

Postgraduate Certificate

Diagnostic Imaging of the Chest



Postgraduate Certificate Diagnostic Imaging of the Chest

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

Website: www.techtitute.com/us/medicine/postgraduate-certificate/diagnostic-imaging-chest

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01

Introduction

Diagnostic imaging is becoming increasingly important in medicine. Radiodiagnostic techniques for pathologies of the chest have evolved rapidly in recent years due to the development of new technologies and bioengineering. Knowledge of these developments, techniques, indications and their implementation in the medical process, make it essential for the specialised doctor to be constantly updated.



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

Chest radiology studies a wide variety of pathologies with a high prevalence in our society. Radiological diagnosis is fundamental in the management of patients and, in most of them, it is the first complementary test performed. Recent technological advances have made it possible to perform venous angiographic studies for the detection of pulmonary thromboembolism and, in addition to high temporal resolution acquisitions, study coronary pathology.

The program is aimed at updating the professional in the study of the most important areas of the thorax, including air space pathology, interstitial diseases, pleural pathology, lung cancer, evaluation of the mediastinum, thoracic trauma or aortic and cardiac vascular pathology.

In addition, it is completed with a radiology management module, with the use of imaging biomarkers, dual-energy CT and multiparametric studies in radiology.

This **Postgraduate Certificate in Diagnostic Imaging of the Chest** contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- ♦ 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 practical information on the disciplines that are essential for professional practice
- ♦ Real high-resolution images, both of pathologies of the chest and imaging diagnostic tests
- ♦ Presentation of practical workshops on procedures and techniques
- ♦ Algorithm-based interactive learning system for decision-making in the presented clinical situations
- ♦ Action protocols for radioprotection and the most important developments in imaging diagnostic 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 diagnostic imaging of pathologies of the chest”

“ *This Postgraduate Certificate may be the best investment you can make when choosing a refresher program for two reasons: in addition to updating your knowledge in Diagnostic Imaging of the Chest, you will obtain a certificate from TECH Technological University*”

Its teaching staff includes a team of leading radiologists, who bring to this training 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.

This program is designed around Problem Based Learning, whereby the student must try to solve the different professional practice situations that arise during the course. 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 diagnostic imaging of the chest 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 diagnostic approach to the pathologies of the thoracic area, 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.



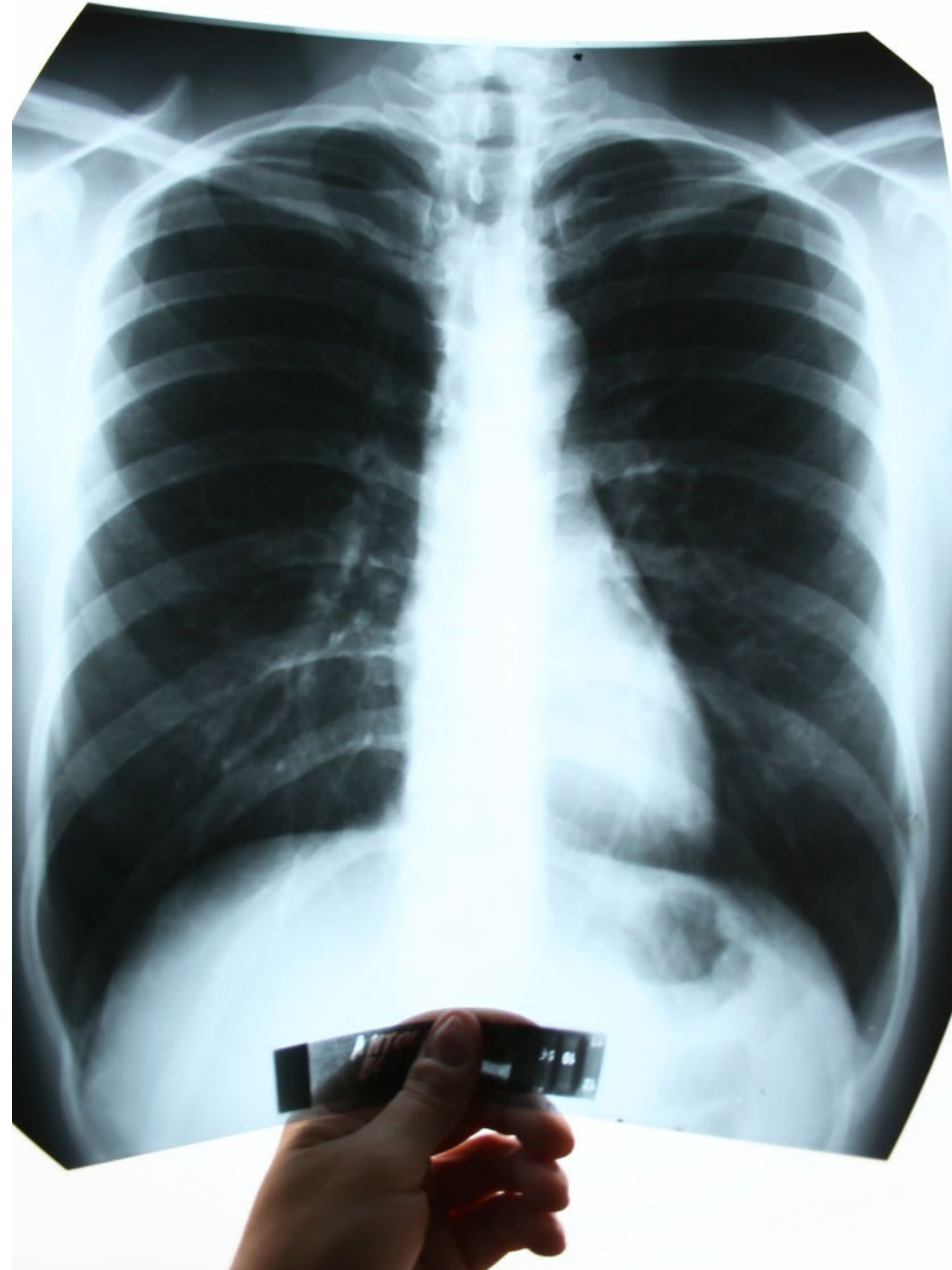
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This refresher program will generate a sense of confidence in decision making during the diagnostic process, and help you grow professionally”



General Objective

- Update the medical specialist in the latest procedures and techniques performed in the process of diagnosis of pathologies in the organs in the chest, incorporating these latest developments in the discipline to increase the quality of their daily medical practice and improve the patient's prognosis.





Specific Objectives

- ◆ Recognize in the different radiological techniques the pathology affecting the airspace, mediastinum and pleura
- ◆ Diagnose and stage lung cancer using radiological techniques
- ◆ Evaluate the response to lung cancer treatment
- ◆ Describe the radiological semiology of thoracic vascular pathology
- ◆ Evaluate the anatomy and cardiac pathology with CT and MRI.
- ◆ Recognise the latest advances in a cardiac CT and cardiac MRI
- ◆ Revise the technological advances in image biomarkers
- ◆ Analyze the technique and indications of dual-energy CT
- ◆ Evaluate the methodology of multiparametric studies in radiology



03

Structure and Content

The structure of the syllabus has been designed by a team of professionals with knowledge of the implications of medical training in the approach to the diagnostic process, who are aware of the relevance of the up-to-date training, and are committed to quality teaching using new educational technologies.



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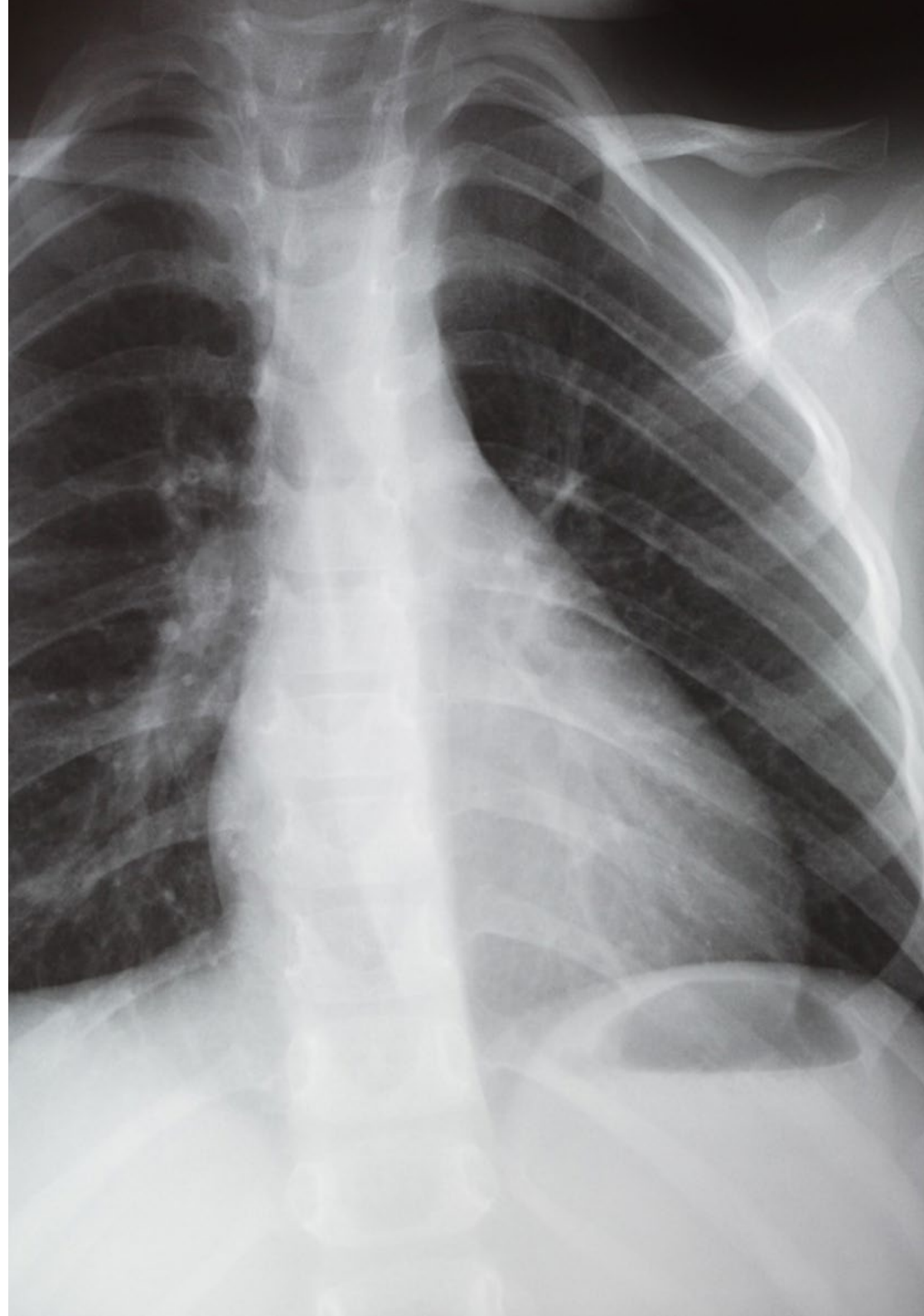
This Postgraduate Certificate in Diagnostic Imaging of the Chest contains the most complete and up-to-date scientific program on the market”

Module 1. Chest

- 1.1. Airspace Pathology
- 1.2. Pleural Pathology
- 1.3. ILD (Diffuse Interstitial Lung Diseases)
- 1.4. COPD (Acute Chronic Obstructive Pulmonary Disease)
- 1.5. Infections
- 1.6. Lung Cancer:
 - 1.6.1. Diagnosis and Staging
 - 1.6.2. Monitoring and Response Assessment
- 1.7. Mediastinal Tumors
- 1.8. Vascular Pathology
- 1.9. Thoracic Trauma
- 1.10. Heart:
 - 1.10.1. Cardiac CT
 - 1.10.2. Cardiac MRI
 - 1.10.3. Management of Ischemic Heart Disease
 - 1.10.4. Mycardiopathies
 - 1.10.5. Valvular Heart Disease
 - 1.10.6. Congenital Diseases
 - 1.10.7. Tumors

Module 2. Trending topic

- 2.1. Biomarkers in Imaging
- 2.2. Dual-Energy CT
- 2.3. Multiparametric Studies in Radiology



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*A unique, key, and decisive
Training 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 Diagnostic Imaging of the Chest guarantees you, in addition to the most rigorous and updated specialization, access to a university title of Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Diagnostic Imaging of the Chest** contains the most complete and up-to-date scientific program on the market.

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

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

Title: **Postgraduate Certificate in Diagnostic Imaging of the Chest**

ECTS: 4

Official Number of 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.

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institutions technology learning
community commitment
personalized service innovation
knowledge present
online training
development languages
virtual classroom



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