



Postgraduate Certificate

Radiotherapy of Tumors of the Central Nervous System (Adults)

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/radiotherapy-tumors-central-nervous-system-adults

Index

> 06 Certificate

> > p. 32



Radiotherapy is one of the most in-demand therapeutic techniques in the field of oncology and its use on tumors of the central nervous system is complex and requires the mastery of the latest procedures and advances. In fact, each year there are new technological advances in the subject matter. Therefore, it is essential for physicians to have up-to-date knowledge so that they can deal with this type of diagnosis appropriately. This program allows professionals to obtain the most up-to-date information in a comfortable way and 100% online.



tech 06 | Introduction

Advances in the study and treatment of central nervous system tumors are becoming increasingly extensive. However, there is still a long way to go in finding a simple process in order to cure these types of tumor.

But as well as having the necessary technological advances to treat patients, it is equally as important that healthcare professionals have the ability to make a proper diagnosis from the very beginning. Therefore, it is essential that they have all the information and up-to-date skills to provide personalized and effective patient care.

In this Postgraduate Certificate we delve into the knowledge of radiotherapy in patients with tumors of the central nervous system, with the possible effects that such treatment with radiotherapy can cause. In this way, medical professionals will update their knowledge in the different types of tumors of the Central Nervous System.

This Postgraduate Certificate provides oncology professionals with the keys for the use of the main advances in radiation treatment of tumors of the Central Nervous System which will help them to evolve in their profession and to keep up to date with recent research in this field of oncology.

System (Adults) contains the most complete and up-to-date scientific program on the market. The most important features include:

» Development of more than 75 clinical cases presented by experts in Radiation Oncology.

» The graphic, schematic, and practical contents with which they are created

The graphic, schematic, and practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional practice

This Postgraduate Certificate in Radiotherapy of Tumors of the Central Nervous

- » Diagnostic-therapeutic developments on assessment, diagnosis and intervention in Tumors of the Central Nervous System
- » It contains practical exercises where the self-assessment process can be carried out to improve learning
- » Clinical and Diagnostic imaging and testing iconography
- » An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- » With special emphasis on evidence-based medicine and research methodologies in Radiation Oncology
- » All of this will be complemented by 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





Make the most of this Postgraduate Certificate to update your knowledge, expand your specialization and obtain a certified qualification from the TECH Global University"

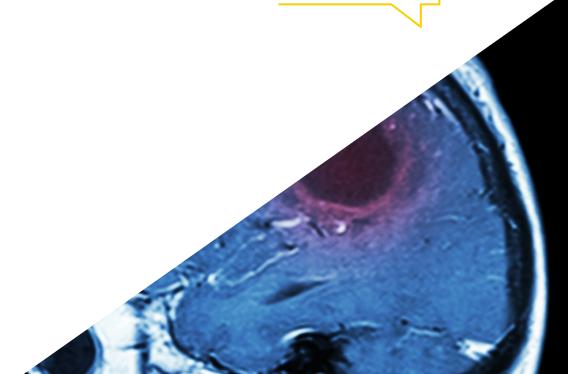
The teaching staff includes professionals from the field of Radiation Oncology, who bring their experience to this training program, as well as renowned specialists from leading scientific societies.

Thanks to its multimedia content developed with the latest educational technology, they will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to prepare for real situations.

This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise throughout the program. For this purpose, the physician will be assisted by an innovative interactive video system developed by renowned experts in the field of Radiation Oncology with extensive teaching experience.

This Postgraduate Certificate is the best opportunity you could have to complete your specialization.

The student will learn through real cases and the resolution of complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.







tech 10 | Objectives



General Objective

 Develop a holistic and up-to-date vision of Radiotherapy of Tumors of the Central Nervous System, allowing the student to acquire useful knowledge and, at the same time, generate interest in applying it to daily practice



This type of teaching-learning encourages curiosity and skill development, and allows students to feel an active part of the process"



Objectives | 11 tech



Specific Objectives

- Analyze how the advances of the last decades in both diagnosis and treatment of cancer have managed to increase survival
- Review the different types of cancer that warrant radiotherapeutic management and show the specific issues for each tumor
- Create a global and updated vision of the exposed topics that will allow the student to acquire useful knowledge and at the same time, generate interest in expanding the information and discovering its application in their daily practice. Learn the basics of Radiotherapy, as well as the different techniques available and their efficacy in order to know the place of each in the management of different central nervous system tumors
- Know the radiotherapeutic advances that allow a differential diagnosis to be made, making it possible to precisely define the field of resection, and providing information on prognosis and post-treatment monitoring
- Know the best indications for radiotherapy treatment of different tumors of the central nervous system





International Guest Director

Awarded by the Royal College of Radiologists of the United Kingdom for his BCRM presentation, Christopher Nutting is a prestigious **Oncologist** specialized in the areas of **Radiotherapy** and **Chemotherapy**. He has an extensive professional background of more than 30 years, where he has been part of reference health institutions such as the Royal Marsden Hospital or the Institute of Cancer Research in London.

In his firm commitment to optimize the quality of life of his patients, he contributed to the installation of Magnetic Resonance Imaging machines for the first time in Great Britain, incorporating a scanner and Linear Accelerator to locate tumors with greater precision. In addition, his clinical research has contributed to the development of several advances in the oncological field. His most outstanding contribution is Intensity-Modulated Radiation Therapy, a technique that improves the efficacy of cancer treatments by directing radiation to a specific target so as not to damage nearby healthy tissue.

In turn, he has performed more than 350 clinical studies and scientific publications that have facilitated the understanding of malignant tumors. For example, its "PARSPOT" trial provided relevant clinical data on the efficacy of Linear Accelerator Intensity Modulated Radiation Therapy in terms of local carcinoma control and patient survival. Thanks to these results, the UK Department of Health established practices to optimize both the accuracy and effectiveness of Radiotherapy in the treatment of Head and Neck Cancer.

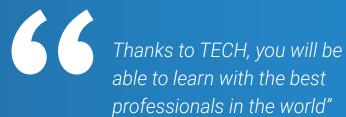
He is a regular speaker at **Scientific Congresses**, where he shares his solid knowledge in subjects such as Radiotherapy Technology or innovative therapies for the approach of people with Dysphagia. In this way, he helps medical professionals to stay at the forefront of advances in these fields in order to provide excellent services.



Dr. Nutting, Christopher

- Medical Director and Oncology Consultant at The Royal Marsden Hospital in London, United Kingdom
- Chairman of the Oncology Section at the Royal Society of Medicine, London, United Kingdom
- Clinical Head of Head and Neck Cancer at the Department of Health and Social Care, United Kingdom
- Consultant Oncologist at The Harley Street Clinic in London, United Kingdom
- Chairman of the National Cancer Research Institute in London, United Kingdom
- President of the Association of British Oncology in London, United Kingdom
- Senior Research Fellow at the National Institute for Health and Care Research, United Kingdom

- PhD in Medicine and Cellular Pathology from the University of London
- UK College of Physicians
- UK College of Radiologist



Management



Dr. Morera López, Rosa María

- » Head of the Radiation Oncology Service at La Paz University Hospital since 2017
- » Doctor of Medicine from the Complutense University of Madrid
- » Specialist in Radiation Oncology
- » Master's Degree in Health Services Management and Administration
- » Implementation of the HDR Breast Brachytherapy technique in the Radiation Oncology Department of the G.U.H Ciudad Real in 2013
- » Implantation of the HDR Prostate Brachytherapy technique in the Radiation Oncology Department of the G.U.H Ciudad Real in 2013
- » Implementation of the Tomotherapy Unit in the Radiation Oncology Department of the G.U.H Ciudad Real in 2014
- » Honorary Collaborating Professor in the subject of Radiology and Physical Therapeutics taught in the 3rd year of the Degree of Medicine at the Faculty of Medicine of the UCLM in Ciudad Real
- » Associate Professor in the Onco-Hematology course taught in the 4th year of the Medicine Degree at the Faculty of Medicine of the UCLM in Ciudad Real
- » Participation as Principal Investigator and collaborator in a large number of research project
- » Editor of several dozen articles in high-impact scientific journals



Dr. Rodríguez Rodríguez, Isabel

- » Specialist in Radiation Oncology La Paz University Hospital Madrid
- » Degree in Medicine. Specialist in Radiotherapy
- » Clinical Research Coordinator, Biomedic Foundation of the Ramón y Cajal Hospital until 2007
- » Member of the American Brachytherapy Society
- » Member of the European School of Oncology
- » Member of the European Society for Therapeutic Radiology and Oncology
- » Founding member of the Latin American Society of Breast Imaging
- » Participation as a collaborating researcher in many research projects
- » Editor of several dozen articles in high-impact scientific journals



Dr. Belinchón Olmeda, Belén

- Specialist in Radiation Oncology La Paz University Hospital. Madrid
- Specialist in Radiation Oncology Ruber International Hospital Madrid
- Doctorate in Medicine from the Autonomous University Madric
- Participation as a collaborating researcher in many research projects
- Editor of several dozen articles in high-impact scientific journals
- Teaching collaborator for residents of Radiation Oncology La Paz University Hospital. Madrid
- Member of the Multidisciplinary Unit of Cardio-Onco-Hematology (U.H La Paz)
- Member of the Sarcoma Group of the Spanish Society of Radiation Oncology (SEOR)
- Member of the Spanish Group of Breast Radiation Oncology (GEORM)

tech 18 | Course Management

Professors

Dr. Romero Fernández, Jesús

• Head of Radiation Oncology Service Puerta de Hierro University Hospital

Dr. Samper Ots, Pilar María

• Head of Radiation Oncology Service Rey Juan Carlos Hospital, Móstoles

Dr. Vallejo Ocaña, Carmen

- Head of the Radiation Oncology Department at the Ramón y Cajal University Hospital in Madrid
- Degree in Medicine and Surgery

Dr. Gómez Camaño, Antonio

 Head of Radiation Oncology Service Clinical University Hospital of Santiago de Compostela

Dr. Rodríguez Pérez, Aurora

- Degree in Medicine and Surgery
- Head of Radiation Oncology Service Ruber International Hospital Madrid, Spain

Dr. Rubio Rodríguez, Carmen

• Head of Radiation Oncology Service University Hospital H.M. Sanchinarro, Madrid

Dr. Celada Álvarez, Francisco Javier

- Specialist Resident tutor
- Radiation Oncology Service, Hospital Universitario y Politécnico La Fe Valencia, Spain





Course Management | 19 tech

Dr. Conde Moreno, Antonio José

• Head of Radiation Oncology Section La Fe Polytechnic University Hospital, Valencia

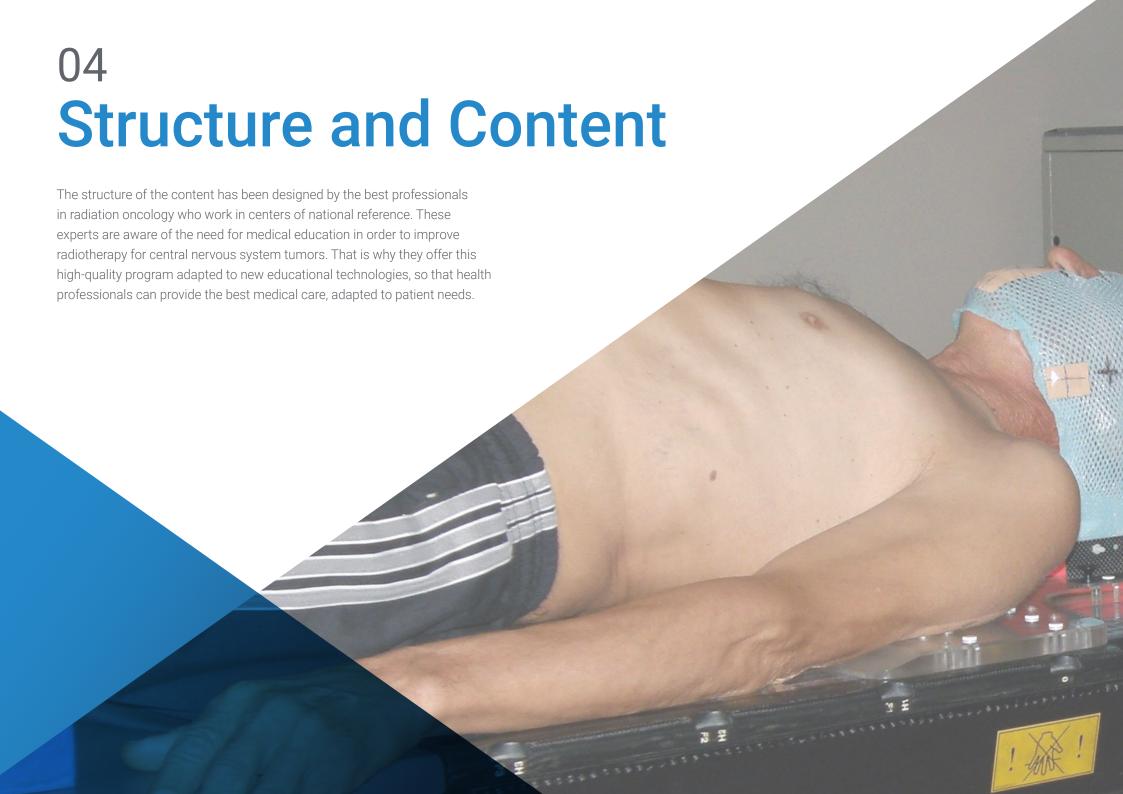
Dr. Palacios Eito, Amalia

• Head of Radiation Oncology Service Reina Sofia University Hospital, Córdoba

Dr. Lozano Martín, Eva María

• Head of the Radiation Oncology Service at from Ciudad Real General University Hospital



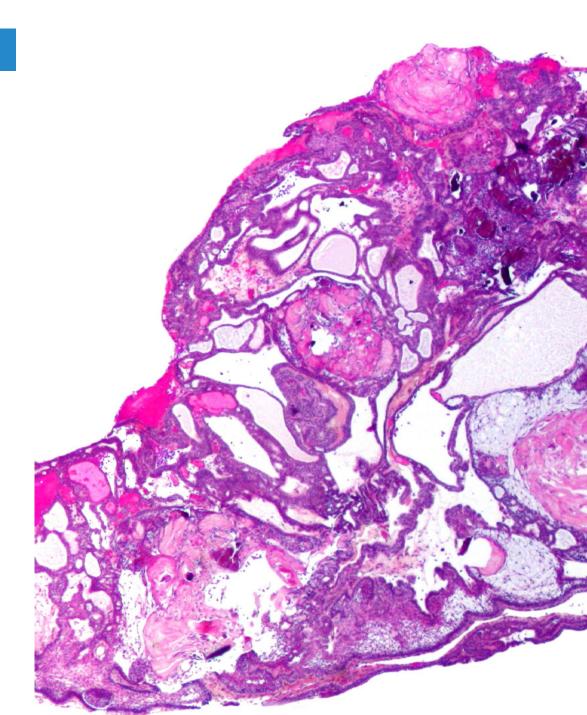


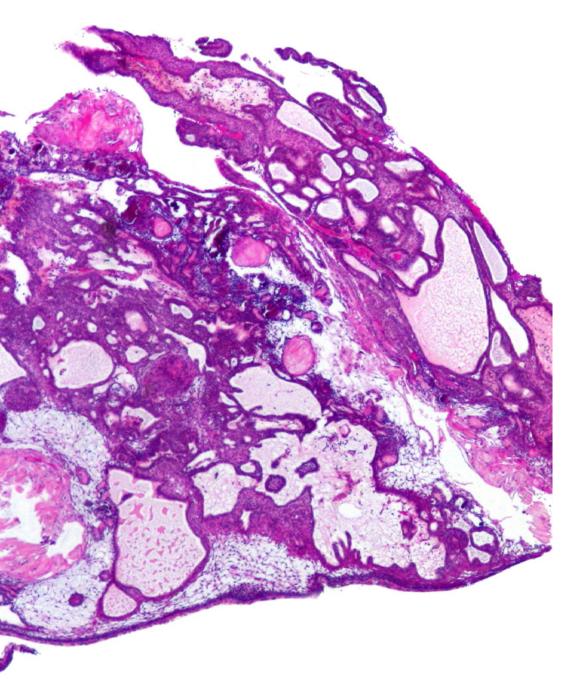


tech 22 | Structure and Content

Module 1. Update of Radiotherapy Treatment in Central Nervous System Tumors (Adults)

- 1.1. Low-Grade Gliomas
- 1.2. High-Grade Gliomas
- 1.3. Benign Brain Tumors
 - 1.3.1. Meningiomas
 - 1.3.2. Vestibular Schwannoma
 - 1.3.3. Neurinoma
- 1.4. Pituitary Tumors
 - 1.4.1. Non-Functioning Adenomas
 - 1.4.2. Prolactinoma
 - 1.4.3. GH-Producing Adenoma
 - 1.4.4. Cushing's Disease
 - 1.4.5. TSH Secreting Adenomas, GnRH-Secreting Adenomas
 - 1.4.6. Pituitary Carcinomas
- 1.5. Spinal Cord Tumors
 - 1.5.1. Astrocytoma
 - 1.5.2. Ependymoma
 - 1.5.3. Meningioma
 - 1.5.4. Chordoma
 - 1.5.5. Chondrosarcoma
 - 1.5.6. Miscellaneous Spinal Tumors
 - 1.5.7. Spinal Cord Compression
 - 1.5.8. Medulloblastoma
 - 1.5.9. Craneofaringioma





- 1.6. Orbital, Ocular and Optic Nerve Tumors
 - 1.6.1. Rhabdomyosarcoma
 - 1.6.2. Pineal Gland Tumors
 - 1.6.3. Orbital Lymphoma
 - 1.6.4. Ocular Melanoma
 - 1.6.5. Ocular Metastases
 - 1.6.5. Optic Nerve Glioma
 - 1.6.6. Optic Nerve Meningioma
- 1.7. Primary Cerebral Lymphoma
- 1.8. Cerebral Metastases
- 1.9. Arteriovenous Malformations



Study a complete training course in the field of Radiotherapy Treatment of Tumors of the Central Nervous System thanks to a teaching program with innovative methodologies"





tech 26 | Methodology

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:

- 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.



Methodology | 29 tech

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

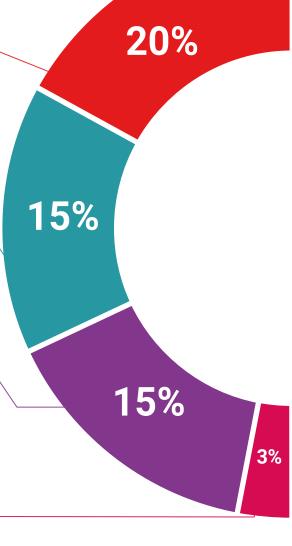
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many 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.

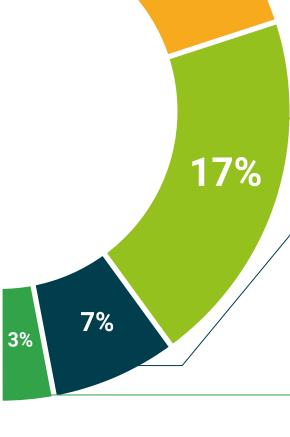
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



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.









tech 34 | Diploma

This private qualification will allow you to obtain a **Postgraduate Certificate in Radiotherapy of Tumors of the Central Nervous System (Adults)** 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 Radiotherapy of Tumors of the Central Nervous System (Adults)

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



Postgraduate Certificate in Radiotherapy of Tumors of the Central Nervous System (Adults)

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

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

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



^{*}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.

health guarantee technology technology

Postgraduate Certificate

Radiotherapy of Tumors of the Central Nervous System (Adults)

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

