

# Postgraduate Certificate Radiology Applied to Ocular Oncology





## Postgraduate Certificate Radiology Applied to Ocular Oncology

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

Website: [www.techtute.com/us/medicine/postgraduate-certificate/radiology-applied-ocular-oncology](http://www.techtute.com/us/medicine/postgraduate-certificate/radiology-applied-ocular-oncology)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Certificate

---

*p. 28*

# 01

# Introduction

Radiology Applied to Ocular Oncology is a discipline that focuses on the diagnosis and treatment of tumors in the eye and its adjacent structures. Due to the complexity and specificity of this area, there is a need for specialized training for health professionals. To this end, TECH offers a solution to this need, providing students with comprehensive training in the use of imaging techniques for the diagnosis and follow-up of ocular oncology patients. The program is designed to be 100% online, which allows students to access the information from anywhere and at any time. Additionally, the pedagogical methodology implemented is Relearning, allowing students to learn with a practical approach.





“

*Get to know the radiology of the future now and learn about the most innovative radiology, the most current techniques and the most advanced technological resources that will allow you to be at the forefront in the field of Ocular Oncology and transform health care”*

Radiology Applied to Ocular Oncology is an area of medicine that focuses on the diagnosis and treatment of tumors affecting the eye and its adjacent structures. Currently, this discipline is of great importance due to the increase in cases of ocular cancer, which makes it necessary to have trained professionals to carry out early detection and effective treatment.

The Postgraduate Certificate in Radiology Applied to Ocular Oncology granted by TECH is an ideal option for those health professionals who wish to specialize in this area. During the program, students will learn about the technical considerations, indications and protocols necessary for performing imaging tests in patients with benign and malignant intraocular tumors, as well as benign and malignant orbital tumors. In addition, the clinical-radiological correlation and differential diagnosis of different pathologies, such as retinoblastoma and uveal melanoma, will be addressed.

The methodology of the program is guided by Relearning, which allows continuous feedback for a better assimilation of knowledge without the need to memorize. The program will also be taught online, allowing students to access the information from anywhere in the world. In addition, the organization of academic resources is designed to facilitate access to materials and maximize student learning. In summary, the Postgraduate Certificate in Radiology Applied to Ocular Oncology is an excellent option for those health professionals who wish to specialize in a discipline of great importance today.

This **Postgraduate Certificate in Radiology Applied to Ocular Oncology** 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 medical experts focused on Radiology Applied to Ocular Oncology
- ◆ 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



*With this program, you will not only acquire a complete knowledge of imaging tests in Ocular Oncology, but you will also develop critical skills for their analysis and interpretation"*

“

*At the end of the program you will be prepared to work in hospitals, clinics and centers specialized in Ocular Oncology, in areas of diagnosis and treatment, research and teaching”*

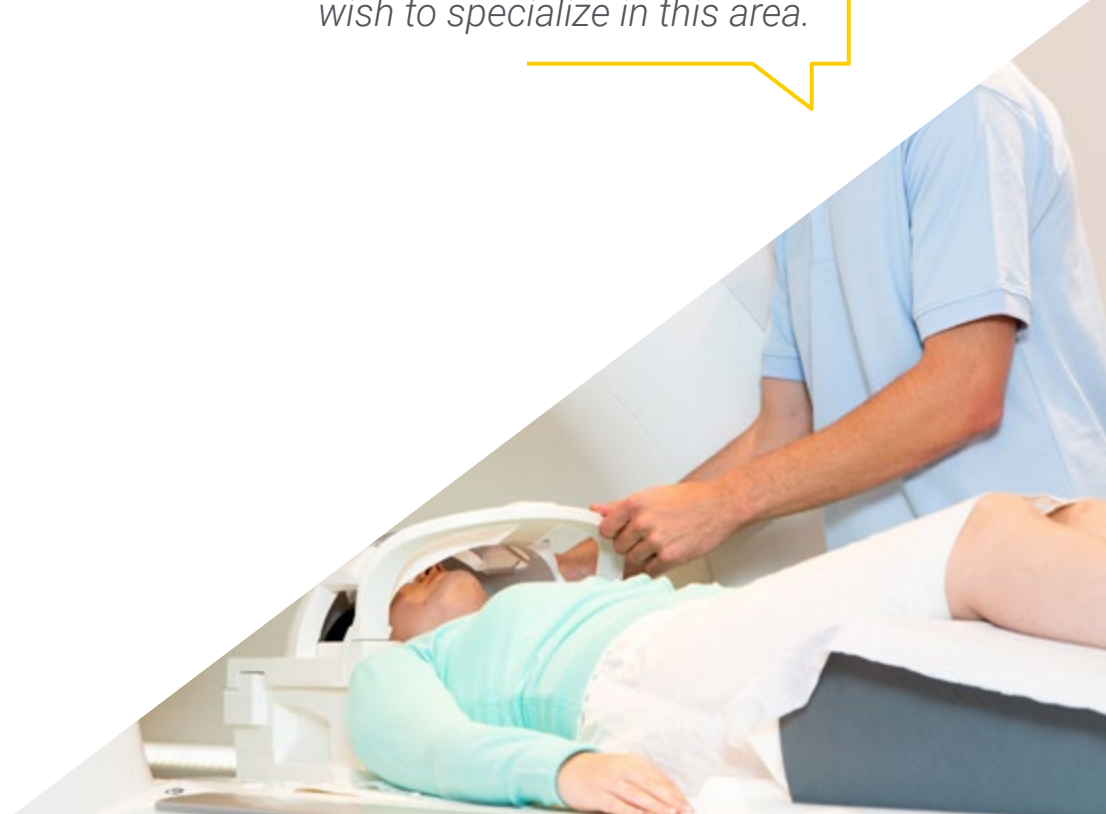
*The organization of the academic resources proposed by TECH ensures that students can access the materials in an easy and simple way.*

*The Postgraduate Certificate in Radiology Applied to Ocular Oncology is an excellent option for those health professionals who wish to specialize in this area.*

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.



# 02 Objectives

Radiology applied to Ocular Oncology is a specialty that requires a high degree of knowledge and experience on the part of health professionals. For this reason, this qualification is essential, which guarantees a correct interpretation of the images obtained by means of different diagnostic techniques. One of the reasons for this program is to provide professionals with comprehensive and updated training on the different imaging tests used in the detection, diagnosis and follow-up of intraocular and orbital tumors. In addition, the Postgraduate Certificate seeks to detail the indications and specific technical considerations of each test, to ensure an accurate interpretation of the results and an adequate clinical decision making.







“

*Enter a world of possibilities through radiology and discover how radiology can help you explore the fascinating world of ocular oncology, unlocking new opportunities and challenges in the field"*



## General Objectives

---

- ◆ Update knowledge on the different tumors that can affect the eye and its appendages
- ◆ Deepen in the diagnostic-therapeutic approach of ocular neoplasms
- ◆ Delve into the main common characteristics of ocular neoplasms
- ◆ Deepen in the different tumor lesions that can affect the eyelids, the lacrimal drainage pathway and the orbit
- ◆ Investigate the different types of tumors that can be located on the ocular surface, cornea and conjunctiva
- ◆ Delve into the most recent research in Oncological Ophthalmology





## Specific Objectives

---

- ◆ Provide the most updated knowledge about the different imaging tests for intraocular and orbital tumor pathology
- ◆ Detail the indications and technical considerations of the different imaging tests in Ocular Oncology



*Learn to save lives from your profession and become an expert in the early detection of ocular pathologies thanks to the most advanced radiology techniques"*

# 03

## Course Management

The trajectory of the Postgraduate Certificate in Radiology Applied to Ocular Oncology is focused on providing quality education, and that is why TECH has made sure to have the best teachers in the field. The team of professionals is highly qualified and has extensive experience in the field, which guarantees that students will obtain a solid and complete training in the area of Radiology Applied to Ocular Oncology. With the guidance of this elite teaching team, students will have at their disposal the necessary tools for the development of their skills and competencies in the subject, which will allow them to excel and progress in their professional career.





“

*Learn from the best! In this Postgraduate Certificate, you will have a highly qualified and experienced teaching team that will guide you through the program and will provide you with all their knowledge and experience"*

## International Guest Director

Dr. Arun Singh is a true international eminence in Ophthalmic Oncology, a field to which he has dedicated more than three decades of his professional career. His career has been focused on research and treatment of eyelid and conjunctival tumors. He has also delved into pathologies such as Retinoblastoma and Uveal Melanoma.

For his exceptional clinical career, this expert has been recognized by both the Royal College of Ophthalmologists in the United Kingdom and the American Board of Ophthalmology in the United States. In addition, he has received a Career Achievement Award. These distinctions, which underline his excellence, are also endorsed by his prolific scientific work, with more than 160 articles in journals of high academic impact.

Another of his important contributions to this medical specialty has been the book *Clinical Ophthalmic Oncology*, considered an essential reference text for experts and professionals in training. His work as Editor of the prestigious *British Journal of Ophthalmology* is also noteworthy.

His excellent healthcare praxis has allowed him to take on challenges such as leading the Department of Ophthalmic Oncology at the Cleveland Clinic in Ohio, USA. From that position he has dedicated extensive efforts to the study of other ocular pathologies and, in turn, collaborates with the Pediatric Program of Uncommon Cancers and Blood Diseases.

As for his training, Dr. Singh began his medical education in India, at the Jawaharlal Institute and Mandras University. Subsequently, he developed internships and fellowships at the University of Florida, as well as completed his internship at St. Luke's Hospital in Bethlehem. He completed his specialization in Ocular Oncology at Wills Eye Hospital in Philadelphia. He has also been linked to highly reputable international organizations such as the Association for Research in Vision and Ophthalmology.



## Dr. Singh, Arun

---

- Director, Department of Ophthalmic Oncology, Cleveland Clinic, Ohio, USA
- Editor of the British Journal of Ophthalmology
- Editor of the academic book Clinical Ophthalmic Oncology
- Specialist in Ophthalmology from the University of Florida
- Internships at Watford General and St. Luke's Hospitals, Watford, Florida
- Graduate of Medicine and Surgery from the Jawaharlal Institute and the University of Madras
- Member of: International Association for Research in Vision and Ophthalmology, International Society of Ocular Oncology, American Academy of Ophthalmology, Royal College of Ophthalmologists of London, UK, Royal College of Surgeons of Edinburgh, UK

“

*Thanks to TECH, you will be able to learn with the best professionals in the world”*

## Management



### Dr. Garrido Hermosilla, Antonio Manuel

- ♦ Medical Specialist in Ophthalmology
- ♦ Specialist in the Ophthalmology Service of the Virgen Macarena University Hospital
- ♦ Specialist in Oculoplasty-Orbit and Ocular Oncology Units
- ♦ Specialist in National Reference Units (CSUR) for Adult and Childhood Intraocular Tumors
- ♦ Co-coordinator of Andalusian Reference Units (UPRA) for the Integral Management of the Anophthalmic Cavity and for Graves' Orbitopathy
- ♦ Tutor for Ophthalmology Interns



### Dr. Relimpio López, María Isabel

- ♦ Specialist Area Physician (FEA) in the Ophthalmology Service at the University Hospital Virgen Macarena (HUVVM)
- ♦ Specialist in the Retina and Ocular Oncology Units of the HUVVM
- ♦ Coordinator of the National Reference Unit (CSUR) for Adult Intraocular Tumors
- ♦ Specialist in the National Reference Unit (CSUR) for Childhood Intraocular Tumors
- ♦ Ophthalmologist in the European Network ERN-PaedCan for Retinoblastoma
- ♦ PhD in Medicine, University of Seville
- ♦ Clinical Tutor of Ophthalmology, Medical Degree, University of Seville



## Professors

### Dr. Caparrós Escudero, Carlos

- ◆ Medical Specialist in Radiodiagnosis
- ◆ Specialist Area Physician (FEA) in the Radiodiagnostic Service of the Virgen Macarena University Hospital (HUVVM) in the National Reference Units (CSUR) for Adult and Childhood Intraocular Tumors
- ◆ Member of the European Network ERN-PaedCan for Retinoblastoma
- ◆ Radiology Clinical Tutor

### Dr. Rosales Martínez, Eduardo

- ◆ Medical Specialist in Radiodiagnosis
- ◆ Specialist of the Radiodiagnostic Service at the Virgen Macarena University Hospital (HUVVM), where he is also a Tutor of Internal Medical Residents (MIR) of Radiodiagnosics
- ◆ Radiology Clinical Tutor

### Dr. Busquier Cerdán, Teresa

- ◆ Medical Specialist in Radiodiagnosis
- ◆ Specialist in the Radiodiagnosis Service of the Virgen Macarena University Hospital (HUVVM)
- ◆ Radiology Clinical Tutor

### Dr. Roquette Mateos, Mario

- ◆ Medical Specialist in Radiodiagnosis of the Virgen Macarena University Hospital
- ◆ Degree in Medicine from the University of Seville
- ◆ Member of: Spanish Society of Medical Radiology, Spanish Society of Emergencies Radiology

### Dr. Mayorga Pineda, María

- ◆ Medical Specialist in Radiodiagnosis
- ◆ Area Physician in the Radiodiagnostic Service of the Virgen Macarena University Hospital
- ◆ Members of the Spanish Society of Medical Radiology



*A unique, key, and decisive training experience to boost your professional development"*

# 04

## Structure and Content

The content of the Postgraduate Certificate is complemented by 10 different topics unified in a single module, which addresses in detail the different aspects of intraocular and orbital tumor pathology. Through the teaching methodology of Relearning, students will have access to the latest advances in the field of Radiation Oncology, which will allow them to acquire a complete and updated training. In the syllabus, different types of intraocular tumors will be studied, both benign and malignant, including uveal melanoma, retinoblastoma and metastases. Orbital tumors, both benign and malignant, and other orbital tumor pathologies will also be addressed for differential diagnosis, such as lymphatic malformations and arteriovenous malformations.





“

*In this Postgraduate Certificate you will have multimedia resources such as videos, images and case studies that will allow you to better understand the concepts and apply them effectively in practice”*

## Module 1. Radiology Applied to Ocular Oncology

- 1.1. Radiology in Ocular Oncology
  - 1.1.1. Technical Considerations
  - 1.1.2. Indications
  - 1.1.3. Protocols
- 1.2. Benign Intraocular Tumors
  - 1.2.1. Choroid-retinal Hemangiomas
  - 1.2.2. Retinal Melanocytoma
  - 1.2.3. Others
- 1.3. Malignant Intraocular Tumors I: Retinoblastoma
  - 1.3.1. Introduction
  - 1.3.2. Imaging Tests
  - 1.3.3. Radiological Differential Diagnosis: Coats disease, persistent hyperplastic primary vitreous, retinopathy of prematurity
- 1.4. Malignant Intraocular Tumors II: Uveal Melanoma
  - 1.4.1. Introduction
  - 1.4.2. Imaging Tests
  - 1.4.3. Clinical- Radiological Correlation
- 1.5. Malignant Intraocular Tumors III: Metastasis
  - 1.5.1. Introduction
  - 1.5.2. Imaging Tests
  - 1.5.3. Clinical- Radiological Correlation
- 1.6. Benign Orbital Tumors I
  - 1.6.1. Child Hemangioma
  - 1.6.2. Optic Tract Glioma
  - 1.6.3. Optic Nerve Sheath Meningioma
- 1.7. Benign Orbital Tumors II
  - 1.7.1. Pleomorphic Adenoma or Mixed Tumor of the Lacrimal Gland
  - 1.7.2. Dermoid Cysts
  - 1.7.3. Lipoma





- 1.8. Malign Orbital Tumors I
  - 1.8.1. Metastasis
  - 1.8.2. Lymphoproliferative Lesions
  - 1.8.3. Rhabdomyosarcoma
- 1.9. Malign Orbital Tumors II
  - 1.9.1. Lacrimal Gland Carcinomas
  - 1.9.2. Plasma Cell Tumors
  - 1.9.3. Others
- 1.10. Other Orbital Tumor Pathology for Differential Diagnosis
  - 1.10.1. Lymphatic Malformations: lymphangioma
  - 1.10.2. Arteriovenous Malformations
  - 1.10.3. Idiopathic Orbital Inflammatory Disease or Inflammatory Pseudotumor of the Orbit

“

*With the Relearning pedagogical method, you will learn in an efficient and permanent way using multimedia resources and interactive tools that will make the learning process more attractive and effective”*

# 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.





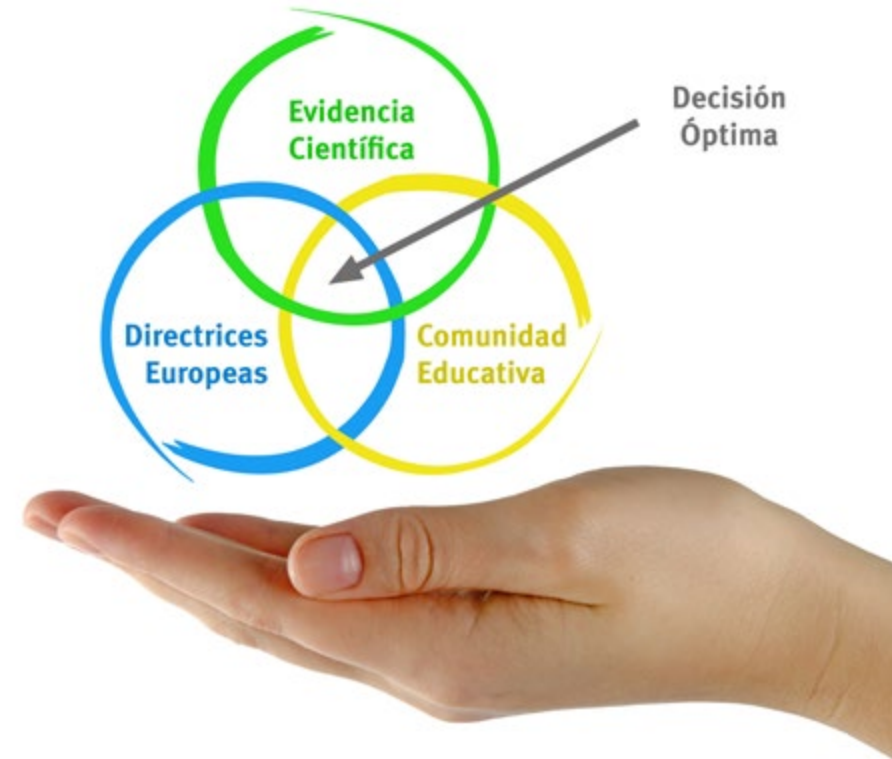
“

*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 we use the Case Method

What should a professional do in a given situation? 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. Specialists learn better, faster, and more sustainably over time.

*With TECH you will experience a way of learning 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, trying to recreate the real conditions in the physician's professional 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. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



## 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 the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

*Professionals will learn through real cases and by resolving 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, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. 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 highly 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.



#### Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and 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 the videos as many times as you like.



#### 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 on the usefulness of learning by observing experts. The system known as 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 Radiology Applied to Ocular Oncology guarantees students, in addition to the most rigorous 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 program will allow you to obtain your **Postgraduate Certificate in Radiology Applied to Ocular Oncology** 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 Radiology Applied to Ocular Oncology**

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  
development languages  
virtual classroom



**Postgraduate Certificate**  
Radiology Applied  
to Ocular Oncology

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

# Postgraduate Certificate Radiology Applied to Ocular Oncology

