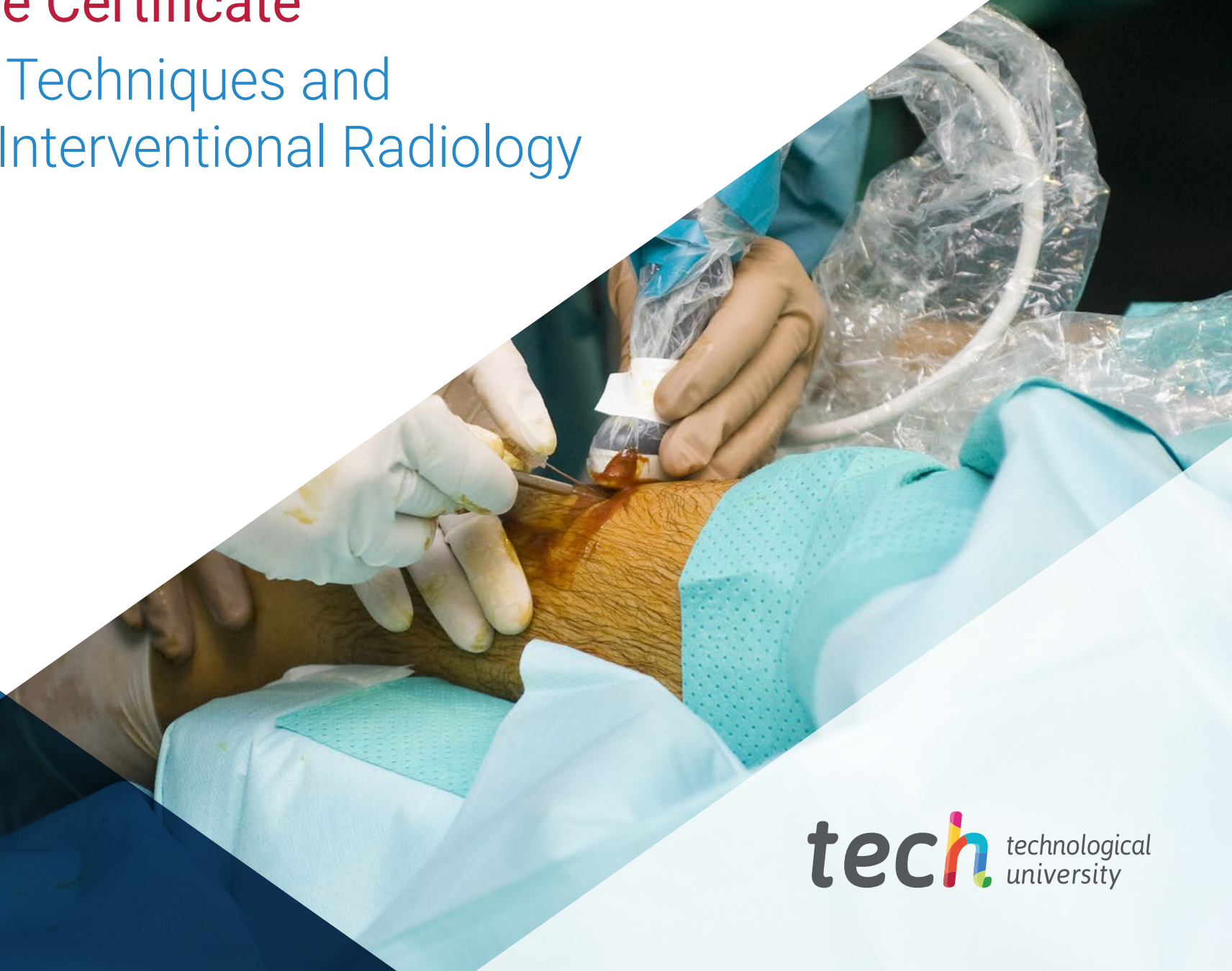


# Postgraduate Certificate

Advances in Techniques and  
Materials in Interventional Radiology





## Postgraduate Certificate

### Advances in Techniques and Materials in Interventional Radiology

- » Modality: online
- » Duration: 3 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-certificate/postgraduate-certificate-advances-techniques-materials-interventional-radiology](http://www.techtute.com/us/medicine/postgraduate-certificate/postgraduate-certificate-advances-techniques-materials-interventional-radiology)

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# 01

# Introduction

Interventional radiology procedures have evolved rapidly in recent years due to the development of new technologies, bioengineering and new materials. Knowledge of these advances, of the techniques and their implementation in the diagnostic and therapeutic process, make it essential for the specialist physician to be constantly updated in order to be able to carry out quality clinical practice.





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*New scenarios in today's radiology drive us to propose new specialization programs that meet the real needs of experienced professionals, so that they can incorporate new advances in materials and techniques into their daily practice"*

Advances in interventional radiology procedures undoubtedly improve patient outcomes, reducing the risk of complications in the most complicated diagnostic and therapeutic tests and improving patient prognosis.

In addition, knowing the most appropriate radioprotection measures to minimize the risk of radiation exposure as well as those to successfully complete the techniques in the shortest possible time are the basis for a good clinical practice in interventional radiology and image-guided therapy.

This program is aimed at providing the professional with the latest techniques in interventional radiology, as well as to get up to date with the new materials in use, in a practical way through the latest educational technology.

This **Postgraduate Certificate in Advances in Techniques and Materials in Interventional Radiology** contains the most complete and up-to-date scientific program on the market. The most important features of the University Course are:

- Clinical cases presented by specialists in radiodiagnostics and other specialties. The graphic, schematic, and eminently practical contents with which they are created, provide scientific and healthcare training on those medical disciplines that are essential to professional practice.
- Real high-resolution images of ultrasound techniques and new materials.
- Algorithm-based interactive learning system for decision-making in the presented clinical situations.
- Action protocols for radioprotection and the most important advances in image-guided therapeutic techniques.
- All this will be complemented by 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 be able to learn, through the latest educational technology, the latest advances in interventional radiology and its new materials”*

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*This Postgraduate Certificate may be the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge of Advances in Techniques and Materials in Interventional Radiology, you will obtain a certificate issued by TECH Technological University”*

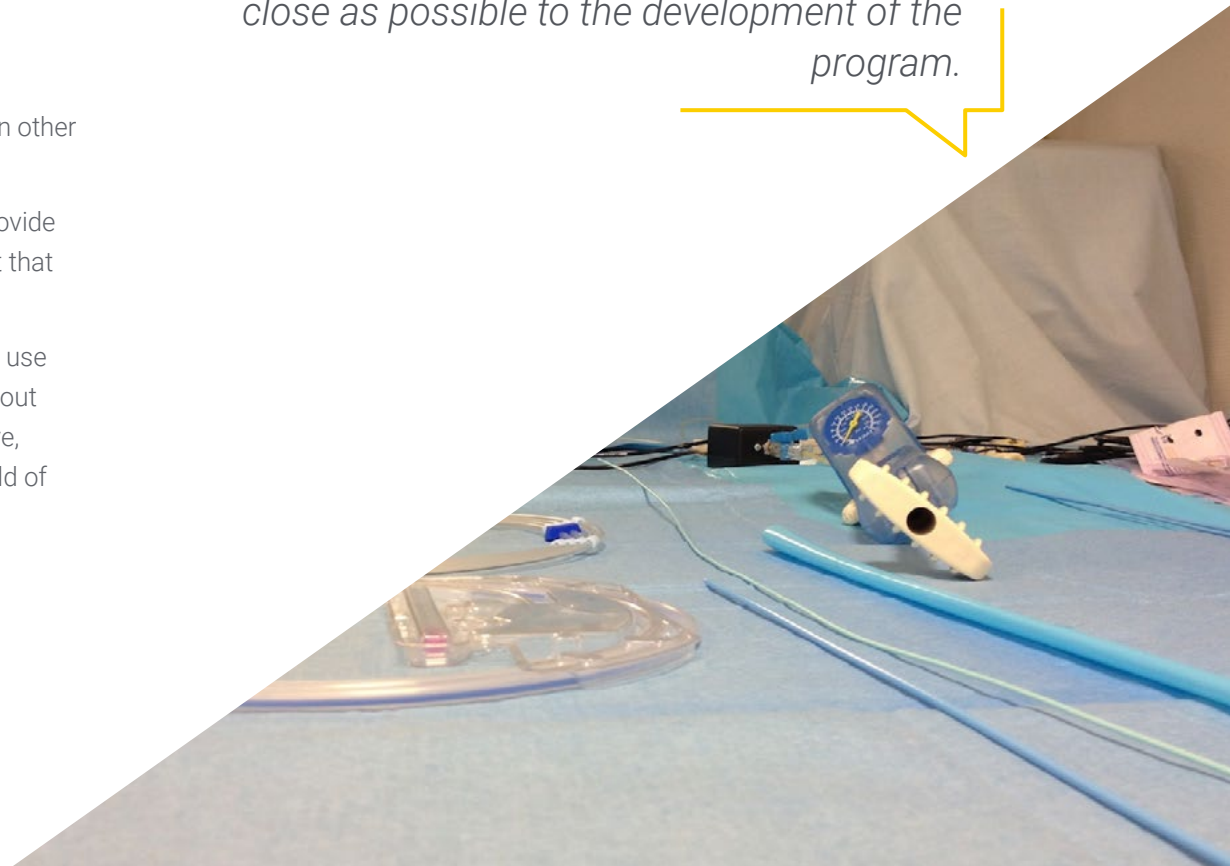
Its teaching staff includes a team of leading radiologists, who bring to this specialization the experience of their work, in addition to recognized specialists in other medical fields.

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.

Problem-Based Learning underpins this program design, and the specialist must use it to try and solve the different professional practice situations that arise throughout the Postgraduate Certificate. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of radiology with extensive teaching experience.

*Incorporate the latest developments in interventional radiology and new materials into your medical practice and improve your patients' 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 aimed at allowing the incorporation of the developments that are taking place in the approach to interventional radiology techniques, 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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*This refresher program will provide skills to act with confidence in decision making during the diagnostic process, and help you grow professionally”*



## General Objective

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- Update the medical specialist in the latest interventional radiology procedures and new materials in use, incorporating these latest advances in the discipline to increase the quality of their daily medical practice and improve patient prognosis.





## Specific Objectives

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- ♦ Identify the basis of second level radiological protection for interventional radiology.
- ♦ Differentiate the bases of percutaneous access in image-guided therapy.
- ♦ Correctly apply ultrasound-guided puncture techniques as a support in the different image-guided therapy techniques.
- ♦ Learn the basics of wound care and catheters as well as vascular access and the different techniques of sealing, compression and percutaneous sutures.
- ♦ Learn the basic and advanced access materials in neurointerventionism.
- ♦ Distinguish the different materials used in vascular interventional procedures.
- ♦ Learn about the materials used for endovascular treatments in oncologic interventionism.
- ♦ Learn about the different materials used for vascular accesses and treatments in musculoskeletal interventionism.
- ♦ Apply the different materials for percutaneous drainage, biopsy and puncture in non-vascular interventionism.

# 03

## Structure and Content

The structure of the curriculum has been designed by a team of professionals with knowledge of the implications of medical specialization in the approach to diagnostic radiology procedures, aware of the relevance of current specialization and committed to quality teaching through new educational technologies.



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*This Postgraduate Certificate in Advances in Techniques and Materials in Interventional Radiology contains the most complete and up-to-date scientific program on the market”*

### 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.





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*A unique, key, and decisive master's degree experience to boost your professional development”*

04

# Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

This teaching system is used 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 Re-learning, 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

In a given situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you can 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 potential 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 professional medical 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 grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on 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.



## Re-learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our 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, which represent a real revolution with respect to simply studying and analyzing cases.



*The physician will learn through real cases and by solving 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 Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

*Re-learning 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 (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards.



In this program you will have access to the best educational material, prepared with you 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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



#### Latest Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### Interactive Summaries

We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



#### Additional Reading

Recent articles, consensus documents, international guides. in our virtual library you will have access to everything you need to complete your training.





#### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through 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 your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



#### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an expert strengthens knowledge and memory, and generates confidence in our future difficult decisions.



#### Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.



# 05 Certificate

The **Postgraduate Certificate in Advances in Techniques and Materials in Interventional Radiology** guarantees, in addition to the most rigorous and up-to-date training, access to a **Postgraduate Certificate** issued by **TECH Technological University**.





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*Successfully complete this specialisation  
and receive your university degree without  
travel or laborious paperwork”*

This **Postgraduate Certificate in Advances in Techniques and Materials in Interventional Radiology** contains the most complete and updated scientific program on the market.

After the student has passed the evaluations, they will receive by mail with acknowledgment of receipt their corresponding certificate issued by **TECH Technological University**.

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

Diploma: **Postgraduate Certificate in Advances in Techniques and Materials in Interventional Radiology**

ECTS: 4

Nº Hours: 100



\*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.

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



## Postgraduate Certificate

Advances in Techniques  
and Materials in  
Interventional Radiology

- » Modality: online
- » Duration: 3 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

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