10.2. Assessment of Renal Function
  - 1.10.3. Monitoring progression of vascular disease and prevention of recurrence



*Access to the most complete program in Pre and Postoperative Care of the Vascular Patient, with the support of TECH's Relearning methodology"*

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 Pre and Postoperative Care of the Vascular Patient 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 Pre and Postoperative Care of the Vascular Patient** 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 certificate 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 Pre and Postoperative Care of the Vascular Patient**

Official N° of Hours: **150 h.**



\*Apostille Convention. In the event that the student wishes to have their paper certificate 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  
online training  
development languages  
virtual classroom



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