Postgraduate Certificate
Radiodiagnosis of Pathologies Related to Forensic Investigation

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Postgraduate Certificate
Radiodiagnosis of Pathologies Related to Forensic Investigation

- » Modality: **online**
- » Duration: **6 weeks**
- » Certificate: **TECH Global University**
- » Accreditation: **6 ECTS**
- » Schedule: **at your own pace**
- » Exams: **online**

Website: **www.techtitute.com/us/nursing/postgraduate-certificate/radiodiagnosis-pathologies-related-forensic-investigation**

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01
Introduction

Radiodiagnosis of Pathologies Related to Forensic Investigation offers significant benefits in Forensic Medicine. Therefore, through advanced imaging techniques, such as Radiography and Computed Tomography, bone lesions, foreign bodies and other anatomical anomalies can be detected with exceptional accuracy. In fact, these tools are essential for the identification of human remains, the reconstruction of traumatic events and the assessment of injuries in victims of violent crime. In addition, Radiodiagnostics allows the objective and detailed documentation of medical evidence needed to support forensic investigations. In this context, TECH has developed a 100% online program, which adapts to the needs of graduates by being able to access the content at any time and place.

Through this 100% online Postgraduate Certificate, you will perform non-invasive evaluations with precision and efficiency, which will streamline the investigation process and guarantee the integrity of the body and the objectivity of the findings"

Radiodiagnostics plays a crucial role in Forensic Investigation by providing a detailed and accurate view of pathologies linked to court cases. Thanks to this technology, nurses can identify internal injuries, determine the cause of death and collect crucial evidence to solve cases. In addition, Radiodiagnosis allows a non-invasive evaluation, which reduces autopsy time and preserves the integrity of the body.

Therefore, this Postgraduate Certificate is born, offering a comprehensive approach to identify a wide range of pathologies using various radiodiagnostic means. In this way, professionals will be able to interpret X-Ray images, Computed Tomography (CT), Magnetic Resonance Imaging (MRI) and other advanced techniques to detect internal injuries and anatomical anomalies relevant to Forensic Investigation.

Likewise, the program will enable graduates to perform an approach or issue an expert opinion. In fact, through case studies and simulated scenarios, they will develop critical skills to evaluate radiological images and correlate findings with clinical and forensic evidence. This ability to analyze and contextualize radiological information will be essential to effectively support criminal investigations and legal proceedings.

Finally, the importance of Radiodiagnostics as a supporting technique to individualize and thereby identify an individual in forensic cases will be emphasized. By learning to recognize unique features in radiological images, such as bone structures or medical implants, students will be able to contribute to the positive identification of victims and the resolution of cases.

In order to consolidate the understanding of the topics, this program implements the revolutionary Relearning approach, which consists of the optimal assimilation of the contents through the organic and gradual repetition of key concepts. In addition, the proposal will be enriched with a wide variety of multimedia resources, such as infographics and explanatory videos, presented in a virtual format for total adaptability to individual agendas.

This **Postgraduate Certificate in Radiodiagnosis of Pathologies Related to Forensic Investigation** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by experts in Radiodiagnosis of Pathologies Related to Forensic Investigation
- The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable for professional practice
- Practical exercises where the self-assessment process can be carried out 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

Radiodiagnostics not only streamlines the investigative process, but also ensures objectivity and reliability of forensic findings. Take advantage of this unique opportunity offered by TECH!"

Radiodiagnostics will provide you with valuable guidance on the cause and manner of death, clarifying the circumstances surrounding traumatic events and homicides"

You will acquire skills to correlate radiological findings with clinical and forensic findings, contributing to criminal investigations and judicial processes with accurate and relevant medical information.

You will interpret images from X-rays, CT scans, MRIs and other advanced techniques to detect internal injuries, bone fractures, internal bleeding and other abnormalities.
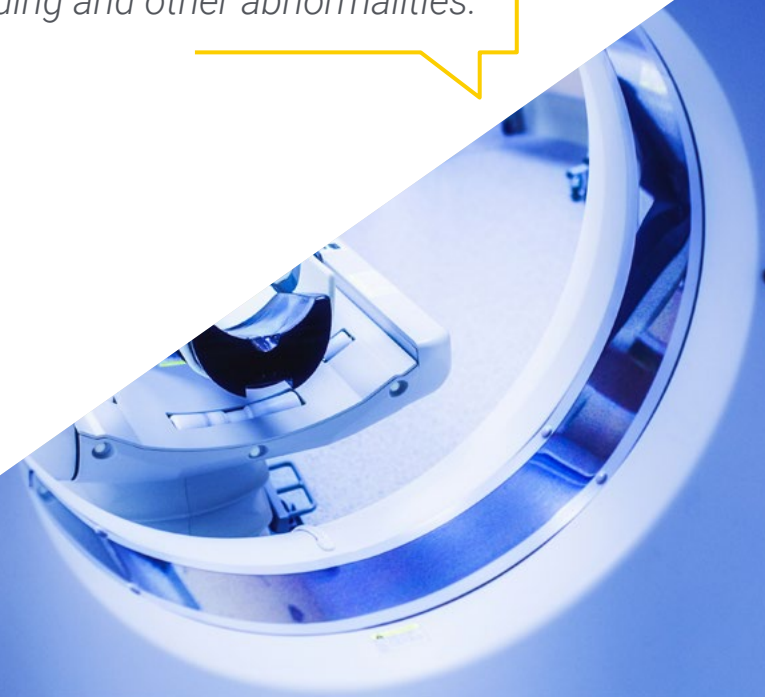
The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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 course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

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Objectives

The objectives of a Postgraduate Certificate in Radiodiagnosis of Pathologies Related to Forensic Investigation will focus on providing nurses with comprehensive specialization that will enable them to acquire skills in the interpretation of radiological images with a forensic approach. Therefore, this academic program will specialize professionals to identify, accurately and systematically, various pathologies through the use of different radiological means, such as X-rays, CT scans and MRIs.

"You will use Radiodiagnosis to support Forensic Investigation, contributing to the identification of individuals, the orientation of diagnoses and the determination of causes and circumstances of death in judicial contexts"

General Objectives

- Identify pathologies or injuries in the body of individuals or corpses with ease, allowing them to contribute in investigations either of criminal acts, identification or cases of negligence of health professionals

- Objectively demonstrate the different findings, helping in the clarification of criminal acts, turning the assessment of body damage, necropsy and skeletal study into a more scientific and reliable procedure

- Support identification and individualization processes

- Specify the different radiodiagnostic aids of pathologies related to the legal world

Specific Objectives

- Identify the different pathologies through different radiodiagnostic means
- Help to guide an adequate diagnosis at the time of making an approach or giving an expert opinion
- Serve as a support technique to individualize and therefore identify an individual
- Guide cause and manner of death

"You will gain a solid foundation as a forensic nurse, thanks to which you will be able to base your expert assessments and opinions with accuracy and confidence. With all the quality guarantees that TECH is known for!"

03
Course Management

The teachers are highly qualified and experienced experts in the field of Forensic Radiology. In fact, these professionals are specialists in Biomedical Engineering, Radiodiagnostics and Clinical Forensics, with solid academic qualification and extensive practical experience in the interpretation of radiological images in the forensic context. In addition, their experience and commitment will guarantee quality teaching, which will prepare graduates to face the challenges of the forensic field with precision and scientific rigor.

The teachers of this Postgraduate Certificate have a deep knowledge of anatomy and pathophysiology, as well as traumatic injuries, congenital anomalies and pathologies relevant to criminal investigation"

Management

Dr. Ortega Ruiz, Ricardo

- PhD in Biomedical Engineering from the Polytechnic University of Madrid, specializing in Diagnostic Imaging
- Director of the Laboratory of Archeology and Forensic Anthropology of the Institute of Forensic Sciences
- Investigator of Crimes against Humanity and War Crimes
- Judicial Expert in Human Identification
- International Observer in Drug Trafficking Crimes in Iberoamerica
- Collaborator in police investigations for the search of missing persons in foot or canine tracking with Civil Protection
- Instructor of adaptation courses in Basic Scale to Executive Scale aimed at the Scientific Police
- Master's Degree in Forensic Sciences applied to the Search for Missing Persons and Human Identification Cranfield University
- Master's Degree in Archeology and Heritage with the Specialty of Forensic Archeology for the Search of Missing Persons in Armed Conflict

Professors

Dr. Galezo Chavarro, Diana

- Technician Responsible of the South Regional of the National Institute of Legal Medicine and Forensic Sciences
- Forensic specialist in the Regional Clinical, Psychology, Odontology and Forensic Psychiatry Group
- Expert in support to the certification process in Clinical Forensics
- Expert in Forensic Sciences and Probation Technique at the Libre University
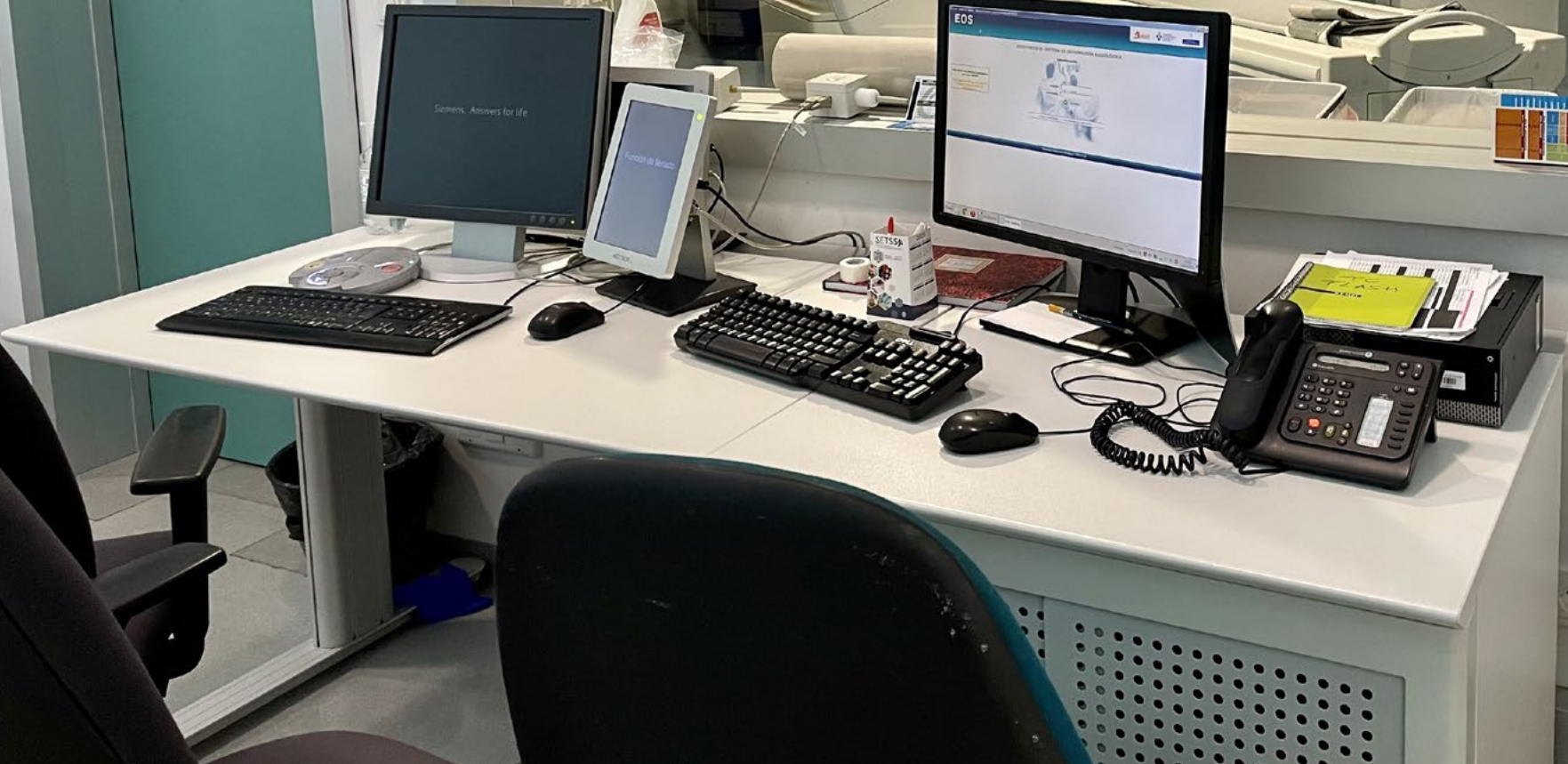- Expert in Search for Missing Persons in Iberoamerica

04

Structure and Content

This Postgraduate Certificate in Radiodiagnosis of Pathologies Related to Forensic Investigation will cover a wide range of content designed to provide nurses with a comprehensive understanding of how to use medical imaging techniques in the forensic context. Therefore, they will delve into fundamental topics, such as the interpretation of X-rays, CT scans, MRIs and other modalities, to identify traumatic injuries, medical pathologies and congenital anomalies relevant to criminal investigations and prosecutions.

You will delve into the correlation between radiological findings and forensic circumstances, including the orientation of cause and manner of death, individualization of subjects, and expert report writing"

Module 1. Radiodiagnosis of Pathologies Related to Forensic Investigation

1.1. Classification of Traumatic Fractures in the Forensic Context
   1.1.1. Classification According to Skin Condition
   1.1.2. Classification According to Location
   1.1.3. Classification According to Fracture Trace
1.2. Stages of Bone Repair in the Forensic Context
   1.2.1. Inflammatory Phase
   1.2.2. Repair Phase
   1.2.3. Remodeling Phase
1.3. Child Maltreatment and its Radiodiagnosis in a Forensic Context
   1.3.1. Simple Radiography
   1.3.2. Axial Tomography
   1.3.3. Magnetic Resonance
1.4. Illegal Transport of Narcotics and Radiodiagnostics in a Forensic Context
   1.4.1. Simple Radiography
   1.4.2. Axial Tomography
   1.4.3. Magnetic Resonance
1.5. Simple Radiographic Technique for Identification of Alterations within a Forensic Context
   1.5.1. Cranial Pathologies
   1.5.2. Thoracic Pathologies
   1.5.3. Extremity Pathologies
1.6. Ultrasound Technique for Identification of Pathologies within a Forensic Context
   1.6.1. Abdominal
   1.6.2. Obstetric
   1.6.3. Thoracic
1.7. Computed Tomography and Identification of Pathologies in a Forensic Context
   1.7.1. Cranial
   1.7.2. Thoracic
   1.7.3. Abdominal

The multidisciplinary approach of this university program will specialize you to apply your knowledge in forensic practice with precision and ethics, through didactic materials at the forefront of technology and education"

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.

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 Nursing School we use the Case Method

In a given situation, what should a professional do? 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. Nurses learn better, faster, and more sustainably over time.

With TECH, nurses can experience a learning methodology that is shaking the foundations of traditional universities around the world.
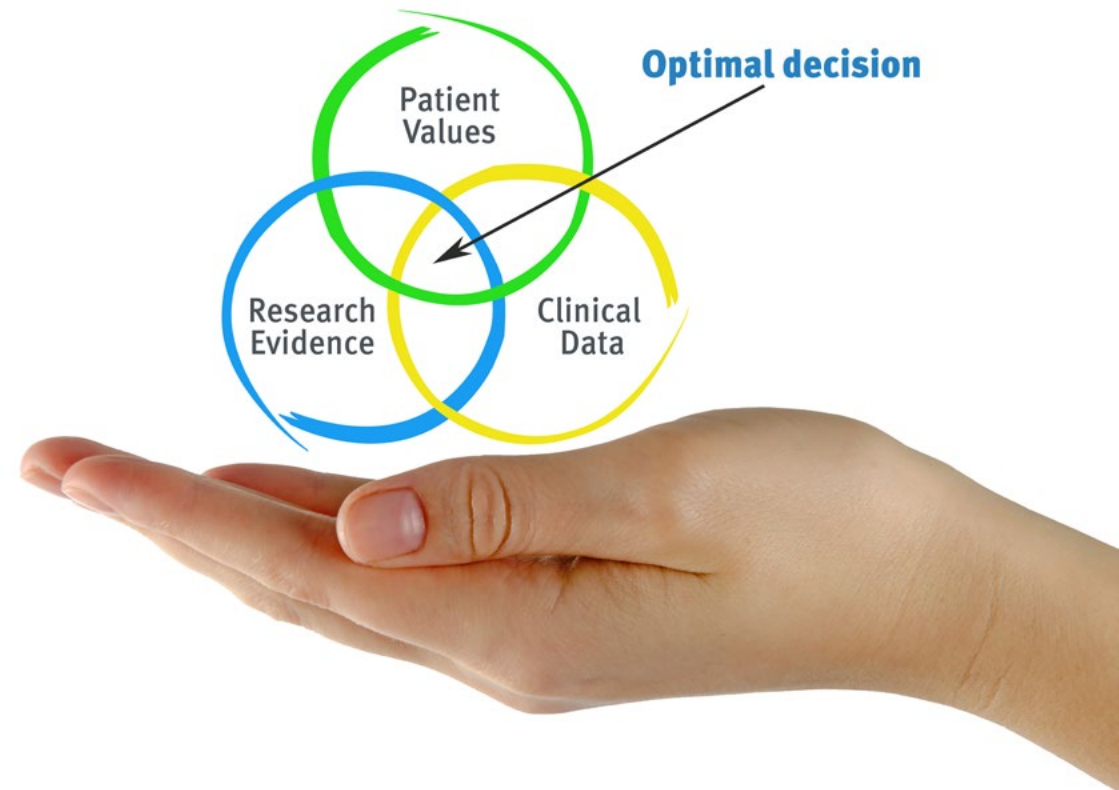
According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the real conditions in professional nursing 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:

1. Nurses 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 nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.

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 case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.

The nurse 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 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 we have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. 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:
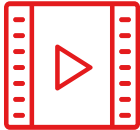
Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is really specific and precise.

These contents are then adapted in 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.

Nursing 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 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 them as many times as you want.

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.

20%

15%

15%

3%

20%

17%

7%

3%
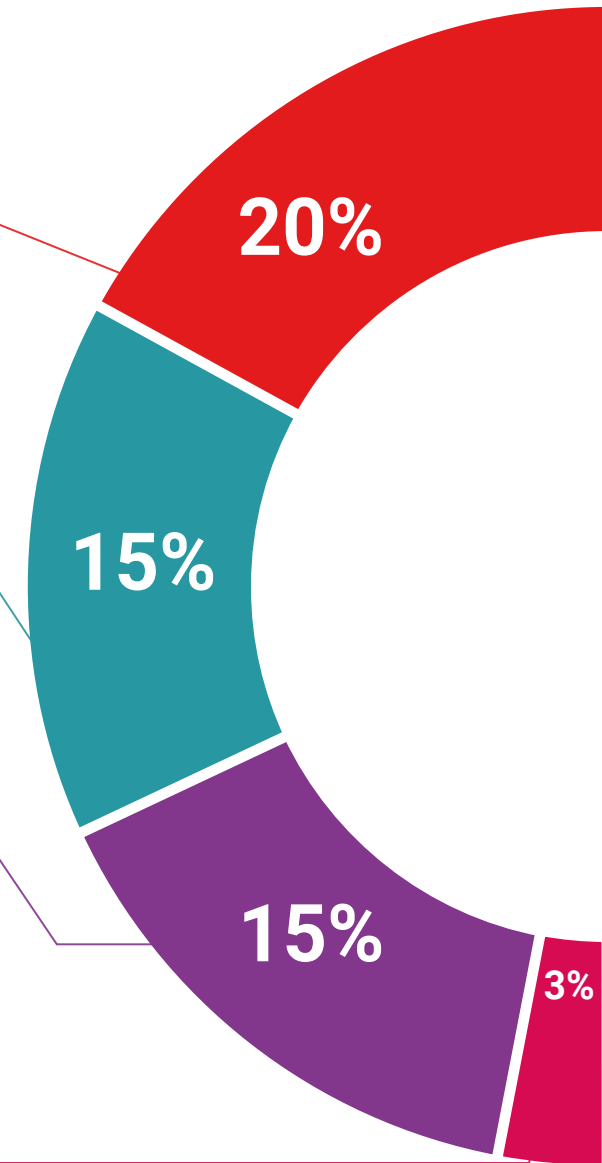
Expert-Led Case Studies and Case Analysis

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

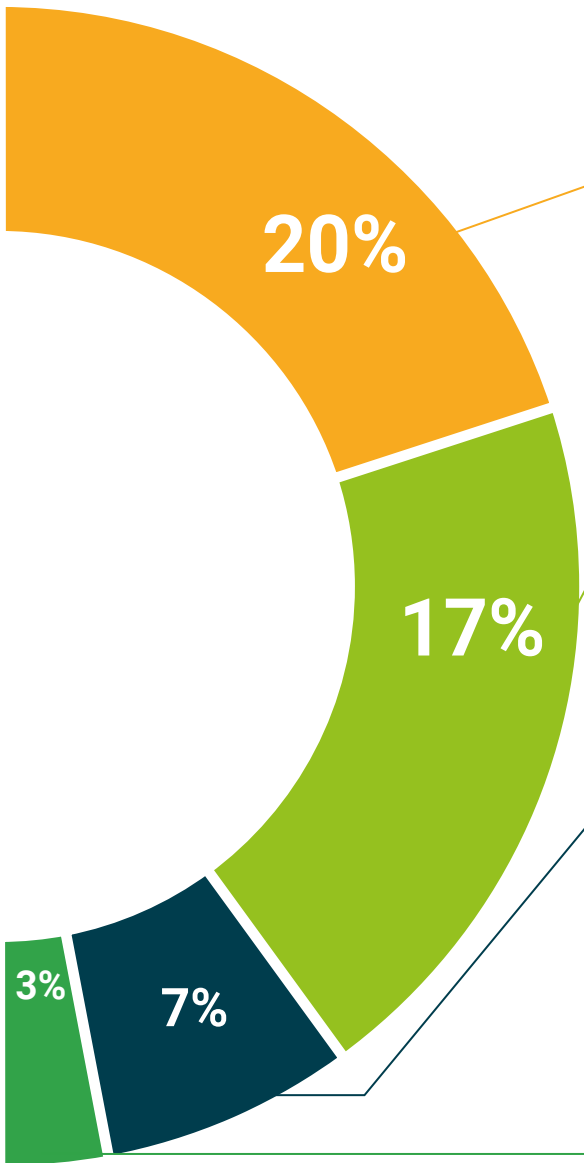The student's knowledge is periodically assessed and re-assessed throughout the program, through evaluative and self-evaluative activities and exercises: in this way, students can check how they are doing in terms of achieving their goals.

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 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 Radiodiagnosis of Pathologies Related to Forensic Investigation guarantees, in addition to the most accurate and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This private qualification will allow you to obtain a **Postgraduate Certificate in Radiodiagnosis of Pathologies Related to Forensic Investigation** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Radiodiagnosis of Pathologies Related to Forensic Investigation**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**

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tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Certificate in Radiodiagnosis of Pathologies Related to Forensic Investigation

This is a private qualification of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.   Unique TECH Code: AFWORD23S   techtitute.com/certificates

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*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

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