

# Postgraduate Certificate

## Diagnostic Imaging of the Abdomen





## Postgraduate Certificate Diagnostic Imaging of the Abdomen

- » 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/diagnostic-imaging-abdomen](http://www.techtute.com/us/medicine/postgraduate-certificate/diagnostic-imaging-abdomen)

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# 01

# Introduction

Diagnostic imaging is becoming increasingly important in medicine. Radiodiagnostic techniques for pathologies of the abdomen 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 specialization programs that meet the real needs of experienced professionals, so that they can incorporate new advances in the field of imaging techniques of the abdomen into their daily practice"*

Imaging study of abdominal pathology is a radiological subspecialty that has experienced great advances in recent years. Rapid and accurate diagnosis is essential in abdominal pathology. Likewise, the increase in neoplasms affecting the solid viscera and the colon and rectum has conditioned the development of this radiological subspecialty.

Due to the high prevalence of abdominal neoplasms and the important role of radiological techniques, methods of staging and assessment of response to treatment of rectal and prostate cancer are presented. Knowledge of the technique is essential to correctly study a patient, reviewing the latest advances in Colono-CT and defecography.

This Postgraduate Certificate is aimed at facilitating the updating of the specialist physician in the radiodiagnosis of the most important abdominal processes, with special attention to liver and biliary tract diseases, pancreatic pathology, splenic lesions, inflammatory bowel disease and urological 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 Abdomen** 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 practical information on the disciplines that are essential for professional practice.
- Real high-resolution images, both of pathologies of the abdomen 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 abdomen”*

“ *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 Abdomen, 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.

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.

*The Postgraduate Certificate includes real clinical cases and exercises to bring the development of the course closer to medical practice.*

*Seize the opportunity to update your knowledge of cardiovascular and respiratory emergencies to improve your patient care.*



# 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 abdominal 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 provide skills to act with confidence in decision making during the diagnostic process, and help you grow professionally”*



## General Objective

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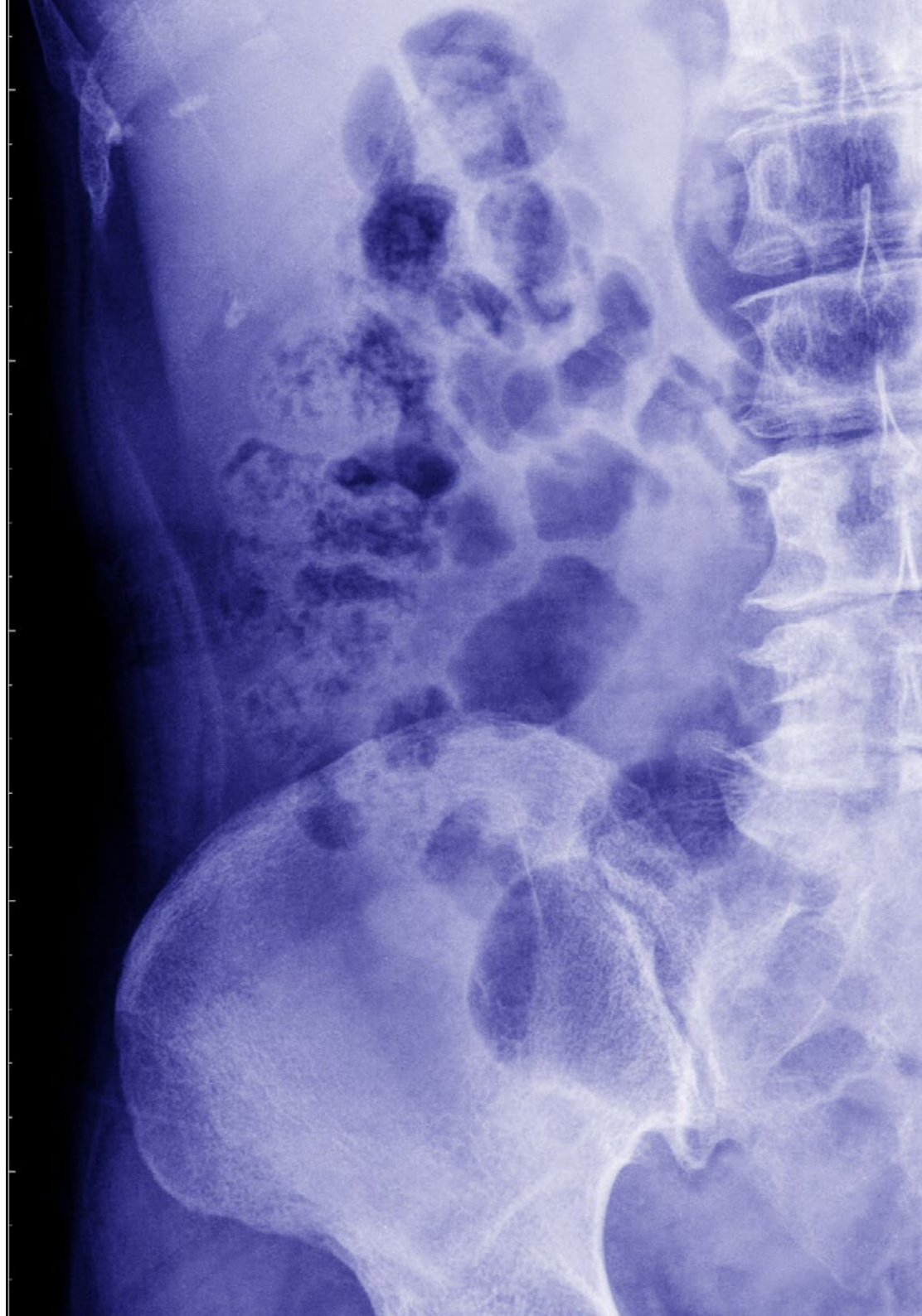
- Update the medical specialist in the latest procedures and techniques performed in the process of diagnosis of pathologies in the abdominal organs, incorporating these latest developments in the discipline to increase the quality of their daily medical practice and improve the patient's prognosis.



## Specific Objectives

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- Update knowledge in the different radiological contrasts for ultrasound, CT and MRI
- Precisely evaluate focal and diffuse liver pathology
- Evaluate the pathology of the biliary tract with radiological techniques
- Evaluate the seriousness of acute pancreatitis with CT
- Stage and evaluate the response to pancreas cancer treatment
- Analyze the radiological semiology of splenic lesions

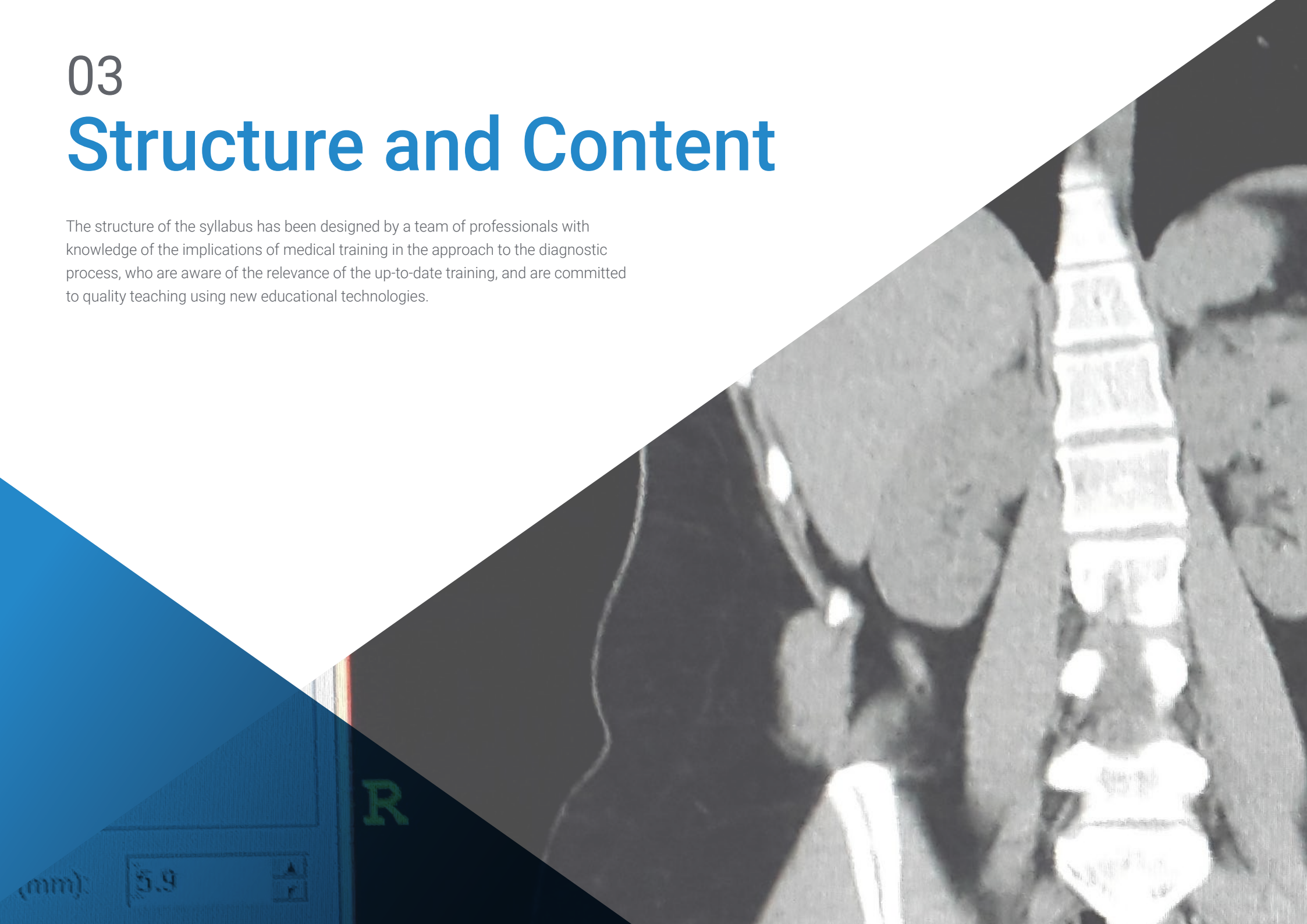


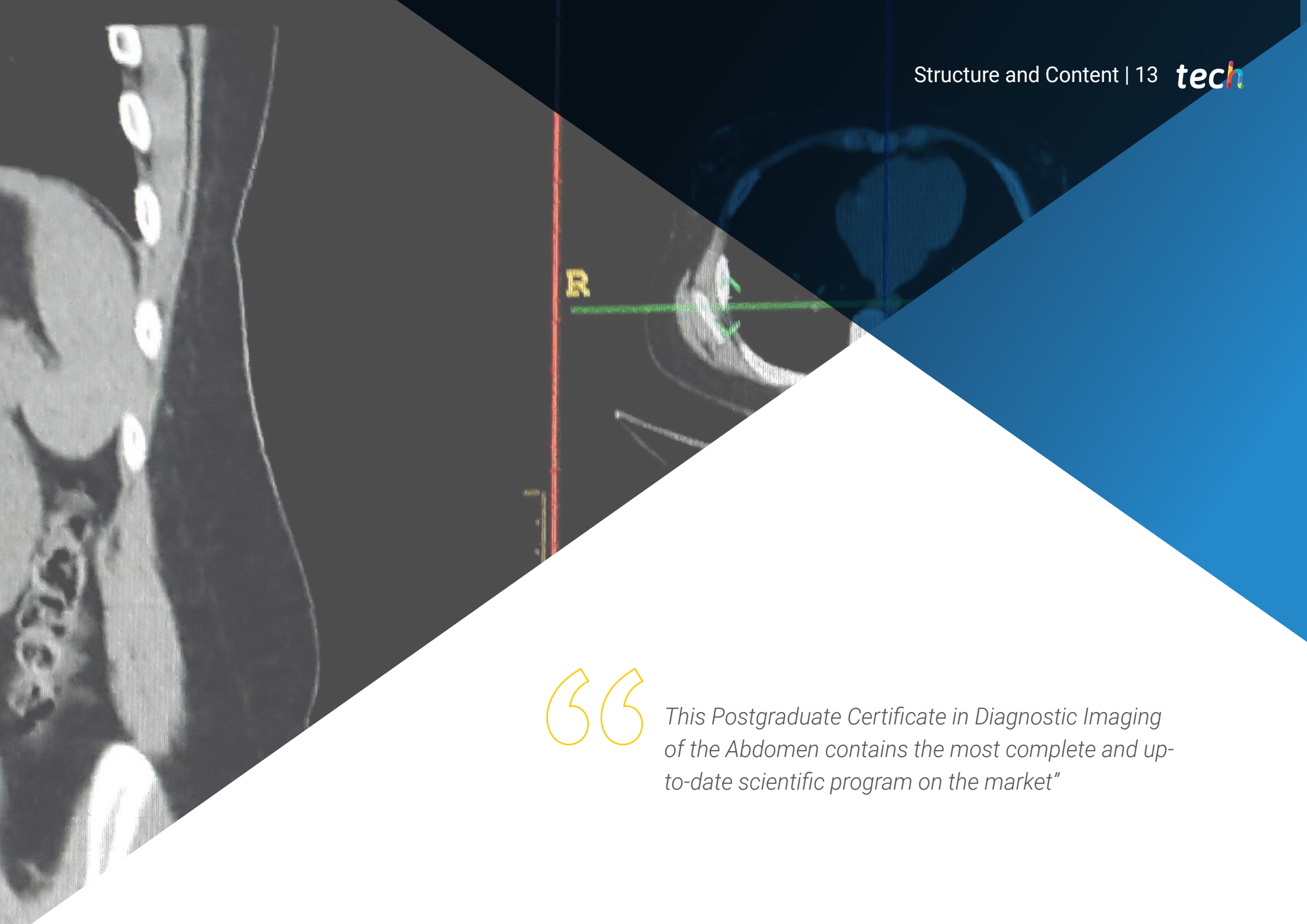
- ♦ Diagnose and evaluate the response to radiological technique treatments for inflammatory bowel disease
- ♦ Systematize the reading and radiological evaluation of peritoneal carcinomatosis
- ♦ Identify poor prognostic signs of rectal cancer with MRI. Local staging
- ♦ Recognise the advances in assessing the response to treatment with imaging diagnostic techniques in rectal cancer
- ♦ Evaluate the technique, indications and semiology of virtual colonoscopy with CT
- ♦ Analyze the findings of radiological techniques in pelvic floor pathology
- ♦ Recognize radiological semiology of urologic neoplasms
- ♦ Systematize the reading and radiologic report of prostate cancer with PI-RADS
- ♦ 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 Abdomen contains the most complete and up-to-date scientific program on the market”*

## Module 1. Abdomen

- 1.1. Iodinated, Gadolinium (Gd)-based and Enteral Contrast Agents
- 1.2. Liver.
  - 1.2.1. Focal Liver Lesion
  - 1.2.2. Diffuse Liver Disease
  - 1.2.3. Management of Cirrhosis Liver
  - 1.2.4. Study and Pathology of the Biliary Route
- 1.3. Pancreas.
  - 1.3.1. Pancreatitis
  - 1.3.2. Pancreatic Cancer
  - 1.3.3. Splenic Lesions
  - 1.3.4. Inflammatory Bowel Disease
  - 1.3.5. Peritoneal Carcinomatosis
  - 1.3.6. Staging and Response Assessment in Rectal Cancer
  - 1.3.7. Technique and Indications of CT Colonoscopy
  - 1.3.8. Defecography: Technique and Indications
  - 1.3.9. Urology.
    - 1.3.9.1 Renal, Ureteral and Bladder Cancer
- 1.4. Multiparametric Study of Prostate Cancer. PI-RADS
- 1.5. Testicular Cancer

## 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 Abdomen** 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 Abdomen** 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 **certificate** issued by TECH Technological University.

The diploma 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.

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

Official N° of hours: **100 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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