

Postgraduate Certificate

Forensic Radiology of Trauma with
Sharp and Cutting Elements



Postgraduate Certificate Forensic Radiology of Trauma with Sharp and Cutting Elements

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

Website: www.techtute.com/us/nursing/postgraduate-certificate/forensic-radiology-trauma-sharp-cutting-elements

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01

Introduction

The World Health Organization warns in a recent report of the increase in the rate of homicides caused by sharp weapons such as knives, razors or daggers. In order to ensure that criminal acts do not go unpunished, it urges nursing staff to update their knowledge of Forensic Radiology of Trauma with Sharp Elements. The truth is that these professionals play a key role during the radiological processes, since they are in charge of mobilizing the corpses to ensure the quality of the images. It is therefore important for them to be aware of all the advances that have been made in this area. To support them, TECH is implementing an innovative online program that will focus on this issue.



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This program, supported by Relearning, will bring you up to date with the latest technological advances that have occurred in the field of Forensic Radiology”

With the emergence of the Fourth Industrial Revolution, the field of Forensic Radiology is experiencing significant advances in clarifying the cause of death of individuals. This is possible thanks to the implementation of imaging tools such as Computed Axial Tomography. This technology provides professionals with detailed photographs of cross sections of the body, which facilitates the precise identification of injuries caused by sharp or cutting elements. In the same line, this technique allows detecting internal traumas that go unnoticed in conventional radiographs (such as hidden injuries in soft tissues, internal organs and deep bones).

In this context, TECH is developing an exclusive program in Forensic Radiology of Trauma with Sharp and Cutting Elements. The syllabus will delve deeply into the classification of the main bladed weapons, examining the most common deep or superficial injuries. Likewise, the syllabus will delve into the main marks on the skeleton of injuries caused by bladed weapons. In tune with this, the didactic materials will provide the graduates with the most modern radiographic techniques, including the X-Ray Tube. This will enable nurses to improve their care of the bodies, ensuring that they are properly positioned during radiological procedures.

On the other hand, the methodology of this program reinforces its innovative character. TECH offers a 100% online educational environment, adapted to the needs of busy professionals seeking to advance their careers. It also relies on the Relearning methodology, based on the repetition of key concepts to fix knowledge and facilitate learning. In this way, the combination of flexibility and a robust pedagogical approach makes it highly accessible. Furthermore, learners will have access to a rich library of multimedia resources in different audiovisual formats (such as interactive summaries and infographics).

This **Postgraduate Certificate in Forensic Radiology of Trauma with Sharp and Cutting Elements** 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 Forensic Radiology
- ♦ 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



You will study at your own pace, benefiting from the convenience offered by TECH's 100% online modality"

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You will deepen in the analysis of injuries in maturing stage and in animals, to determine the time of occurrence of traumas”

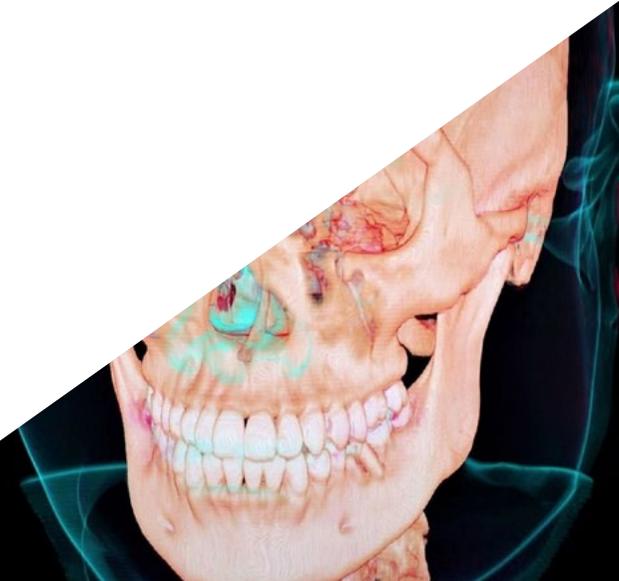
The program's teaching staff includes professionals from the sector who contribute their work experience to this specializing program, as well as renowned specialists from leading societies and prestigious universities.

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.

You will have an exhaustive knowledge of the radiological techniques most commonly used in the study of sharps injuries.

A highly specialized program that will boost your career as a nurse and place you at the forefront of competitiveness in the sector.



02 Objectives

Thanks to this university program, nursing personnel will distinguish themselves by having a comprehensive knowledge of human anatomy to detect injuries caused by sharp or cutting elements. At the same time, the graduates will be highly familiar with the most innovative imaging techniques in the market (among which Computed Axial Tomography or X-Rays stand out). This will allow them to optimize their practice to a higher level, ensuring that cadavers are properly positioned during radiological imaging. In addition, they will apply radiological safety protocols to protect bodies from exposure to ionizing radiation.



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You will gain advanced communication skills to document radiological findings accurately in forensic reports”



General Objectives

- ♦ Identify and recognize the different types of elements that generate blunt injuries in the individual
- ♦ Evaluate the physical and mechanical characterization behind each sharp element to know how it works
- ♦ Recognize the different injury characteristics based on the type of weapon, mechanical application in the individual and the nature of tissue damage
- ♦ Define the extent of tissue injuries to the individual: superficial injuries, deep injuries and amputations





Specific Objectives

- ♦ Evaluate the difference in injury between weapon, object and cutting structure
- ♦ Recognize, in conjunction with the previous topic, mixed injury patterns, such as those caused by short-concussive elements
- ♦ Support the application of radiodiagnostic techniques in individuals in order to know the extent of the injuries and in deceased persons from whom no information can be obtained without altering the organic tissue
- ♦ Provide support to other disciplines to characterize the injuries of the individual

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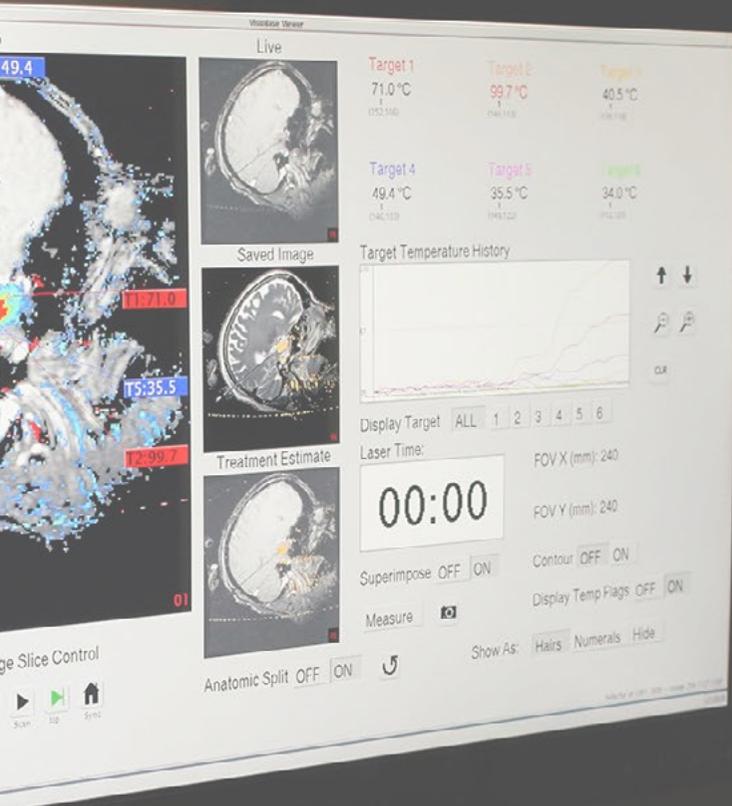
TECH's goal is you! Give a boost to your professional work and stand out in a highly demanded field by healthcare organizations”

03

Course Management

Both for the design and delivery of this academic itinerary, TECH brings together in this program references in the field of Forensic Radiology of Trauma with Sharp and Cutting Elements. These professionals have an extensive professional background, which has allowed them to be part of recognized hospital institutions. In their commitment to teaching, they keep abreast of the latest trends that arise in this field of specialization. Undoubtedly, this is a guarantee for graduates, who will have access to a top-quality program that will significantly raise their professional horizons.





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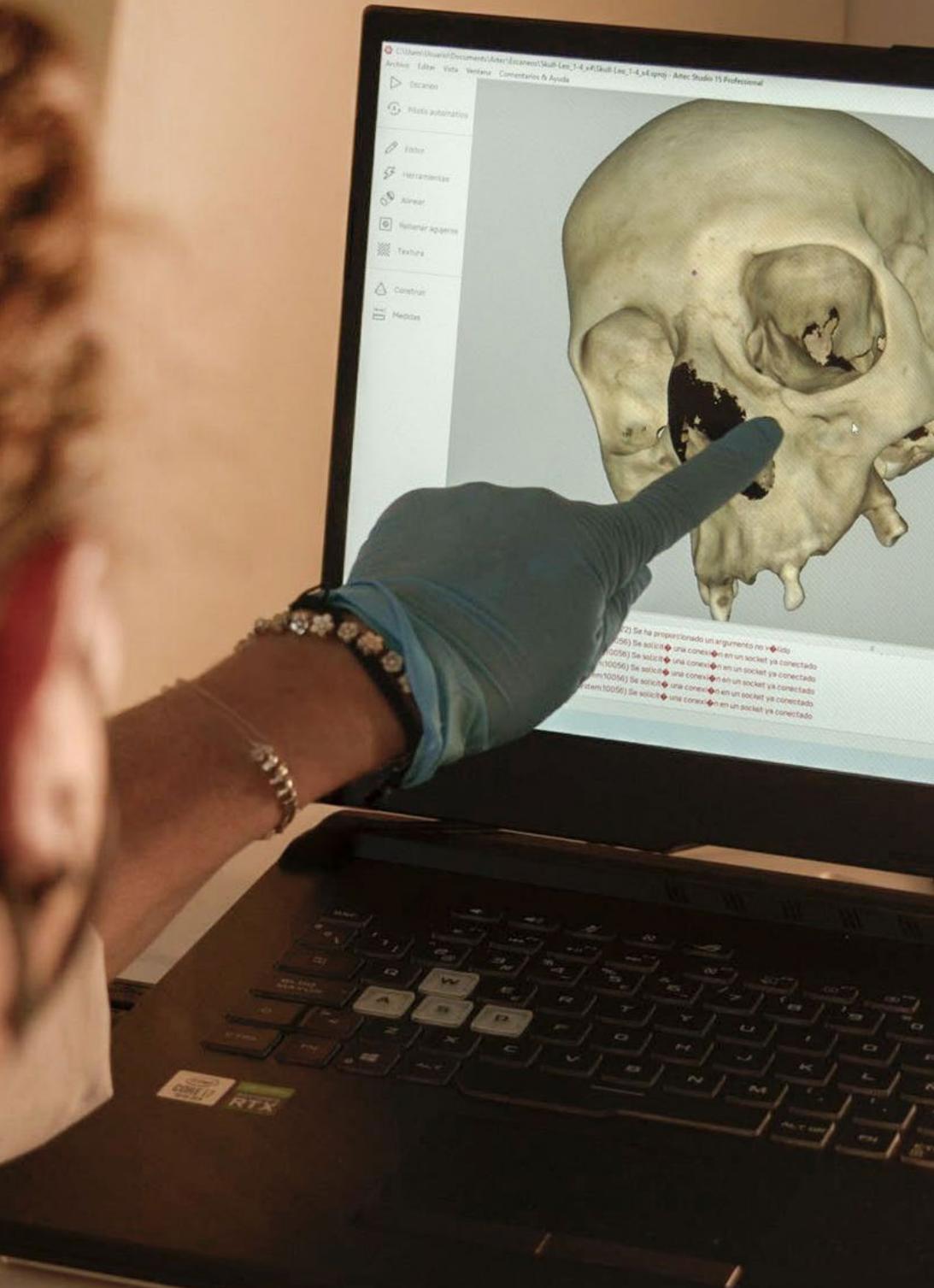
A specialized teaching team will pour their extensive knowledge in the field of Forensic Radiology into the didactic contents of this program”

Management



Dr. Ortega Ruiz, Ricardo

- PhD in Biomedical Engineering from the Polytechnic University of Madrid, specializing in Diagnostic Imaging
- Director of the Laboratory of Archaeology and Forensic Anthropology of the Institute of Professional Training in Forensic Sciences
- Investigator of Crimes against Humanity and War Crimes in Europe and the Americas
- 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. Lini, Priscila

- ◆ Director of the Laboratory of Bioanthropology and Forensic Anthropology of Mato Grosso do Sul
- ◆ Legal Advisor at the Federal Prosecutor's Office at the Federal University of Latin American Integration
- ◆ Technical Collaborator at the Public Defender's Office of the State of Mato Grosso do Sul
- ◆ Master's Degree in Law from the Pontifical Catholic University of Paraná
- ◆ Bachelor's Degree in Biological Sciences from Instituto Prominas
- ◆ Law Degree from State University of Western Paraná
- ◆ Specialization in Physical and Forensic Anthropology from the Institute of Professional Training in Forensic Sciences

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Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice”

04

Structure and Content

This university program will offer nurses a comprehensive approach to the interpretation of injuries and amputations related to the use of edged weapons, based on innovative radiographic techniques. The academic materials will delve into the operation of tools such as computerized axial tomography or X-rays. Therefore, professionals will establish the most appropriate positions of human bodies during radiological processes. The syllabus will also cover the types of injuries derived from sharp objects (including partial amputations), for their correct interpretation in the images.



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*You will update your knowledge in
Injurious Mechanics of Sharp Weapons
through innovative multimedia content”*

Module 1. Forensic Radiology of Trauma with Sharp and Cutting Elements

- 1.1. Classification of Sharp Weapons
 - 1.1.1. Cutting Weapons
 - 1.1.2. Sharp Weapons
 - 1.1.3. Sharps
- 1.2. Injurious Mechanics of Edged Weapons
 - 1.2.1. Cutting Weapons
 - 1.2.3. Sharp Weapons
 - 1.2.4. Sharps
- 1.3. Types of Injuries Caused by Cutting Weapons
 - 1.3.1. Superficial Injuries
 - 1.3.2. Deep Injuries
 - 1.3.3. Total or Partial Amputation Injuries
- 1.4. Injury Typologies of Sharp-Edged Weapons by Sharp Weapons
 - 1.4.1. Superficial Injuries
 - 1.4.2. Deep Injuries
 - 1.4.3. Total or Partial Amputation Injuries
- 1.5. Injury Typologies of Sharp-Edged Weapons by Sharps
 - 1.5.1. Superficial Injuries
 - 1.5.2. Deep Injuries
 - 1.5.3. Total or Partial Amputation Injuries
- 1.6. Skeletal Marks from Sharp-Edged Weapon Injuries
 - 1.6.1. Cutting Weapons
 - 1.6.2. Sharp Weapons
 - 1.6.3. Sharps
- 1.7. Radiological Techniques for the Study of Cutting Weapon Injuries
 - 1.7.1. X-Ray
 - 1.7.2. Computerized Axial Tomography
 - 1.7.3. Other Radiographic Techniques





- 1.8. Radiological Techniques for the Study of Sharps Injuries
 - 1.8.1. X-Ray
 - 1.8.2. Computerized Axial Tomography
 - 1.8.3. Other Radiographic Techniques
- 1.9. Radiological Techniques for the Study of Sharps Injuries
 - 1.9.1. X-Ray
 - 1.9.2. Computerized Axial Tomography
 - 1.9.3. Other Radiographic Techniques
- 1.10. Analysis of Lesions at the Maturation Stage and in Animals
 - 1.10.1. Cutting Lesions in Individuals in Early Stages of Maturation.
 - 1.10.2. Cut Marks on Individuals in Late Stages of Biological Maturation
 - 1.10.3. Cutting Injuries in Animals

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An academic pathway designed for nurses who want to develop and grow in the field of Forensic Radiology of Trauma with Sharp and Cutting Elements. Enroll now!”

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.



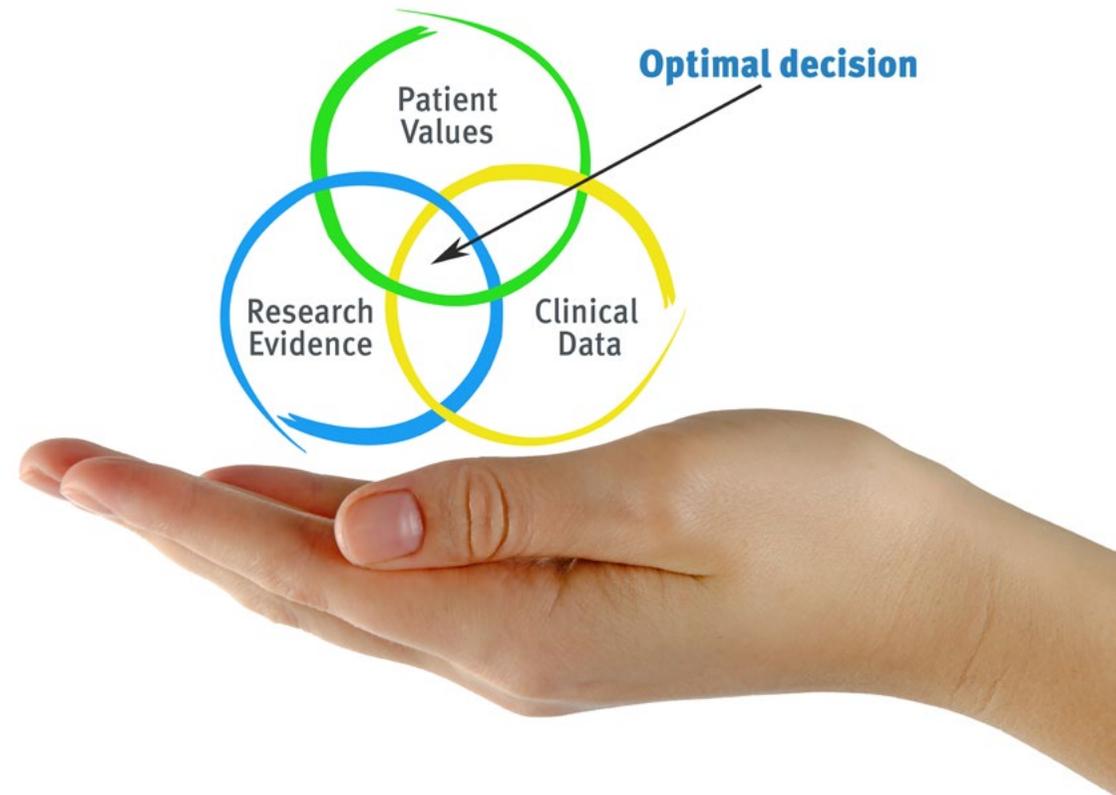
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Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

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.

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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. 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

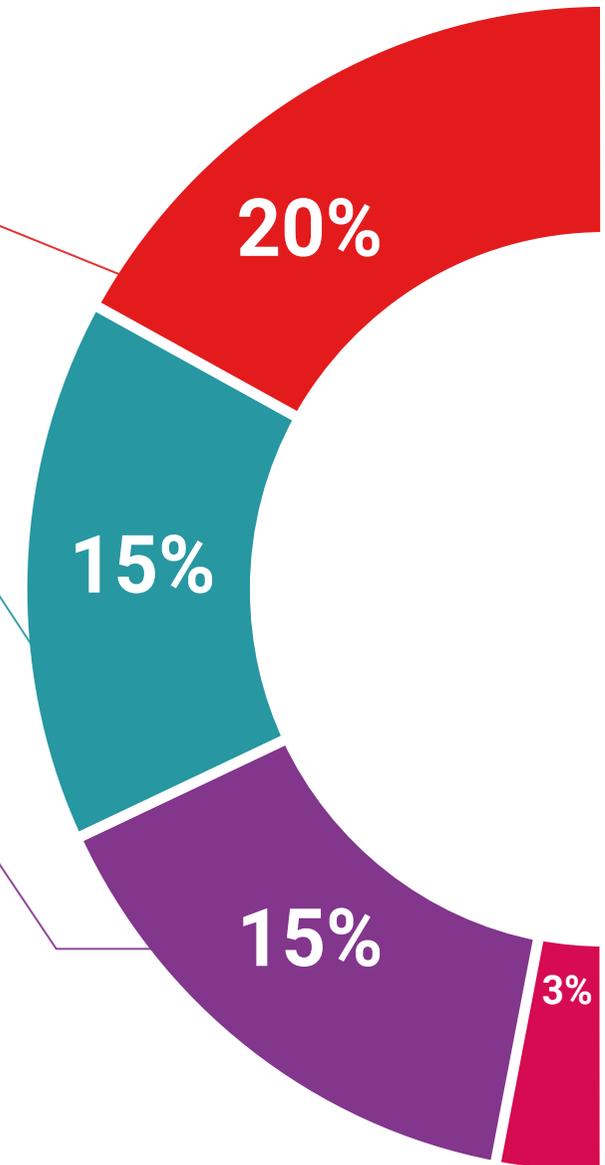
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

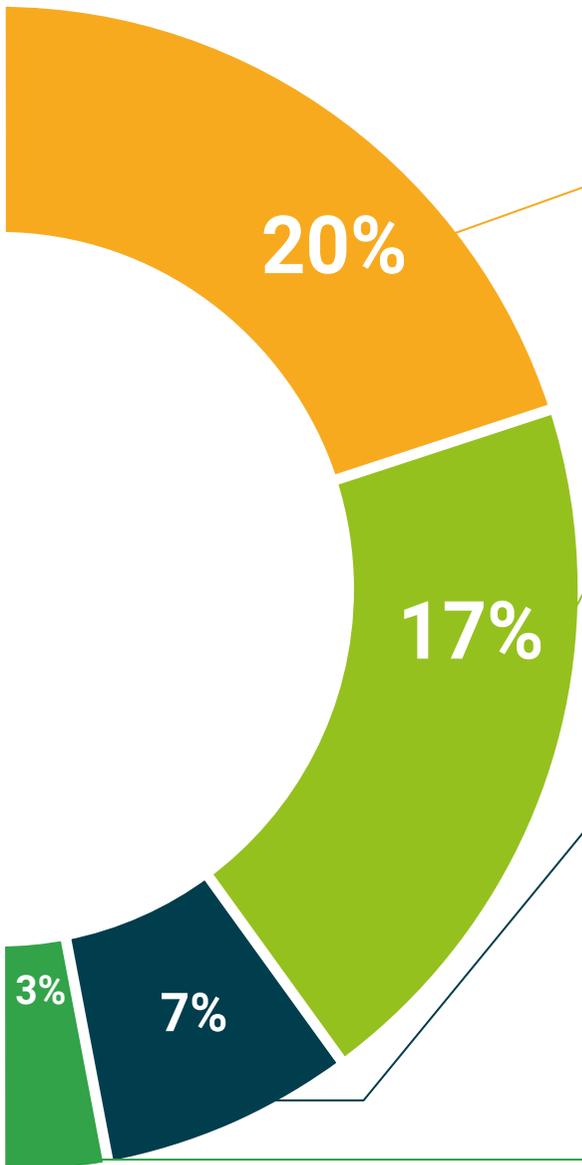
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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.





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 Forensic Radiology of Trauma with Sharp and Cutting Elements guarantees, in addition to the most accurate and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.





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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 Forensic Radiology of Trauma with Sharp and Cutting Elements** 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 Forensic Radiology of Trauma with Sharp and Cutting Elements**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



*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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