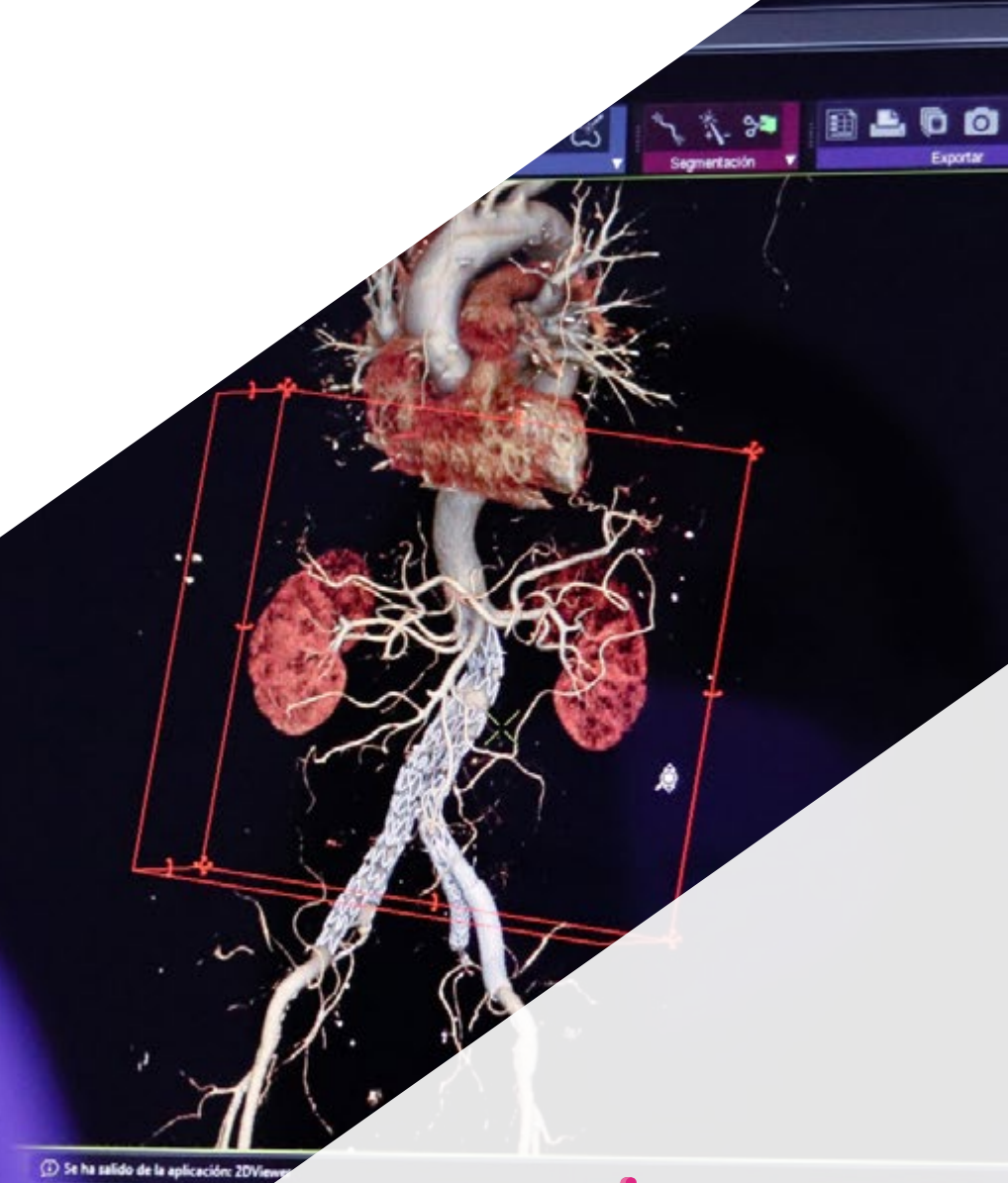


# Postgraduate Diploma Nuclear Medicine in Radiological Nursing





## Postgraduate Diploma Nuclear Medicine in Radiological Nursing

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

Website: [www.techtute.com/in/nursing/postgraduate-diploma/postgraduate-diploma-nuclear-medicine-radiological-nursing](http://www.techtute.com/in/nursing/postgraduate-diploma/postgraduate-diploma-nuclear-medicine-radiological-nursing)

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# 01

# Introduction

The responsibility of a nursing professional in a Nuclear Medicine area is high, given the risks involved in the incorrect performance of a procedure in an environment where radioactive substances are used to diagnose and treat diseases. Given its relevance, it is essential that healthcare professionals have an excellent specialization to promote quality and safe patient care. In this line, this 6-month program provides the graduate with the most current and advanced topics on the DTI Service, radiological prevention, waste management or administration of radiopharmaceuticals. All in a 100% online teaching format and with the best didactic material of the present academic panorama.



“

*A 100% online Postgraduate Diploma that will provide you with an excellent update on Nuclear Medicine in Radiological Nursing”*

Nuclear Medicine presents important progress due to the improvement of technologies and techniques that have allowed perfecting precision radiotherapy, theranostics, the use of hybrid images, the development of new radiotracers or the use of radiomic technique. All this has led nursing professionals to constantly update their knowledge in order to be able to perform their work successfully and safely.

In this sense, healthcare professionals must have solid skills in the administration of radiopharmaceuticals, know the operation and application of each diagnostic device, as well as master the existing protocols. A wide field of specific action in which this Postgraduate Diploma of 450 teaching hours, which offers the graduate the most advanced information.

All this, in addition, with didactic material based on video summaries of each topic, videos in detail, specialized readings and clinical case studies to which students will have easy access from a digital device with an Internet connection. Also, thanks to the *Relearning* method, students will advance naturally through the syllabus, consolidating the most important concepts and thus reducing the long hours of memorization.

A university program that is an excellent opportunity for professionals to be able to carry out a complete updating process with flexibility and adjusted to the real needs of healthcare professionals. Undoubtedly, an ideal option to reconcile daily activities with an avant-garde program.

This **Postgraduate Diploma in Nuclear Medicine in Radiological Nursing** contains the most complete and up-to-date scientific program on the market. Its most outstanding features are:

- ♦ 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

“ You will be up to date with the Instrumentation in Nuclear Medicine and its uses according to each pathology”

“

*You are in front of a university program that adapts perfectly to your agenda and your motivation to update your knowledge in Nuclear Medicine in Radiological Nursing"*

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.

*A program that will allow you to delve into the advantages and disadvantages of scintigraphy with total comfort, from your computer with an Internet connection.*

*Delve into the role of the nurse before, during and after the exploration performed in PET with innovative and current didactic material.*



# 02 Objectives

This Postgraduate Diploma was created with the intention of providing the nursing professional with the latest advances in Nuclear Medicine applied to their daily practice. In this way, they will be able to master the most complex clinical cases and perform the procedures according to the latest existing protocols. To achieve this goal, TECH provides the graduates with the most advanced pedagogical tools, in which the latest technology applied to the academic field has been used.





“

*Obtain a close and real vision of the Radiological Protection norms that every nursing professional in this area must apply"*

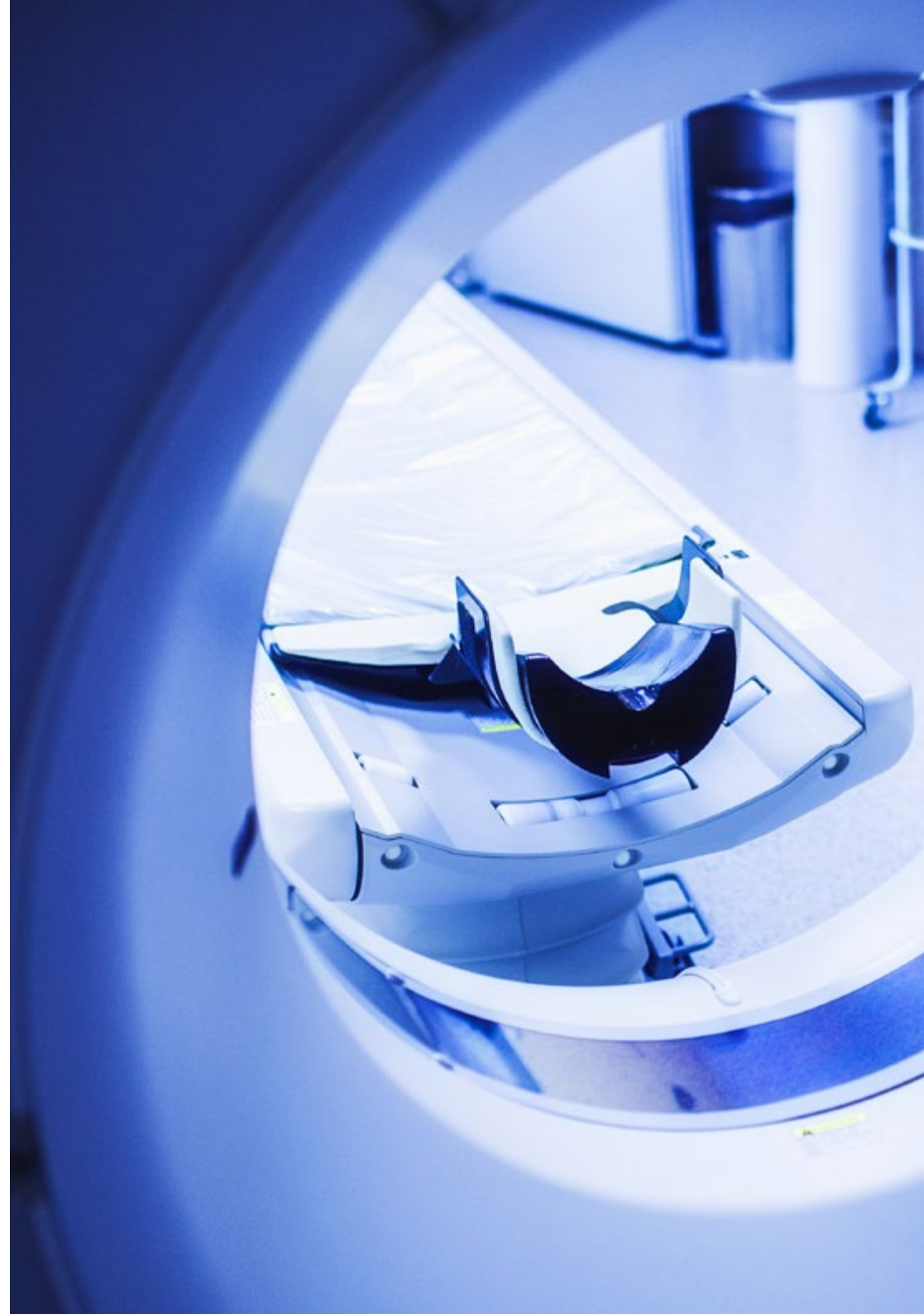


## General Objectives

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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
- ◆ Develop nurses' skills in performing image-guided procedures, including breast and brachytherapy, to improve the quality of patient care and optimize clinical outcomes

“ You will be able to effectively implement the nursing care processes in those patients who undergo Gammacamera studies”





## Specific Objectives

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### Module 1. Nursing in the Diagnostic Imaging and Treatment Service (DTI). Nursing Consultation

- ♦ Delve into the competences to be developed by the nurse in the consultation
- ♦ Delve into understanding of the management of the prevention of unwanted effects after contrast administration, both in allergic patients and in patients with renal insufficiency
- ♦ Establish priorities in the different management activities
- ♦ Delve into the recommendations of the evaluating physicians of the diagnostic tests and to communicate them if necessary to whom it is necessary, managing an agenda of case managers and secretaries, as well as general practitioners

### Module 2. Nuclear Medicine I

- ♦ Describe the object of Nuclear Medicine, its physical and chemical fundamentals
- ♦ Update knowledge in the handling of radiopharmaceuticals
- ♦ Delve into the radioprotection norms appropriate to each radiopharmaceutical and to train us to carry out health education in their application in the intra and intra-hospital environment
- ♦ Carry out a correct management of radioactive waste
- ♦ Develop nursing skills in techniques derived from metabolic therapies
- ♦ Understand the studies performed in PET and the role of the nurse in the care of patients undergoing this test
- ♦ Delve into the different techniques of medical diagnostic imaging in MN
- ♦ Define the characteristics of radioactive decay, types of radiation, its interaction with the environment and the consequences of clinical interest

- ♦ Delve into the structure of a generator
- ♦ Differentiate the concepts of radiopharmaceutical, radiotracer and radionuclide
- ♦ Describe the general characteristics of radionuclides
- ♦ Develop what an activimeter is used for and how it works
- ♦ Identify the different elements of a gamma camera
- ♦ Describe the basics of scintigraphic imaging
- ♦ Evaluate the advantages and disadvantages of scintigraphy
- ♦ Identify the main therapeutic applications of some radioisotopes
- ♦ Describe the characteristics and kinetics of radiopharmaceuticals associated with each diagnostic examination

### Module 3. Nuclear Medicine II Isotopic Studies

- ♦ Delve into the development of the studies performed in the Nuclear Medicine Department and the use of the gamma camera
- ♦ Delve into the different nursing procedures of isotopic studies in neurology, pneumology, nephrourology, cardiology, vascular, musculoskeletal, hepatic, biliary, etc
- ♦ Implement the nursing care process for patients undergoing Gammacamera studies
- ♦ Manage the different radiological protection recommendations and their correct explanation to patients and health personnel outside the MN service

# 03

# Course Management

TECH has brought together in this university program an excellent teaching team with extensive experience in areas of Diagnostic Imaging and Treatment. In this way, the graduates have the guarantee of being able to access a syllabus based on clinical experience and the latest knowledge in this field, applied to Nursing. Also, thanks to the proximity of the faculty, students will be able to resolve any questions they may have about the content of this program.



“

*The proximity of the specialized faculty of this university program will allow you to resolve any doubts you may have about the syllabus of this program"*

## 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. Busta Díaz, Mónica

- ◆ Supervisor of the Nuclear Medicine Service at the Central University Hospital of Asturias
- ◆ University Diploma in Nursing
- ◆ Bachelor's Degree in History
- ◆ Postgraduate Diploma in Intensive Care Unit Nursing
- ◆ Postgraduate Diploma in in Dialysis Nursing
- ◆ Postgraduate Diploma in Surgical Fields in Nursing
- ◆ Postgraduate Diploma in Hemotherapy
- ◆ Nuclear Medicine Radioactive Installations Operator's License. Nuclear Safety Council
- ◆ Member of the Scientific Committee during the XX Congress of the Spanish Society of Radiological Nursing in 2022

### 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
- ◆ University Diploma 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

DTI Services must have Advanced Practice Nursing professionals who have a perfect command of the key concepts of radiopharmaceutical administration, the various existing techniques, as well as the advances in Nuclear Medicine. For this reason, this Postgraduate Diploma brings together this information in a dynamic way, through advanced pedagogical tools, available 24 hours a day, 7 days a week, from any electronic device with an Internet connection.







“

*An unparalleled library of multimedia resources that will allow you to update your knowledge in Nuclear Medicine, whenever and wherever you want"*

## Module 1. Nursing in the Diagnostic Imaging and Treatment Service (DTI). Nursing Consultation

- 1.1. Nursing Role in a DTI Service
  - 1.1.1. Definition of Advanced Practice Nursing (APN)
  - 1.1.2. History of Advanced Practice Nursing
  - 1.1.3. Current status of Advanced Practice Nursing
- 1.2. Role of the PPS in the Nursing Consultation of a DTI Department
  - 1.2.1. Historical Development of an ITN Service
  - 1.2.2. Historical Evolution of Care in an ITD Department
  - 1.2.3. Role of the PPS in the Nursing Consultation of a DTI Department
- 1.3. Contrast Media in Diagnostic Imaging and Treatment
  - 1.3.1. Definition and Types of Contrast Media
  - 1.3.2. Chemical Properties of Contrast Media
  - 1.3.3. Classification of Contrast Media
  - 1.3.4. Routes of administration of contrast media in Diagnostic and Treatment Imaging
- 1.4. Adverse Reactions Due to Contrast Media Administration
  - 1.4.1. Toxicity Due to Contrast Media Administration
  - 1.4.2. Renal Toxicity Due to Contrast Media Administration
  - 1.4.3. Hypersensitivity Reactions Due to the Administration of Contrast Media
  - 1.4.4. Others Toxicity Due to Contrast Media Administration
  - 1.4.5. Extravasation of Peripheral Venous Route Due to Contrast Administration
- 1.5. Contrast Screening. The Importance of Renal Function in the Administration of Contrast Media.
  - 1.5.1. Contrast-induced Nephropathy. Definition
  - 1.5.2. Risk Factors in Contrast-Induced Nephropathy
  - 1.5.3. Risk Diagnosis in Contrast-Induced Nephropathy
- 1.6. Contrast Screening. Role of the EPA in the Indication of an Iodinated Contrast Medium according to Renal Function
  - 1.6.1. Review of the Patient's Medical History
  - 1.6.2. General Recommendations Before the Administration of an Iodinated Contrast Medium
  - 1.6.3. Prevention and Follow-up of Iodinated Contrast-induced Nephropathy
- 1.7. Contrast Screening. Role of EPA in the Administration of Other Contrast Media According to Renal Function
  - 1.7.1. Impact of the Administration of Non-Iodinated Contrast Media on Renal Function
  - 1.7.2. Gadolinium-based Contrast Media and Renal Function
  - 1.7.3. Impact of Other Contrast Media on Renal Function
- 1.8. Contrast Screening. Hypersensitivity Reactions to Contrast Media
  - 1.8.1. Definition of Hypersensitivity Reaction
  - 1.8.2. Classification of Hypersensitivity Reactions
  - 1.8.3. Risk Factors for Hypersensitivity Reactions to Contrast Media
  - 1.8.4. Diagnosis of a Hypersensitivity Reactions to Contrast Media
- 1.9. Contrast Screening. Role of the EPA in the Presence of a Previous History of Contrast Hypersensitivity Reactions
  - 1.9.1. Review of the Patient's Medical History
  - 1.9.2. Prevention of Hypersensitivity Reactions to Iodinated Contrast Media
  - 1.9.3. Prevention of Hypersensitivity Reactions to Gadolinium-based Contrast Media
  - 1.9.4. Prevention of Hypersensitivity Reactions to Other Contrast Agents
- 1.10. Management of Imaging Tests
  - 1.10.1. The Importance of the Diagnostic Imaging and Treatment Service in the Health System
  - 1.10.2. Nursing Knowledge
  - 1.10.3. The Need to Record

**Module 2. Nuclear Medicine I**

- 2.1. What is Nuclear Medicine?
  - 2.1.1. Introduction to Nuclear Medicine
  - 2.1.2. History of Nuclear Medicine
  - 2.1.3. Fields of Application of Nuclear Medicine
  - 2.1.4. Radiopharmaceuticals
- 2.2. Physical Fundamentals of Nuclear Medicine
  - 2.2.1. Key Concepts
  - 2.2.2. Structure of Matter
  - 2.2.3. Electromagnetic Radiation
  - 2.2.4. Atomic Structure Bohr Atom
  - 2.2.5. Nuclear Structure
  - 2.2.6. Radioactivity and Nuclear Reactions
  - 2.2.7. Interaction of Radiation with Matter
- 2.3. Chemical Fundamentals of Nuclear Medicine
  - 2.3.1. Key Concepts
  - 2.3.2. Obtaining Radionuclides
  - 2.3.3. Radionuclide Generators
  - 2.3.4. Structure of a Molybdenum/Tcnetium Generator
  - 2.3.5. Tagging Mechanisms
- 2.4. Radiopharmaceuticals
  - 2.4.1. Characteristics of the Ideal Radiopharmaceutical
  - 2.4.2. Physical Form and Routes of Administration of Radiopharmaceuticals
  - 2.4.3. Localization Mechanisms of Radiopharmaceuticals
- 2.5. Fundamentals of Radiological Prevention in Nuclear Medicine
  - 2.5.1. Key Concepts
  - 2.5.2. Quantities and Units
  - 2.5.3. Fundamentals of Radiological Prevention in Nuclear Medicine
    - 2.5.3.1. Patients
    - 2.5.3.2. Workers and Members of the Public
    - 2.5.3.3. Pregnancy and Breastfeeding
- 2.6. Fundamentals of Radiological Prevention and Medical Physics in Nuclear Medicine
  - 2.6.1. Key Concepts
  - 2.6.2. Radiation Detection and Measurement
    - 2.6.2.1. Gas Ionization Detectors
    - 2.6.2.2. Semiconductor Detectors
    - 2.6.2.3. Scintillation Detectors
  - 2.6.3. Radiation Protection Standards
- 2.7. Radioactive Waste
  - 2.7.1. Key Concepts
  - 2.7.2. Radioactive Sources out of Use
  - 2.7.3. Solid Waste Materials with Radioactive Content
  - 2.7.4. Liquid Radioactive Waste
- 2.8. Instrumentation in Nuclear Medicine
  - 2.8.1. Key Concepts
  - 2.8.2. Activimeter or Dose Calibrators
  - 2.8.3. Gamma Camera and SPECT
    - 2.8.3.1. Gammacamera Detectors
    - 2.8.3.2. Collimation
    - 2.8.3.3. Image Correctors
    - 2.8.3.4. Planar Image Formation
    - 2.8.3.5. Tomographic Acquisition
  - 2.8.4. PET
    - 2.8.4.1. Detectors Used in PET
    - 2.8.4.2. PET Image Formation
- 2.9. Radiometabolic Therapy
  - 2.9.1. Treatment of Metastatic Bone Pain
  - 2.9.2. Treatment of Differentiated Thyroid Cancer
  - 2.9.3. Treatment of Hyperthyroidism
  - 2.9.4. Treatment of Non-Hodgkin's Lymphoma
  - 2.9.5. Treatment of Neuroendocrine Tumors
  - 2.9.6. Radiosynoviorthesis

- 2.10. Scans performed in PET. Nursing care and attention
  - 2.10.1. Radionuclides and radiopharmaceuticals in PET
  - 2.10.2. Types of Studies
  - 2.10.3. Nursing Care at the PET-FDG
  - 2.10.4. Nursing Care in the PET-Colina
  - 2.10.5. Nursing care in the PET-Vizamil PET
  - 2.10.6. Nursing Care at the PET-DOPA
  - 2.10.7. Nursing Care at the PET-PSMA
  - 2.10.8. Nursing Care in the Myocardial Viability PET

### Module 3. Nuclear Medicine II Isotopic Studies

- 3.1. Isotopic studies of the musculoskeletal system. Nursing care and attention
  - 3.1.1. Bone scintigraphy
  - 3.1.2. Three-phase bone scintigraphy
  - 3.1.3. Bone Marrow Gammagraphy
  - 3.1.4. Isotopic studies for diagnosis in Inflammatory and Infectious Pathology
    - 3.1.4.1.  $^{67}\text{Ga}$
    - 3.1.4.2. Labeled leukocytes
- 3.2. Isotopic studies in Digestive Pathology. Nursing Care and Attention
  - 3.2.1. Anatomophysiological Recall
  - 3.2.2. Salivary Gammagraphy
  - 3.2.3. Esophageal Transit Scintigraphy
  - 3.2.4. Gastric scintigraphy Detection of ectopic gastric mucosa Meckel's Diverticulum
  - 3.2.5. Gastric Emptying Scintigraphy
  - 3.2.6. Gammagraphy for detection of Gastroesophageal Reflux
  - 3.2.7. Gammagraphy for the diagnosis of Digestive Hemorrhage
- 3.3. Isotopic studies in splenic and biliary pathology. Nursing Care and Attention
  - 3.3.1. Anatomophysiological Recall
  - 3.3.2. Hepatosplenic Scintigraphy
  - 3.3.3. Hepatobiliary Gammagraphy
  - 3.3.4. Bad absorption of biliary salts



- 3.4. Isotopic studies in Endocrinology. Nursing Care and Attention
  - 3.4.1. Isotopic studies for diagnosis from Thyroid Pathology
  - 3.4.2. Isotopic studies for diagnosis from Parathyroid Pathology
  - 3.4.3. Isotopic studies for diagnosis from Adrenal Glands Pathology
- 3.5. Isotopic studies in Cardiology. Nursing Care and Attention
  - 3.5.1. Study of Cardiac Function
    - 3.5.1.1. Equilibrium ventriculography
    - 3.5.1.2. First-pass ventriculography
  - 3.5.2. Study of Myocardial Perfusion
    - 3.5.2.1. Myocardial perfusion SPECT during exercise
    - 3.5.2.2. Myocardial perfusion SPECT at rest
  - 3.5.3. PET
- 3.6. Isotopic studies in Pneumology. Nursing Care and Attention
  - 3.6.1. Anatomophysiological Recall
  - 3.6.2. Studies for the diagnosis of pulmonary thromboembolism
    - 3.6.2.1. Pulmonary Ventilation Scintigraphy
    - 3.6.2.2. Pulmonary Perfusion Scintigraphy
  - 3.6.3. Diffuse Interstitial Lung Disease Evaluation Scintigraphy
  - 3.6.4. Gammagraphy in the evaluation of Infectious Processes
  - 3.6.5. Gammagraphy in the evaluation of Thoracic Neoplasms
- 3.7. Isotopic studies in Neurology. Nursing Care and Attention
  - 3.7.1. Anatomophysiological Recall
  - 3.7.2. Brain perfusion SPECT Technique Clinical applications
  - 3.7.3. Studies for the diagnosis of Epilepsies
    - 3.7.3.1. CSF fistula detection. Cisternography
  - 3.7.4. Studies for the diagnosis of Movement Disorders
    - 3.7.4.1. Studies for the differential diagnosis of Parkinsonisms
    - 3.7.4.2. Study of Dopamine Transporters DATSCAN
    - 3.7.4.3. Study of postsynaptic D2 Dopaminergic Dopamine Receptors. 123I-IBZM
    - 3.7.4.4. Myocardial Sympathetic Denervation Study with 123I-MIBG
  - 3.7.5. Studies for the diagnosis of Cerebrovascular Pathology and Encephalic Death 99Tc-HMPAO
- 3.8. Isotopic studies in Nephrourology. Nursing Care and Attention
  - 3.8.1. Anatomophysiological Recall
  - 3.8.2. Studies for the diagnosis of Renal Functionality. Glomerular filtration
  - 3.8.3. Isotopic Renogram
  - 3.8.4. Renal Cortical Gammagraphy: DMSA
  - 3.8.5. Isotopic cystography
  - 3.8.6. Scrotal or testicular scintigraphy
- 3.9. Isotopic studies in Vascular Pathology. Nursing Care and Attention
  - 3.4.1. Anatomophysiological Recall
  - 3.4.2. Isotopic phlebography
  - 3.4.3. Lymphogrammagraphy
  - 3.9.4. Sentinel lymph node study
    - 3.9.4.1. Sentinel Lymph Node in Breast Cancer
    - 3.9.4.2. Sentinel lymph node in malignant melanoma
    - 3.9.4.3. Sentinel node in other applications
- 3.10. Isotopic studies in Oncology. Nursing Care and Attention
  - 3.10.1. Tracking with  $^{67}\text{Ga}$  citrate
  - 3.10.2. Tracking with  $^{99\text{m}}\text{Tc}$ -sestaMIBI
  - 3.10.3. Traceback with 123I-MIBG and 131I-MIBG
  - 3.10.4. Traceback with labeled peptides
  - 3.10.5. Traceback with labeled monoclonal antibodies



*An academic itinerary that will allow you to delve into the most relevant isotopic studies in oncology and the important role of the nurse"*

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 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 Diploma in Nuclear Medicine in Radiological Nursing guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.



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

This **Postgraduate Diploma in Nuclear Medicine in Radiological Nursing** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery\*.

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

Title: **Postgraduate Diploma in Nuclear Medicine in Radiological Nursing**

Official N° of Hours: **450 h.**



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



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## Postgraduate Diploma Nuclear Medicine in Radiological Nursing

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

# Postgraduate Diploma

## Nuclear Medicine in Radiological Nursing