

# Postgraduate Certificate

## CT for Nursing



## Postgraduate Certificate CT for Nursing

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

Website: [www.techtute.com/us/nursing/postgraduate-certificate/ct-nursing](http://www.techtute.com/us/nursing/postgraduate-certificate/ct-nursing)

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Certificate

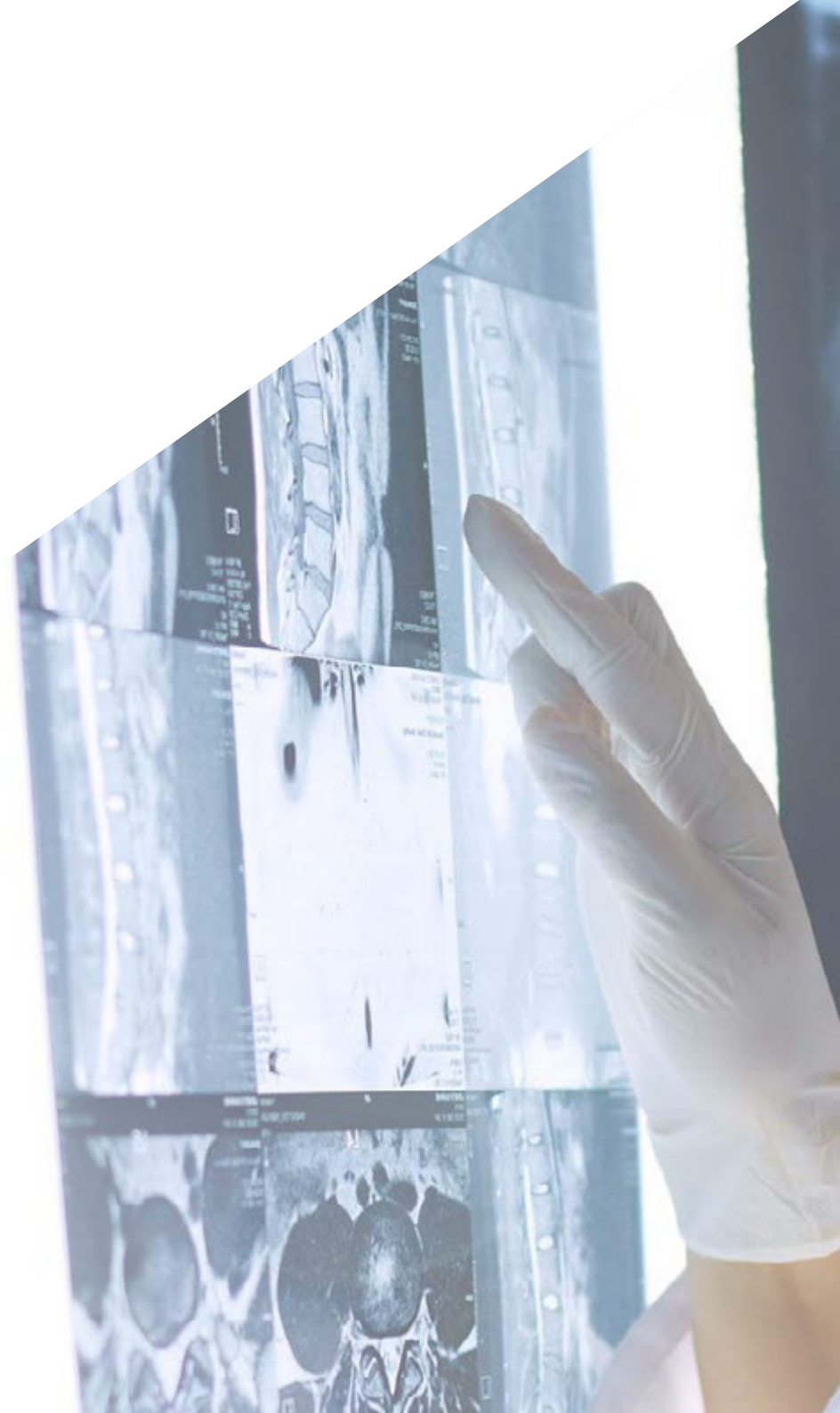
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# 01

# Introduction

The new equipment used in Computed Tomography allows obtaining very high quality images in less time and avoids other more invasive tests. For this reason, this test is becoming more and more frequent and presents advances that lead nursing professionals to continuously update their knowledge. In this sense, TECH provides a complete update through a 100% online program, which offers students, the most rigorous and current information on work procedures, the safe handling of the risks to which health workers and patients are exposed, as well as the evolution of CT. All in a flexible academic option that allows self-management of study and reconcile daily activities.





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*A 100% online Postgraduate Certificate with 180 intensive teaching hours on CT for Nursing”*

The follow-up of people with cancer, the screening of possible diseases without using high doses of radiation or the reduction of less invasive tests has made Computed Tomography an increasingly used test. The continuous development of techniques and protocols leads nursing professionals to be constantly updating their skills in this field.

Faced with this reality, health professionals who wish to effectively update their skills in this field have before them an online academic option of 180 teaching hours with the most updated content in CT for Nursing. A program designed and developed by real specialists in Diagnostic and Imaging Services in reference hospitals.

It is a Postgraduate Certificate that will lead students to investigate over 6 weeks in the evolution of CT, the objectives of exploration, the process of sedation, as well as the risks to which both nurses and patients are exposed. A wide field of action in which they can delve into through multimedia pills, additional readings and clinical case studies that provide a theoretical-practical approach and very useful in the daily care performance.

An excellent opportunity to carry out an updating process through a flexible and convenient proposal. Students only need an electronic device with an Internet connection to view the content at any time of the day. This way, without the need for attendance or classes with fixed schedules, students can combine a quality program with the most demanding work and personal responsibilities.

This **Postgraduate Certificate in CT for Nursing** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ The development of case studies presented by experts in Nursing in the area of Diagnostic and Imaging Treatment
- ♦ Graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where self-assessment can be used 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



*Get in only 6 weeks a complete update on the processes of nursing care in CT scanning"*

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*The multimedia pills will be your great allies in this updating process. Thanks to the dynamic material you will obtain a quality and agile update”*

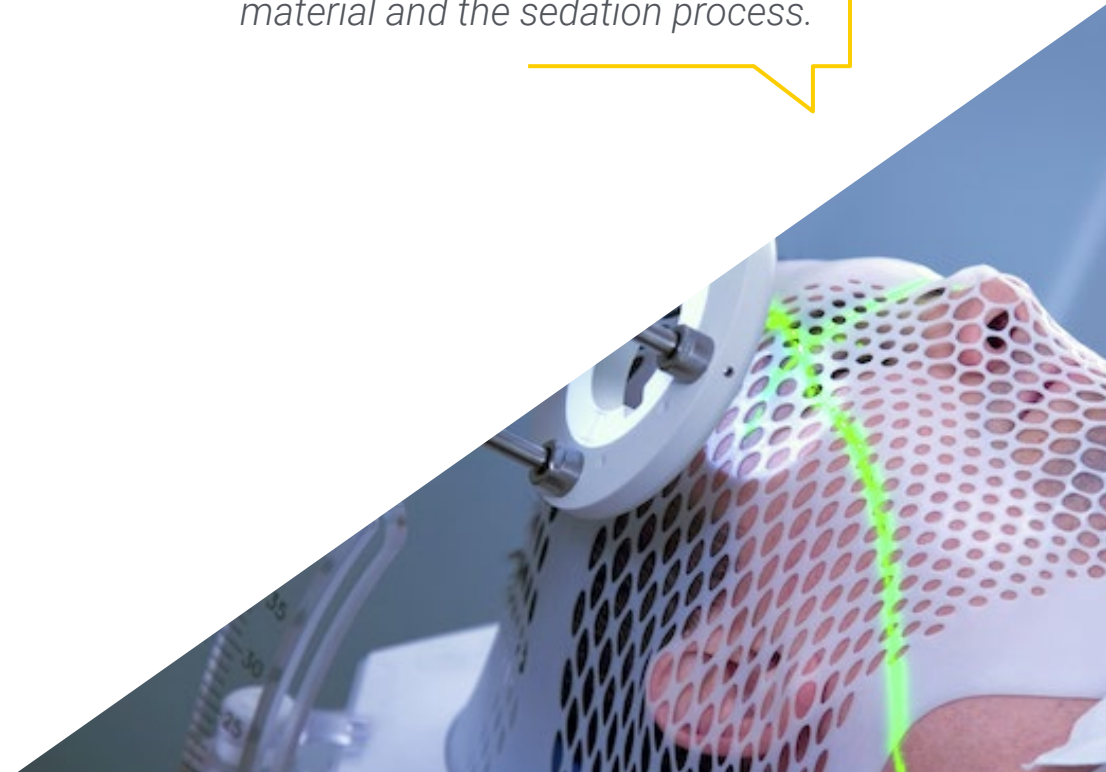
The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will provide the professionals with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professionals must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned experts.

*Delve into the physical fundamentals involved in the CT imaging process at your convenience.*

*This program provides you with scientific literature to further extend the information on reactions to contrast material and the sedation process.*



# 02 Objectives

This Postgraduate Certificate is designed to provide the graduates with the most advanced content in Computed Tomography and the protocols of action of nursing professionals. An updating process of only 180 teaching hours, which will be much easier, thanks to the numerous pedagogical tools provided by TECH in this program and the excellent expert teaching team that makes up this program, unique in the current academic scenario.





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*Get a close and real vision of the nurses' performance in musculoskeletal, neurological or abdominal explorations"*

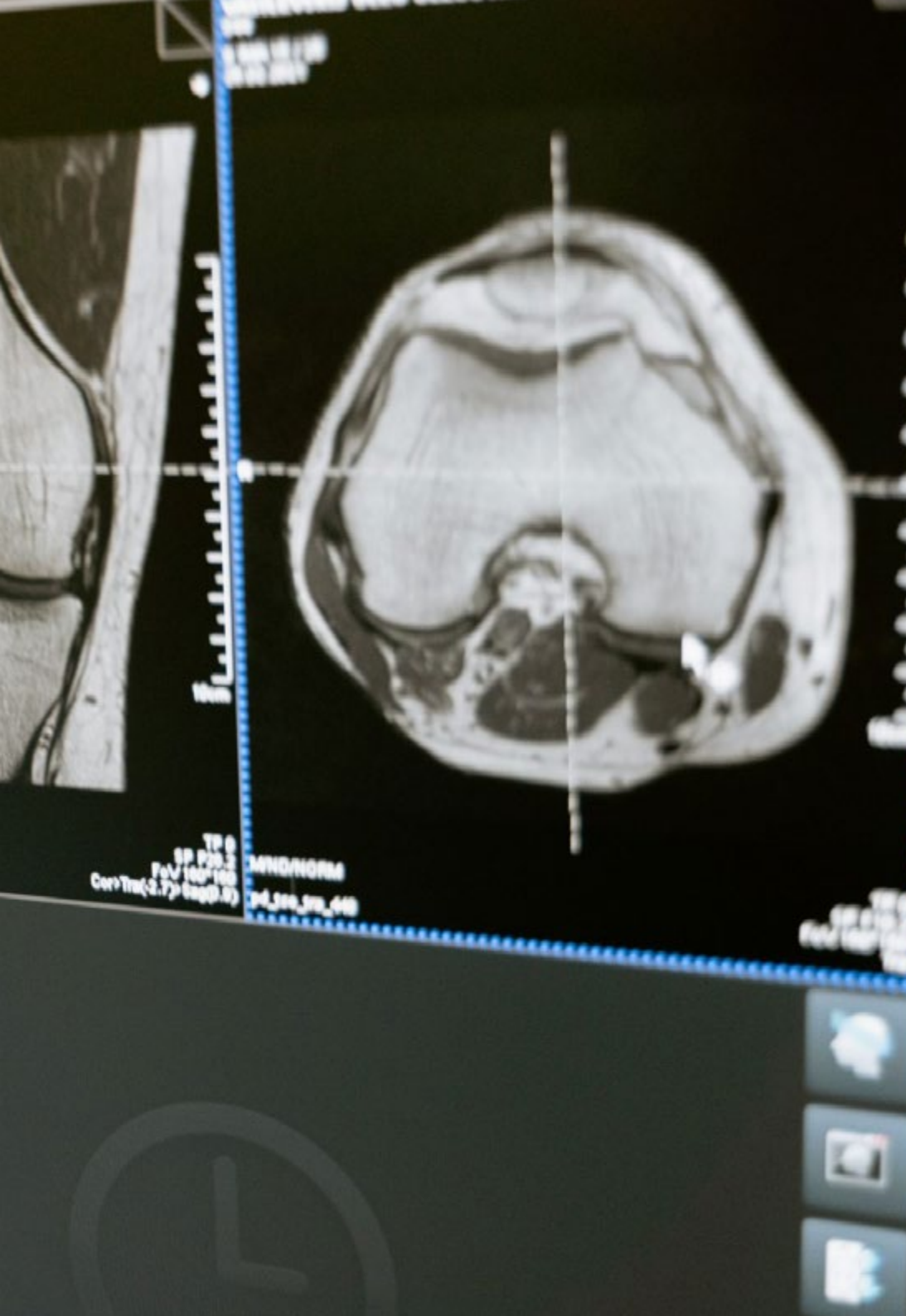


## General Objectives

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- Promote work strategies based on the practical knowledge of a tertiary level hospital and its application in Diagnostic Imaging, Nuclear Medicine and Radiation Oncology services
- Favor the enhancement of technical skills and abilities through care procedures and case studies
- Provide nurses with a process of updating their knowledge in the field of Radiology
- Be up to date with the care management and organization of the Diagnostic Imaging and Treatment Area, in order to optimize the operation of the Radiology Service
- Develop skills and competencies in nurses for their performance in the nursing consultation in the Diagnostic Imaging and Treatment Department (DTI)
- Expand nurses' knowledge of radiation oncology, interventional vascular radiology and neuroradiology to improve patient care in these specific areas





## Specific Objectives

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- ◆ Discover the history, physical fundamentals, elements and components involved in CT imaging
- ◆ Delve into the objectives of the scan: muscle and bone disorders, bone tumors and fractures; localization of tumors, infections and blood clots
- ◆ Describe the applications of the procedures in early detection, disease monitoring, treatment effectiveness and detection of injuries
- ◆ Understand the risks of the explorations: exposure to radiation, reactions to contrast material and those derived from sedation
- ◆ Develop the necessary competences to elaborate the nursing care process for patients undergoing a CT examination



*With this program you will be aware of the protocols to avoid risks in Computed Tomography tests"*

# 03

## Course Management

Nursing professionals with extensive experience in the Radiodiagnostic and Nuclear Medicine Service and in the field of research make up a first class teaching team. In this way, students who take this university program will have access to the most advanced and current information from real experts with extensive experience in health care in reference hospitals. Their proximity will allow the graduates to obtain answers to any doubts that may arise about the content of the syllabus throughout this program.





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*Authentic Nursing professionals with high experience in Radiology will be responsible for offering you the most complete syllabus in this field"*

## Management



### Ms. Viciano Fernández, Carolina

- ♦ Nurse in the Radiodiagnosis and Nuclear Medicine
- ♦ Postgraduate Certificate in Nursing
- ♦ Professional Master's Degree in Pediatric Nursing
- ♦ University Specialist in Emergency and Catastrophe Nursing
- ♦ University Specialist in Nursing in the Surgical Area
- ♦ Nuclear Medicine Radioactive Installations Operator License by the Nuclear Safety Council



### Ms. García Argüelles, María Noelia

- ♦ Area Supervisor of Diagnostic Imaging and Treatment at the Asturias University Central Hospital
- ♦ Professor in the Department of Medicine at the University of Oviedo
- ♦ Professor at numerous conferences and congresses, including the Congress of the Society of Radiological Nursing
- ♦ Postgraduate Certificate in Nursing
- ♦ Professional Master's Degree in Prevention Management in the Company
- ♦ Professional Master's Degree in Urgency, Emergencies and Catastrophes
- ♦ Member of the panel of auditors authorized by the Quality Assessment Unit of the Health Service of the Principality of Asturias
- ♦ Certificate of Pedagogical Aptitude for Secondary Education Teachers
- ♦ Radioactive Facilities Operator License in Nuclear Medicine by the Nuclear Safety Council



## Professors

### Ms. Álvarez Noriega, Paula

- ◆ Supervisor of the Radiodiagnostics Service at the Central University Hospital of Asturias
- ◆ Honorary Collaborator attached to the Department of Medicine of the University of Oviedo and the Adolfo Posada Institute
- ◆ Postgraduate Certificate in Nursing
- ◆ Professional Master's Degree in Prevention Management in the Company
- ◆ Professional Master's Degree in Support Treatment and Palliative Care in Oncology Patients
- ◆ Postgraduate Diploma from in Hemotherapy Nursing
- ◆ Nuclear Medicine Radioactive Installations Operator License by the Nuclear Safety Council

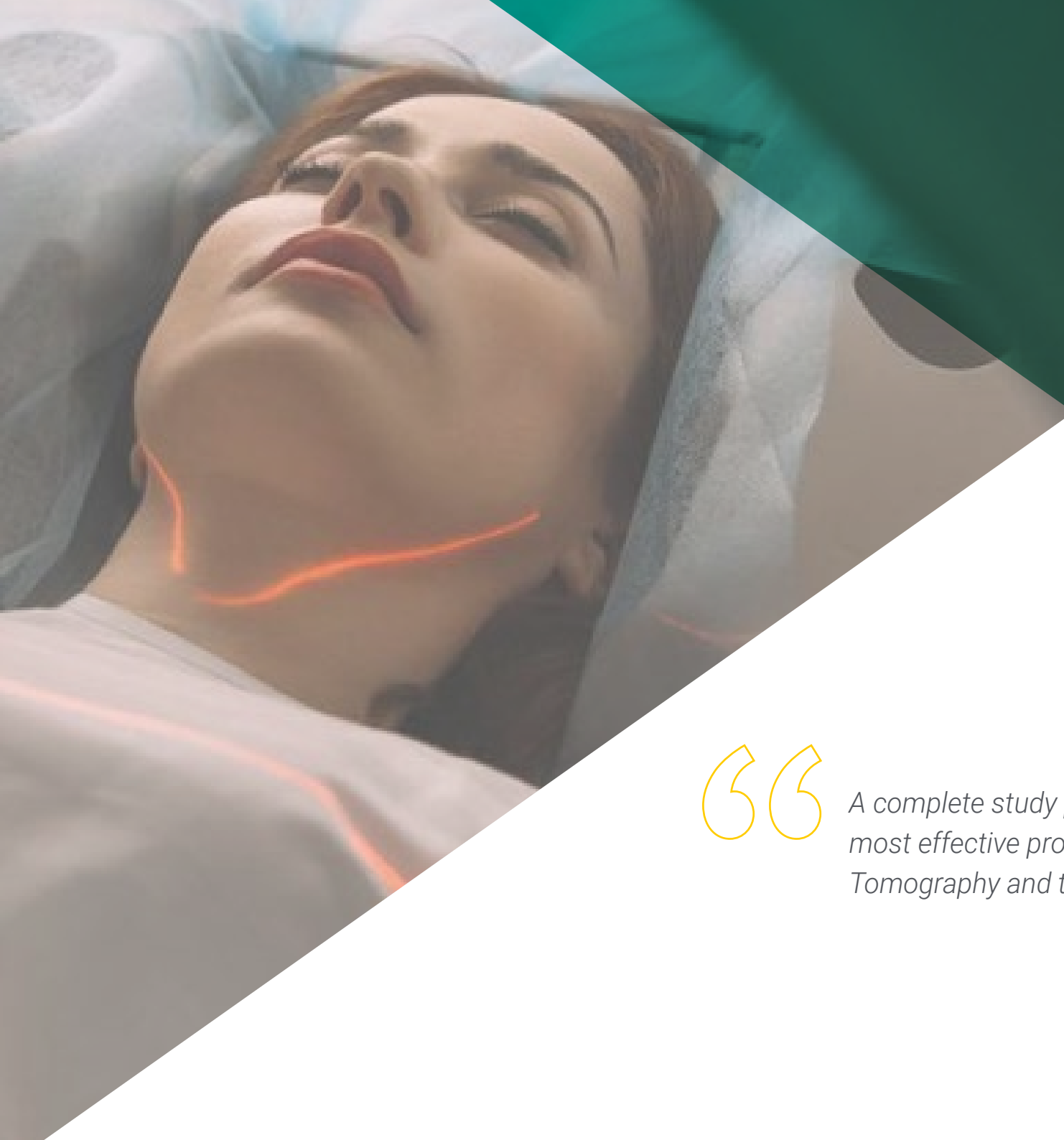
# 04

## Structure and Content

Thanks to the Relearning method, used by this academic institution in all its programs, the graduates will advance naturally through the syllabus consolidating the most relevant concepts. This way, they will be able to obtain in a short time a complete update on the procedures, objectives and care that every nurse must take into account when performing a Computed Tomography. In addition, didactic material is available 24 hours a day, 7 days a week.







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*A complete study plan that focuses on the most effective procedures in Computed Tomography and the objectives of exploration"*

## Module 1. Computerized Tomography

- 1.1. CT and Components of a Unit
  - 1.1.1. History and Evolution of Computerized Tomography
  - 1.1.2. Definition and Application
  - 1.1.3. Physical Fundamentals, Elements and Components involved in Computed Tomography Imaging
  - 1.1.4. Contrasts Acquisition Time and Resolution
  - 1.1.5. Artifacts
  - 1.1.6. Room Characteristics
- 1.2. Scanning Objectives
  - 1.2.1. Introduction
  - 1.2.2. Muscle and Bone Disorders, Bone Tumors, and Fractures
  - 1.2.3. Localization of Tumors, Infections or Blood Clots
  - 1.2.4. Guidance for Procedures such as Surgeries, Biopsies and Radiotherapy
  - 1.2.5. Detection and control of diseases such as Cancer, Heart Disease, Lung Nodules and Liver Tumors
  - 1.2.6. Monitoring the Effectiveness of Certain Treatments
  - 1.2.7. Detecting Internal Injuries and Internal Bleeding
- 1.3. Risks of the Exploration
  - 1.3.1. Radiation Exposure
  - 1.3.2. Reactions to Contrast Material
  - 1.3.3. Sedation
- 1.4. Neurological Examination
  - 1.4.1. Description and Protocols
  - 1.4.2. Preparation
  - 1.4.3. Nursing Care Process
- 1.5. Musculoskeletal Examination
  - 1.5.1. Description and Protocols
  - 1.5.2. Preparation
  - 1.5.3. Nursing Care Process
- 1.6. Vascular Explorations I
  - 1.6.1. Description and Protocols
  - 1.6.2. Preparation
  - 1.6.3. Nursing Care Process





- 1.7. Vascular Explorations II. Cardiac Examinations
  - 1.7.1. Description and Protocols
  - 1.7.2. Preparation
  - 1.7.3. Nursing Care Process
- 1.8. Examination of Abdomen
  - 1.8.1. Description and Protocols
  - 1.8.2. Preparation
  - 1.8.3. Nursing Care Process
- 1.9. Pediatric Examinations
  - 1.9.1. Description and Protocols
  - 1.9.2. Preparation
  - 1.9.3. Nursing Care Process
- 1.10. Interventions
  - 1.10.1. Description and Protocols
  - 1.10.2. Preparation
  - 1.10.3. Nursing Care Process

“*Delve into the scientific evidence surrounding vascular examinations, patient preparation and the most effective care process*”

# 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 applied to the 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

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are 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 CT for Nursing guarantees students, in addition to the most rigorous 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 program will allow you to obtain your **Postgraduate Certificate in CT for Nursing** 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.

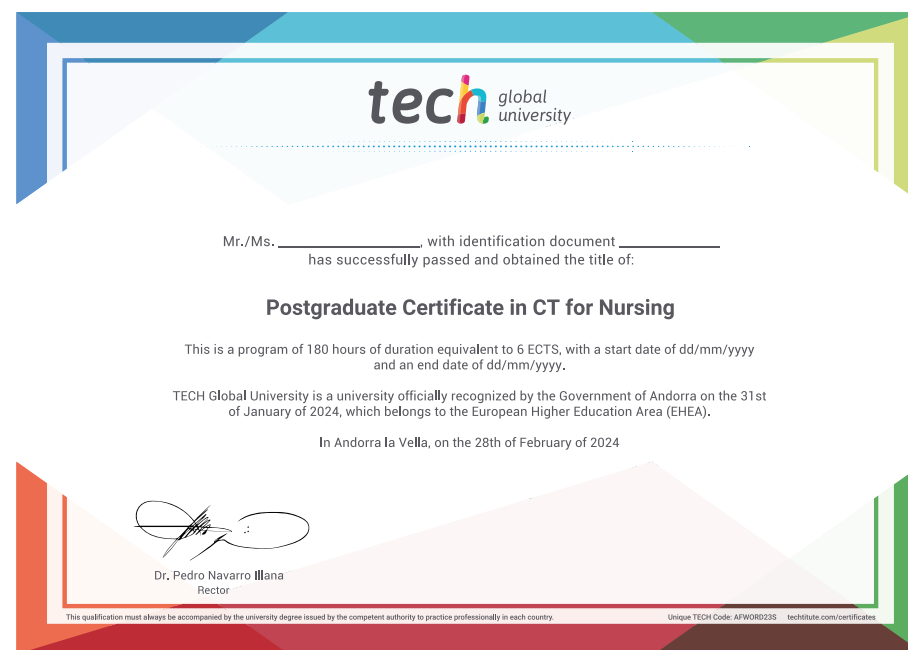
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in CT for Nursing**

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.

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



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