Postgraduate Diploma Interventional Vascular Radiology



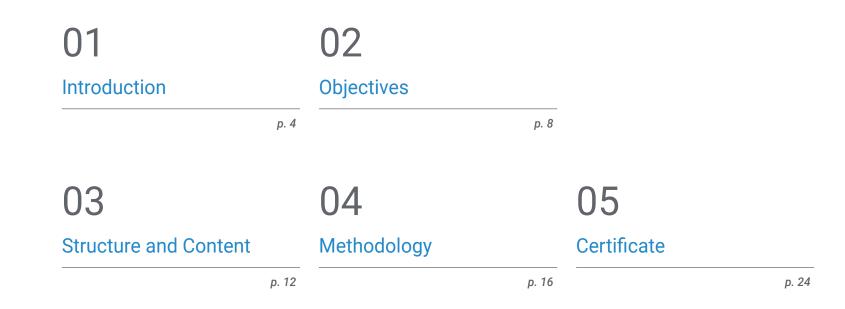


Postgraduate Diploma Interventional Vascular Radiology

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

Acceso web: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-interventional-vascular-radiology

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01 Introduction

Interventional Vascular Radiology continues to be of increasing relevance in medicine today. Vascular embolization techniques have been evolving rapidly in recent years due to the development of technological innovation and bioengineering. The knowledge of these new materials, techniques and their implementation in the medical process, make it essential for the interventional radiologist to be constantly updated.



The new scenarios in current radiology push us to propose new training programs that meet the real needs of experienced professionals, so that they can incorporate the advances in Interventional Vascular Radiology to their medical practice"

tech 06 | Introduction

Interventional Vascular Radiology has evolved enormously in recent years, together with the development of new techniques and materials. Computer science, genetics and bioengineering have allowed an increase in the efficacy of these therapies and an approach to excellence with the development of personalized treatments.

The latest technological advances allow a less invasive and more efficient approach for very prevalent vascular pathologies such as venous insufficiency or pathologies of enormous complexity such as vascular malformations, lymphatic pathology or aneurysmal disease.

This Postgraduate Diploma includes the most important areas of Radiology organized by organ systems, including aspects of daily practice, such as the importance of the radiological report and its legal implications, as well as the most frequent entities where Radiology has a fundamental role (head and neck, thorax, abdomen, musculoskeletal and women's radiology).

A complete and modern updating program, based on the latest advances in interventional Radiology, developed through the latest educational technology, to update the professional and improve patient care.

This **Postgraduate Diploma in Interventional Vascular Radiology** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Clinical cases presented by specialists in Radiology and other specialties
- 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
- Real high-resolution images of pathologies, diagnostic imaging tests and guided procedures
- Presentation of practical workshops on procedures and techniques
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- Action protocols with the most important advances in the specialty
- All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- With a special emphasis on evidence-based medicine and research methodologies in Radiology
- Content that is accessible from any fixed or portable device with an Internet connection

You will be able to learn about the most recent advances in the field of Interventional Vascular Radiology, using the latest educational technology"

Introduction | 07 tech

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This Postgraduate Diploma is the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Interventional Vascular Radiology you will obtain a qualification from TECH Technological University"

The teaching staff includes a team of leading Radiologists who bring their professional experience to this program, in addition to renowned specialists in other medical areas.

The multimedia content developed with the latest educational technology will provide the physician with situated and contextual learning, i.e., a simulated environment that will provide immersive training programmed to train in real situations.

This program is focused on Problem-Based Learning, whereby the specialist must try to solve the different professional practice situations that arise during this training. For this reason, you will be assisted by an innovative, interactive video system created by renowned experts in the field of radiology with extensive teaching experience.

Incorporate the latest developments in Interventional Vascular Radiology to your medical practice and improve patient prognosis.

It includes clinical cases and real images in high definition to bring clinical practice as close as possible to the development of the program.

02 **Objectives**

The main objective is to facilitate the incorporation of the advances made in Interventional Vascular Radiology, ensuring that the specialist can update their knowledge in a practical way, with the latest educational technology and adapting the educational process to their real needs.



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tech 10 | Objectives



General Objective

• Update the specialist on the procedures and techniques performed in Interventional Vascular Radiology, incorporating the latest advances to increase the quality of their daily medical practice and improve patient prognosis

> A path to achieve education and professional growth that will propel you towards a greater level of competitiveness in the employment market"

Specific Objectives

Module 1. Basis of Intervention Procedures

- Describe the techniques for therapeutic neurointerventionism, their indications, alternatives, and medical management
- * Address the treatment of cerebral vasospasm, ischemic stroke and intracerebral AVMs
- Identify the spinal vascular malformations

Module 2. Materials in Interventional Techniques

- * Know the most commonly used materials in neurointerventionism
- Know and identify vascular, oncologic, musculoskeletal, drainage and non-vascular interventional materials, as well as materials for drainage and non-vascular interventions

Module 3. Venous and Lymphatic Interventional Procedures

- Identify invasive diagnostic techniques in venous pathology of upper and lower limbs
- Review the latest evidence in superior and inferior vena cava tumor obstructive pathology
- Analyze the latest advances in venous thromboembolic disease
- Increase knowledge of central venous access techniques and placement of catheters and central venous devices
- Manage intravenous dialysis catheters
- Increase knowledge about percutaneous lymphatic venous system access and invasive diagnosis and therapy of the lymphatic system
- Apply indications and techniques for transjugular liver biopsy and hepatic hemodynamic study, as well as venous sampling
- Distinguish the different percutaneous techniques and strategies for the treatment of venous insufficiency in the lower extremities

Objectives | 11 tech

Module 4. Vascular Diagnosis

- Gain up-to-date knowledge on invasive vascular diagnostic procedures at the level of the thorax, abdomen and lower limbs
- Increase knowledge of dilatation and *stenting* techniques in the peripheral vascular system
- Describe the techniques of thrombectomy and fibrinolysis of the peripheral vascular system
- Describe the techniques for vascular therapy, their indications, alternatives, and medical management

Module 5. Vascular Therapy

- Update the techniques of exoplasty and vascular recanalization in the abdominal visceral trunks
- Correctly apply the treatment of aneurysmal disease at the level of the visceral trunks of the abdominal aorta
- Recognize the differences between the techniques of endoprosthesis implantation in aortic aneurysms
- Review the latest revascularization techniques in the treatment of the diabetic foot
- Gain up-to-date knowledge procedures for stenting, tightening and balloon dilations in the peripheral vascular system

Module 6. Embolotherapy

- Describe the techniques of renal, prostate, uterine, portal and trauma embolization, their indications, alternatives and medical management
- Describe chemoembolization and hepatic DEBIRI, its indications, alternatives, and medical management
- Gain up-to-date knowledge non-invasive diagnostic procedures for the detection of arterial and venous bleeding
- Increase knowledge of non-invasive diagnostic techniques in the study of vascular malformations
- Recognize and apply the indications for treatment by embolotherapy in the different vascular territories and clinical scenarios
- Review the latest endovascular image-guided embolotherapy techniques
- Describe the treatment of emergencies in embolotherapy

03 Structure and Content

The structure of the syllabus has been designed by a team of professionals knowledgeable about the implications of medical training in Interventional Vascular Radiology, aware of the current relevance of this program and committed to quality teaching through new educational technologies.

This Postgraduate Diploma in Interventional Vascular Radiology contains the most complete and up-to-date scientific program on the market"

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Module 1. Basis of Intervention Procedures

- 1.1. Radiological Protection in Interventional Procedures
- 1.2. Arterial and Venous Puncture for Interventional Access: Seldinger and Trocar Technique
- 1.3. Ultrasound Puncture for Vascular Access
- 1.4. Compression of Puncture Sites and Care

Module 2. Materials in Interventional Techniques

- 2.1. Materials in Neurointerventionism
- 2.2. Materials in Vascular Interventional Techniques
- 2.3. Materials in Oncologic Interventional Techniques
- 2.4. Materials in Musculoskeletal Interventional Techniques
- 2.5. Materials for Drainages and Non-Vascular

Module 3. Venous and Lymphatic Interventional Procedures

- 3.1. Phlebography of the Upper and Lower Limbs. Cavography
- 3.2. Superior Vena Cava Syndrome
- 3.3. Pulmonary Embolism and Deep Vein Thrombosis
- 3.4. Central Routes, Port a Cath, PICS
- 3.5. Diagnostic and Therapeutic Lymphography
- 3.6. Inferior Vena Cava Filter Placement
- 3.7. Dialysis Catheter Placement, Replacement and Removal
- 3.8. Angioplasty and Thrombectomy of Vascular Access for Dialysis
- 3.9. Transjugular Liver Biopsy, Hepatic Hemodynamic Study and Hepatic Venous Sample
- 3.10. Treatment of Venous Insufficiency of MMII

Module 4. Vascular Diagnosis

- 4.1. Abdominal Aortography and Arteriography of Lower Limbs
- 4.2. Arteriography of Visceral Digestive Trunks



Structure and Content | 15 tech



Module 5. Vascular Therapy

- 5.1. Peripheral Vascular Angiopathy and *Stents*
- 5.2. Peripheral Intra-arterial Thrombolysis
- 5.3. Percutaneous Vascular Closures
- 5.4. ATP of Renal Arteries and Stent
- 5.5. ATP and *Stenting* of Visceral Digestive Trunks
- 5.6. Aneurysms in Visceral Arteries. Diagnosis and Treatment
- 5.7. Aortic Aneurysms. Endoprosthesis
- 5.8. Treatment of Diabetic Foot

Module 6. Embolotherapy

- 6.1. Upper and Lower Gastrointestinal Bleeding
- 6.2. Renal Embolization
- 6.3. Embolization in Trauma
- 6.4. Prostate Embolization
- 6.5. Uterine Embolization
- 6.6. Portal Embolization
- 6.7. Hepatic Chemoembolization
- 6.8. Hepatic DEBIRI

A unique, key, and decisive educational experience to boost your professional development"

04 **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"

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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:

 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.



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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.



Methodology | 21 tech

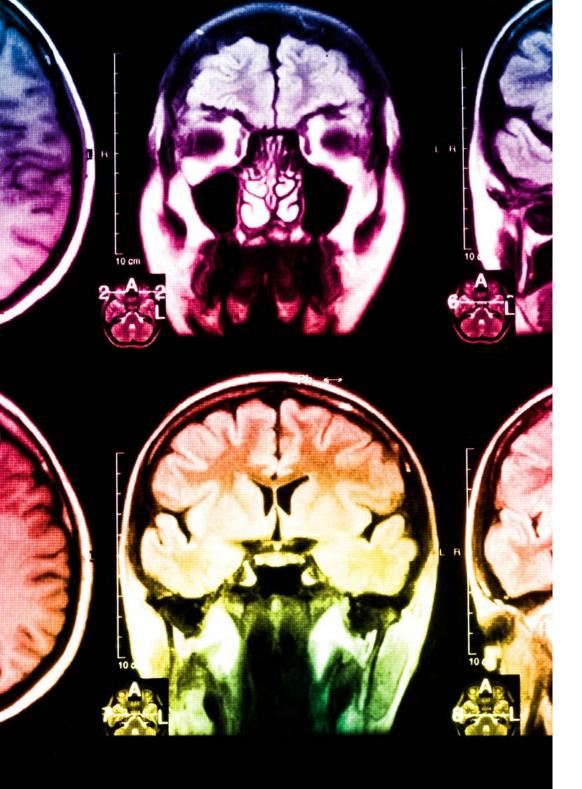
At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

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.



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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.

20%

15%

3%

15%

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.

Methodology | 23 tech



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.

20%

7%

3%

17%



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.

05 **Certificate**

The Postgraduate Diploma in Interventional Vascular Radiology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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"

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This **Postgraduate Diploma in Interventional Vascular Radiology** contains the most complete and up-to-date scientific program on the market.

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

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

Title: Postgraduate Diploma in Interventional Vascular Radiology Official No. of Hours: 400 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.

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