Master's Degree
Radiation Oncology

Endorsed by:

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Master's Degree
Radiation Oncology

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Global University**
- Accreditation: **60 ECTS**
- Timetable **At your own pace**
- Exams: **online**

Website: https://www.techtitute.com/us/medicine/master-degree/master-radiation-oncology

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01

Introduction to the Program

Radiation Oncology has undergone significant advancements in recent decades, establishing itself as a cornerstone in cancer treatment. In fact, it is estimated that approximately 50% of cancer patients receive radiotherapy at some point during their care, highlighting its impact on both survival and quality of life. In this regard, innovations such as intensity-modulated radiotherapy, image-guided radiotherapy, and stereotactic radiotherapy have enhanced therapeutic precision, reducing toxicity while maximizing clinical benefits. In response to these advancements, TECH offers an online university degree focused on mastering the most advanced techniques in oncologic practice.

You will master the most innovative radiotherapy techniques, refining dose planning and tumor response monitoring with this exclusive 100% online program"

The continuous progress of Radiation Oncology has solidified its role as one of the most relevant therapeutic strategies in modern cancer treatment. Thanks to these advancements, not only has the precision and effectiveness of procedures improved, but there is also a growing demand for highly trained professionals in the field. In addition, the integration of cutting-edge technologies and clinical approaches has driven the ongoing need for updated, specialized knowledge. As a result, ensuring the implementation of best practices based on the latest scientific evidence has become essential for the advancement of this discipline.

In response to this reality, TECH offers an innovative Master's Degree that provides in-depth training in the most advanced areas of Radiation Oncology. Through a carefully structured syllabus, the program covers everything from the biological foundations of cancer to the latest developments in precision Radiotherapy. Topics include intensity-modulated radiotherapy, image-guided radiotherapy, and stereotactic radiotherapy. As well as therapeutic indication criteria, treatment planning, and the use of new digital tools in radiotherapy practice—all aimed at delivering up-to-date, clinically relevant knowledge.

To ensure a flexible and effective learning experience, TECH offers a fully online methodology—accessible 24/7 from any device with an Internet connection. Through the innovative Relearning system, learners progressively assimilate key concepts, enhancing the development of clinical and technical skills.

Finally, a renowned International Guest Director will deliver 10 ground-breaking masterclasses on the latest advances in Radiation Oncology.

This **Master's Degree in Radiation Oncology** contains the most complete and up-to-date university program on the market. Its most notable features are:

- The development of practical case studies presented by experts in Medicine
- 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
- Practical exercises where the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies in the management of the audiovisual industry
- 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

A renowned International Guest Director will give 10 comprehensive Masterclasses on the most recent advances in Radiation Oncology and their application in clinical practice"

You will have access to updated content that will strengthen your clinical decision making skills, ranging from biological fundamentals to advanced radiation therapy techniques"

You will explore how translational research and molecular biology transform cancer diagnosis and treatment in Radiation Oncology.

You will develop techniques in volumetric arc radiation therapy and adaptive planning to maximize efficacy.

The faculty includes medical professionals who bring their practical experience to the program, alongside renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive educational experience designed to prepare students for real-life situations.

This program is designed around Problem-Based Learning, whereby students must try to solve the different professional practice situations that arise during the academic year. For this purpose, professionals will be assisted by an innovative interactive video system created by renowned and experienced experts.

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Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs, available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it has a huge faculty of more than 6,000 professors of the highest international prestige.

Study at the largest online university in the world and ensure your professional success. The future begins at TECH"

The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future"

The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs in eleven different languages position us as the largest educational institution in the world.

The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

Leaders in employability

TECH has become the leading university in employability. 99% percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.

Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.

The top-rated university by its students

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.

03

Syllabus

This university program, distinguished by precision and innovation in radiation oncology, offers in-depth training in the foundations of radiotherapy, covering everything from the biological effects of radiation to its combination with pharmacological agents to enhance tumor response. It also explores the most advanced radiotherapy strategies for tumors of the central nervous system, head and neck region, thorax, and breast—incorporating cutting-edge techniques such as intensity-modulated radiotherapy (IMRT) and image-guided radiotherapy (IGRT). Through this training, participants will strengthen their ability to design personalized treatment plans that minimize side effects and improve patients' quality of life.

You will plan advanced strategies to optimize Radiotherapy in Breast Cancer, applying adaptive planning to personalize treatment according to Tumor location and characteristics"

Module 1. Foundations of Radiotherapy Treatment. Radiobiology

1.1. Biological Effects of Ionizing Radiations
  1.1.1. DNA Damage
  1.1.2. Non-clonal Effects
1.2. Dose Fractionation
  1.2.1. Linear-Quadratic Model
  1.2.2. Time Factor in Radiotherapy
  1.2.3. Altered Subdivisions
1.3. Oxygen Effect and Tumor Hypoxia
1.4. Radiobiology of Brachytherapy
1.5. Effects of Irradiation on Healthy Tissues
1.6. Combination of Irradiation with Drugs
1.7. Predictive Assays of Response to Radiotherapy
1.8. Radiobiology of Re-Irradiation
1.9. Effects of Irradiation on the Embryo and Fetus
1.10. Radiation-Induced Carcinogenesis

Module 2. Update of Radiotherapy Treatment in Central Nervous System Tumors (Adults)

2.1. Low-Grade Gliomas
2.2. High-Grade Gliomas
2.3. Benign Brain Tumors
  2.3.1. Meningiomas
  2.3.2. Vestibular Schwannoma
  2.3.3. Neurinoma
2.4. Pituitary Tumors
  2.4.1. Non-Functioning Adenomas
  2.4.2. Prolactinoma
  2.4.3. GH-Producing Adenoma
  2.4.4. Cushing's Disease
  2.4.5. TSH-Secreting Adenomas, GnRH-Secreting Adenomas
  2.4.6. Pituitary Carcinomas
2.5. Spinal Cord Tumors
  2.5.1. Astrocytoma
  2.5.2. Ependymoma
  2.5.3. Meningioma
  2.5.4. Chordoma
  2.5.5. Chondrosarcoma
  2.5.6. Miscellaneous Spinal Tumors
  2.5.7. Spinal Cord Compression
  2.5.8. Medulloblastoma
  2.5.9. Craniopharyngioma
2.6. Orbital, Ocular and Optic Nerve Tumors
  2.6.1. Rhabdomyosarcoma
  2.6.2. Pineal Gland Tumors
  2.6.3. Orbital Lymphoma
  2.6.4. Ocular Melanoma
  2.6.5. Ocular Metastases
  2.6.6. Optic Nerve Glioma
  2.6.7. Optic Nerve Meningioma
2.7. Primary Cerebral Lymphoma
2.8. Brain Metastases
2.9. Arteriovenous Malformations

Module 3. Update on Radiotherapeutic Treatment of ENT Tumors

3.1. Oral Cavity
  3.1.1. Lip
  3.1.2. Tongue
  3.1.3. Floor of Mouth
  3.1.4. Gum
  3.1.5. Hard Palate
  3.1.6. Retromolar Trigone
  3.1.7. Jugal Mucosa

3.2. Oropharynx
  3.2.1. Soft Palate
  3.2.2. Tonsils
  3.2.3. Oropharyngeal Wall
  3.2.4. Base of the Tongue
3.3. Nasopharynx
3.4. Larynx and Hypopharynx
  3.4.1. Larynx
    3.4.1.1. Glottis
    3.4.1.2. Supraglottis
    3.4.1.3. Subglottis
  3.4.2. Hypopharynx
    3.4.2.1. Pyriform Sinus
    3.4.2.2. Hypopharyngeal Wall
    3.4.2.3. Postcricoid Tumors
  3.4.3. Epidermoid Carcinoma Variants
    3.4.3.1. Verrucous Carcinoma
    3.4.3.2. Sarcomatoid Carcinoma
    3.4.3.3. Neuroendocrine Carcinoma
3.5. Nasal and Paranasal Sinuses
  3.5.1. Nasal Vestibule
  3.5.2. Nasal Cavity and Ethmoid Sinus
  3.5.3. Maxillary Sinus
3.6. Salivary Glands
3.7. Thyroid
  3.7.1. Papillary Carcinoma
  3.7.2. Follicular Carcinoma
  3.7.3. Medullary Carcinoma
  3.7.4. Anaplastic Carcinoma
  3.7.5. Primary Thyroid Lymphoma
3.8. Cervical Lymph Node Metastases of Unknown Origin

Module 4. Update on Radiotherapeutic Treatment of Thoracic Tumors (Pulmonary, Pleural, Cardiac)

4.1. Non-Small Cell Lung Cancer
  4.1.1. General Information on Non-Small Cell Lung Cancer
  4.1.2. Early Stage Radiotherapy Treatment
  4.1.3. Radical Radiotherapy Treatment in Locally Advanced Stages
  4.1.4. Postoperative Radiotherapy Treatment
  4.1.5. Palliative Radiotherapy Treatment
4.2. Small Cell Lung Cancer
  4.2.1. Overview of Small Cell Lung Cancer
  4.2.2. Thoraxic Radiotherapy Treatment in Limited-Disease
  4.2.3. Radiotherapeutic Treatment in Extended-Disease
  4.2.4. Prophylactic Cranial Irradiation
  4.2.5. Palliative Radiotherapy Treatment
4.3. Uncommon Thoracic Tumors
  4.3.1. Thymic Tumors
    4.3.1.1. Overview of Thymic Tumors
    4.3.1.2. Radiotherapeutic Treatment of Thymic Carcinoma
    4.3.1.3. Radiotherapeutic Treatment of Thymomas
  4.3.2. Carcinoid Lung Tumors
    4.3.2.1. Overview of Carcinoid Lung Tumors
    4.3.2.2. Radiotherapeutic Treatment of Carcinoid Lung Tumors
  4.3.3. Mesothelioma
    4.3.3.1. Overview of Mesotheliomas
    4.3.3.2. Radiotherapeutic Treatment of Mesotheliomas (Adjuvant, Radical, Palliative)
4.4. Primary Cardiac Tumors
  4.4.1. Overview of Cardiac Tumors
  4.4.2. Radiotherapy Treatment of Cardiac Tumors
4.5. Pulmonary Metastases
  4.5.1. Overview of Pulmonary Metastases
  4.5.2. Definition of Oligometastatic Lung Status
  4.5.3. Radiotherapeutic Treatment in Pulmonary Oligometastases

Module 5. Update on Radiotherapy Treatment in Breast Tumors

5.1. Introduction to Invasive Breast Cancer
- 5.1.1. Etiology
- 5.1.2. Epidemiology
- 5.1.3. Advantages of Screening: Overdiagnosis and Cost Overruns
- 5.1.4. Clinical and Pathological Staging
- 5.1.5. Radiological Diagnosis
- 5.1.6. Histological Diagnosis: Molecular Subtypes
- 5.1.7. Prognosis

5.2. General Information on Radiotherapeutic Treatment of Breast Cancer
- 5.2.1. Simulation Process: Positioning and Immobilization Systems
- 5.2.2. Image Acquisition and Volume Delimitation
- 5.2.3. Techniques: 3D-CRT, Evidence of IMRT/VMAT Use in Breast Cancer
- 5.2.4. Dosage, Fractionation and Constraints
- 5.2.5. Breath Hold
- 5.2.6. Image-Guided Radiation Therapy (IGRT)
- 5.2.7. Radiotherapy in the Presence of Cardiac Devices

5.3. Indications for Radiotherapy on the Breast After Conservative Treatment in Invasive Breast Cancer
- 5.3.1. Exclusive Preoperative Radiotherapy
- 5.3.2. Adjuvant Radiotherapy After Conservative Surgery and/or Primary Systemic Therapy
- 5.3.3. Evidence in Subdivisions
- 5.3.4. Better Conservative Treatment than Mastectomy?
- 5.3.5. Radiotherapy according to Molecular Subtype?

5.4. Indications for Radiotherapy after Mastectomy in Invasive Breast Cancer
- 5.4.1. Radiotherapy Post Mastectomy According to Type of Surgery
- 5.4.2. Radiotherapy Post Mastectomy in N0 Cancer Radiotherapy according to Molecular Subtype?
- 5.4.3. Radiotherapy Post Mastectomy in Complete Response After Primary Systemic Treatment
- 5.4.4. Rib Wall Hypofractionation
- 5.4.5. Inflammatory Carcinoma

5.5. Radiotherapy and Postmastectomy Breast Reconstruction
- 5.5.1. Types of Surgery (Radical Mastectomy, Skin-Sparing, Nipple-Areola Complex Preservation...)
- 5.5.2. Types of Reconstruction and Pros/Cons of Radiotherapy Before or After Reconstruction
- 5.5.3. Hypofractionation in Reconstructed Patients

5.6. Axillary Management for the Radiation Oncologist. Indication for Radiotherapy (RT) on Nodal Chains
- 5.6.1. Nodal Staging in Diagnosis and Sentinel Node Detection Methods
- 5.6.2. RT After Lymphadenectomy and After Positive Sentinel Gland at the Time of Surgery
- 5.6.3. RT After Sentinel Node Before/After Primary Systemic Therapy
- 5.6.4. Hypofractionation in Chains
- 5.6.5. Risk of Plexopathy

5.7. Boost: Indications and Radiotherapy Techniques
- 5.7.1. Rationale for the Implementation of the Boost
- 5.7.2. Indications After Conservative Surgery, Oncoplastic Surgery and Mastectomy
- 5.7.3. External Radiotherapy Techniques Simultaneous Integrated Boost (SIB)
- 5.7.4. Brachytherapy
- 5.7.5. Intraoperative Radiotherapy (IORT)

5.8. Partial Breast Irradiation: Indications and Radiotherapy Techniques
- 5.8.1. Justification for Performing Magnetic Particle Imaging (MPI)
- 5.8.2. Preoperative Radiotherapy
- 5.8.3. External Radiotherapy RTC3D. Intensity-Modulated Radiation Therapy (IMRT) SBRT
- 5.8.4. Brachytherapy
- 5.8.5. Intraoperative Radiotherapy (IORT)

5.9. Radiotherapy in Non-Invasive Carcinoma

5.9.1. Introduction
5.9.1.1. Etiology
5.9.1.2. Epidemiology
5.9.1.3. Advantages of Screening
5.9.2. Indications After Conservative Surgery and Evidence After Mastectomy
5.9.3. Genetic Platform in Ductal Carcinoma In Situ (DCIS)
5.10. Radiotherapy and Systemic Treatment
5.10.1. Concomitant Radiotherapy/Chemotherapy
5.10.1.1. Neoadjuvant
5.10.1.2. Inoperable
5.10.1.3. Adjuvant
5.10.2. Sequence with Systemic Treatment : Is it Possible to Administer Radiotherapy Before Chemotherapy After Surgery?
5.10.3. Radiotherapy and Hormonal Therapy (Tamoxifen, Aromatase Inhibitors): Evidence for their Sequential Administration: is Concomitance Better?
5.10.4. Chemotherapy Followed by Radiotherapy Without Surgery?
5.10.5. Association Radiotherapy and Anti-Her2 Teatment (Trastuzumab and Pertuzumab)
5.10.6. Possible Toxicities of the Association
5.11. Evaluation of the Response Monitoring Treatment of Locoregional Recurrences Reirradiation
5.12. Locoregional Radiotherapy in Metastatic Breast Cancer. Treatment of Oligometastases Stereotactic Body Radiotherapy (SBRT) Radiotherapy and Immunotherapy
5.13. Male Breast Cancer and Other Breast Tumors: Paget's Disease; Phyllodes; Primary Lymphoma

Module 6. Update on Radiotherapy Treatment in Digestive Tumors

6.1. Esophageal Tumors
6.1.1. General Information on Esophageal Tumors
6.1.2. Radical Treatment of Cervical Esophageal Cancer
6.1.3. Radical Treatment of Thoracic Esophageal Cancer
6.1.4. Adjuvant Treatment of Thoracic Esophageal Cancer
6.1.5. Palliative Radiotherapy Treatment
6.2. Gastric and Gastroesophageal Junction Tumors
6.2.1. General Information About Gastric and Gastroesophageal Junction Cancer
6.2.2. Neoadjuvant Radiochemotherapy
6.2.3. Adjuvant Radiochemotherapy
6.2.4. Role of Radiotherapy in the Context of Perioperative Chemotherapy
6.2.5. Radical Radiochemotherapy
6.2.6. Palliative Radiotherapy Treatment
6.3. Pancreatic Tumors
6.3.1. Overview of Pancreatic Cancer
6.3.2. Role of Radiotherapy in Resectable Tumors
6.3.3. Role of Radiotherapy in Potentially Resectable Tumors (Borderline)
6.3.4. Role of Radiation Therapy in Unresectable Tumors
6.3.5. Role of Radiotherapy in Inoperable Tumors
6.3.6. Palliative Radiotherapy Treatment
6.4. Hepatobiliary Tumors
6.4.1. Overview of Hepatobiliary Tumors
6.4.2. Hepatocellular Carcinoma
6.4.3. Gallbladder Cancer
6.4.4. Cholangiocarcinoma
6.4.5. Liver Metastases
6.5. Colorectal Cancer
6.5.1. Overview of Colorectal Tumors
6.5.2. Neoadjuvant Treatment in Rectal Cancer
6.5.3. Adjuvant Treatment in Rectal Cancer
6.5.4. Radical Treatment in Rectal Cancer
6.5.5. Radiotherapeutic Treatment of Recurrences. Reirradiation
6.5.6. Role of Radiation Therapy in Colon Cancer
6.5.7. Palliative Radiotherapy Treatment
6.6. Anal Canal and Perianal Skin Cancer
6.6.1. Overview of Anal Canal and Perianal Skin Cancer
6.6.2. Role of Radiotherapy in Early Tumors and Carcinoma *In Situ*
6.6.3. Radical Treatment of Locally Advanced Tumors
6.6.4. Palliative Radiotherapy Treatment

Module 7. Update on Radiotherapy Treatment in Anesthesia Tumors

7.1. Endometrial Cancer
- 7.1.1. Epidemiological Aspects
- 7.1.2. Risk Factors
- 7.1.3. Anatomy Recap
- 7.1.4. Histological Type
- 7.1.5. Dissemination Pathways
- 7.1.6. Classification
- 7.1.7. Prognostic Factors
- 7.1.8. Surgical Treatment
- 7.1.9. Adjuvant Early Stage Radiotherapy Treatment
- 7.1.10. Advanced Disease
- 7.1.11. Local, Regional, Distant Recurrence
- 7.1.12. Monitoring

7.2. Uterine Sarcomas
- 7.2.1. Epidemiological Aspects
- 7.2.2. Risk Factors
- 7.2.3. Anatomy Recap
- 7.2.4. Histological Type
- 7.2.5. Dissemination Pathways
- 7.2.6. Classification
- 7.2.7. Prognostic Factors
- 7.2.8. Surgical Treatment
- 7.2.9. Adjuvant Early Stage Radiotherapy Treatment
- 7.2.10. Advanced Disease
- 7.2.11. Local, Regional, Distant Recurrence
- 7.2.12. Monitoring

7.3. Cervical Cancer
- 7.3.1. Epidemiological Aspects
- 7.3.2. Risk Factors
- 7.3.3. Anatomy Recap
- 7.3.4. Histological Type
- 7.3.5. Dissemination Pathways
- 7.3.6. Classification
- 7.3.7. Prognostic Factors
- 7.3.8. Surgical Treatment
- 7.3.9. Adjuvant Early Stage Radiotherapy Treatment
- 7.3.10. Advanced Disease
- 7.3.11. Local, Regional, Distant Recurrence
- 7.3.12. Monitoring

7.4. Vulvar Cancer
- 7.4.1. Epidemiological Aspects
- 7.4.2. Risk Factors
- 7.4.3. Anatomy Recap
- 7.4.4. Histological Type
- 7.4.5. Dissemination Pathways
- 7.4.6. Classification
- 7.4.7. Prognostic Factors
- 7.4.8. Surgical Treatment
- 7.4.9. Adjuvant Early Stage Radiotherapy Treatment
- 7.4.10. Advanced Disease
- 7.4.11. Local, Regional, Distant Recurrence
- 7.4.12. Monitoring

7.5. Vagina Cancer
- 7.5.1. Epidemiological Aspects
- 7.5.2. Risk Factors
- 7.5.3. Anatomy Recap
- 7.5.4. Histological Type
- 7.5.5. Dissemination Pathways
- 7.5.6. Classification
- 7.5.7. Prognostic Factors
- 7.5.8. Surgical Treatment
- 7.5.9. Adjuvant Early Stage Radiotherapy Treatment
- 7.5.10. Advanced Disease
- 7.5.11. Local, Regional, Distant Recurrence
- 7.5.12. Monitoring

7.6. Fallopian Tube and Ovarian Cancer
- 7.6.1. Epidemiological Aspects
- 7.6.2. Risk Factors
- 7.6.3. Anatomy Recap
- 7.6.4. Histological Type
- 7.6.5. Dissemination Pathways
- 7.6.6. Classification
- 7.6.7. Prognostic Factors
- 7.6.8. Surgical Treatment
- 7.6.9. Adjuvant Early Stage Radiotherapy Treatment
- 7.6.10. Advanced Disease
- 7.6.11. Local, Regional, Distant Recurrence
- 7.6.12. Monitoring

Module 8. Update on Radiotherapeutic Treatment of Prostate and Other Urological Tumors

8.1. Prostate Cancer
- 8.1.1. Low-Risk
- 8.1.2. Intermediate Risk
  - 8.1.2.1. Definition of Intermediate Risk Prostate Cancer
  - 8.1.2.2. Subclassification of Intermediate Risk Prostate Cancer
    - 8.1.2.2.1. Importance of Gleason 7
  - 8.1.2.3. Diagnosis and Extension Study
  - 8.1.2.4. Treatment
    - 8.1.2.4.1. Active Surveillance
    - 8.1.2.4.2. Radical Prostatectomy
    - 8.1.2.4.3. Radiotherapy. Techniques and Requirements
      - 8.1.2.4.3.1. Role of External Radiation Therapy
      - 8.1.2.4.3.2. Role of Brachytherapy
      - 8.1.2.4.3.3. Role of Stereotactic Body Radiotherapy (SBRT)
      - 8.1.2.4.3.4. Combined Treatments
    - 8.1.2.4.4. Hormone Therapy. When and How Much?
    - 8.1.2.4.5. The Best Option for Each Patient
  - 8.1.2.5. Monitoring
  - 8.1.2.6. Conclusions
- 8.1.3. High-Risk
- 8.1.4. Local and/or Distant Relapse Treatment
  - 8.1.4.1. Treatment of Local Relapse
    - 8.1.4.1.1. After Prostatectomy
    - 8.1.4.1.2. After Radiotherapy
      - 8.1.4.1.2.1. Rescue Surgery
      - 8.1.4.1.2.2. Rescue Cryotherapy
      - 8.1.4.1.2.3. Rescue Brachytherapy
      - 8.1.4.1.2.4. High Intensity Focused Ultrasound (HIFU)
      - 8.1.4.1.2.5. Intermittent Hormone Rescue
  - 8.1.4.2. Treatment of Distant Relapse
    - 8.1.4.2.1. Metastatic Patient
    - 8.1.4.2.2. Oligorecurrent Patient
      - 8.1.4.2.2.1. Hormonal Treatment
      - 8.1.4.2.2.2. Surgical Treatment
      - 8.1.4.2.2.3. SBRT Treatment

8.2. Preoperative and Postoperative Radiotherapy in Bladder Cancer
- 8.2.1. Introduction
- 8.2.2. Preoperative Radiotherapy
  - 8.2.2.1. Bibliographic Review
  - 8.2.2.2. Indications
- 8.2.3. Postoperative Radiotherapy
  - 8.2.3.1. Bibliographic Review
  - 8.2.3.2. Indications
- 8.2.4. Organ Conservative Treatment

8.3. Testicular Tumors
- 8.3.1. Introduction
- 8.3.2. Histological Type
- 8.3.3. TNM Classification and Prognostic Groups
- 8.3.4. Germinal Tumors: Treatment According to Stage and Prognostic Group
  - 8.3.4.1. Seminoma
  - 8.3.4.2. Non-Seminoma
- 8.3.5. Toxicity of Chemotherapy and Radiotherapy
- 8.3.6. Secondary Neoplasms
- 8.3.7. Non-Germ Cell Tumors

8.4. Renal, Ureteral and Urethral Tumors
- 8.4.1. Renal Tumors
  - 8.4.1.1. Clinical Presentation
  - 8.4.1.2. Diagnosis
  - 8.4.1.3. Localized Disease Treatment
  - 8.4.1.4. Advanced Disease Treatment
- 8.4.2. Urethral Tumors
  - 8.4.2.1. Clinical Presentation: Men vs. Women
  - 8.4.2.2. Diagnosis
  - 8.4.2.3. Treatment
- 8.4.3. Ureter and Renal Pelvis Tumors
  - 8.4.3.1. Risk Factors
  - 8.4.3.2. Presentation: Primary Tumor-Metastasis
  - 8.4.3.3. Symptoms/Clinical
  - 8.4.3.4. Diagnosis
  - 8.4.3.5. Localized Disease Treatment
  - 8.4.3.6. Advanced Disease Treatment

8.5. Penile Cancer
- 8.5.1. Adjuvant Treatment
- 8.5.2. Radical Treatment

8.6. Treatment of Adrenal Metastases
- 8.6.1. Introduction
- 8.6.2. Surgery
- 8.6.3. SBRT

Module 9. Update on Radiotherapy Treatment in Low Incidence and Miscellaneous Tumors

9.1. Orbital and Ocular Tumors
- 9.1.1. Orbital Tumors
  - 9.1.1.1. Rhabdomyosarcoma
  - 9.1.1.2. Lacrimal Gland Tumors
  - 9.1.1.3. Orbital Metastases
  - 9.1.1.4. Orbital Pseudotumor
  - 9.1.1.5. Graves-Basedow Ophthalmopathy
- 9.1.2. Ocular Tumors and Ocular Pathology
  - 9.1.2.1. Choroidal Melanoma
  - 9.1.2.2. Choroidal Metastasis
  - 9.1.2.3. Primary Ocular Lymphoma
  - 9.1.2.4. *Pterigyum*
  - 9.1.2.5. Macular Degeneration
  - 9.1.2.6. Choroidal Hemangioma

9.2. Cutaneous Tumors
- 9.2.1. Melanoma
- 9.2.2. Non-Melanoma Skin Tumors
  - 9.2.2.1. Basal Cell Carcinoma
  - 9.2.2.2. Squamous Cell Carcinoma
  - 9.2.2.3. Merckel Cell Carcinoma
  - 9.2.2.4. Adnexal Carcinomas

9.3. Soft Tissue Sarcomas and Bone Tumors
- 9.3.1. Soft Tissue Sarcomas of the Extremities and Trunk
- 9.3.2. Retroperitoneal and Pelvic Sarcomas
- 9.3.3. Head and Neck Sarcomas
- 9.3.4. Dermatofibrosarcoma Protuberans
- 9.3.5. Desmoid Tumor
- 9.3.6. Bone Sarcomas
  - 9.3.6.1. Ewing Sarcoma
  - 9.3.6.2. Osteosarcoma
  - 9.3.6.3. Chondrosarcoma
  - 9.3.6.4. Chordoma

9.4. Hematological Tumors and Associated Techniques
- 9.4.1. Hodgkin's Lymphomas
- 9.4.2. Non-Hodgkin's Lymphomas
- 9.4.3. Multiple Myeloma
- 9.4.4. Plasmacytoma
- 9.4.5. Mycosis Fungoides
- 9.4.6. Kaposi's Sarcoma
- 9.4.7. Total Body Irradiation, Total Nodal Irradiation

9.5. Pediatric Tumors
- 9.5.1. Central Nervous System Tumors
- 9.5.2. Soft Tissue Sarcomas
- 9.5.3. Bone Sarcomas
- 9.5.4. Wilms Tumor
- 9.5.5. Retinoblastoma
- 9.5.6. Neuroblastoma
- 9.5.7. Leukemias and Lymphomas

9.6. Benign Pathology
- 9.6.1. Benign Joint and Tendon Diseases
- 9.6.2. Benign Connective and Skin Diseases
  - 9.6.2.1. Keloids
  - 9.6.2.2. Plantar Fasciitis
  - 9.6.2.3. Gynecomastia
- 9.6.3. Benign Bone Tissue Diseases
  - 9.6.3.1. Heterotopic Ossification
  - 9.6.3.2. Vertebral Hemangiomas
  - 9.6.3.3. Pigmented Villonodular Synovitis
  - 9.6.3.4. Aneurysmal Bone Cyst

Module 10. Pain and Nutrition in Radiation Oncology

10.1. General Information on Oncologic Pain
- 10.1.1. Epidemiology
- 10.1.2. Prevalence
- 10.1.3. Impact of Pain
- 10.1.4. Multidimensional Concept of Cancer Pain

10.2. Characterization of Pain
- 10.2.1. Types of Oncologic Pain
- 10.2.2. Evaluation of Oncologic Pain
- 10.2.3. Prognosis of Pain
- 10.2.4. Classification
- 10.2.5. Diagnostic Algorithm

10.3. General Principles of Pharmacological Treatment

10.4. General Principles of Radiotherapy Treatment
- 10.4.1. External Radiotherapy
- 10.4.2. Dosages and Fractions

10.5. Bisphosphonates

10.6. Radiopharmaceuticals in the Management of Metastatic Bone Pain

10.7. Pain in Long-Term Survivors

10.8. Nutrition and Cancer
- 10.8.1. Concept of Malnutrition
- 10.8.2. Prevalence of Malnutrition
- 10.8.3. Causes and Consequences of Malnutrition in Oncology Patients
- 10.8.4. Mortality and Survival
- 10.8.5. Nutritional Risk Factors in Oncology Patients
- 10.8.6. Objectives of Nutritional Support

10.9. Cachexia

10.10. Initial Nutritional Assessment in a Radiation Oncology Service
- 10.10.1. Diagnostic Algorithm
- 10.10.2. Specific Treatment
- 10.10.3. General Dietary Recommendations
- 10.10.4. Specific Individualized Recommendations

10.11. Nutritional Assessment During Monitoring in a Radiation Oncology Service

04

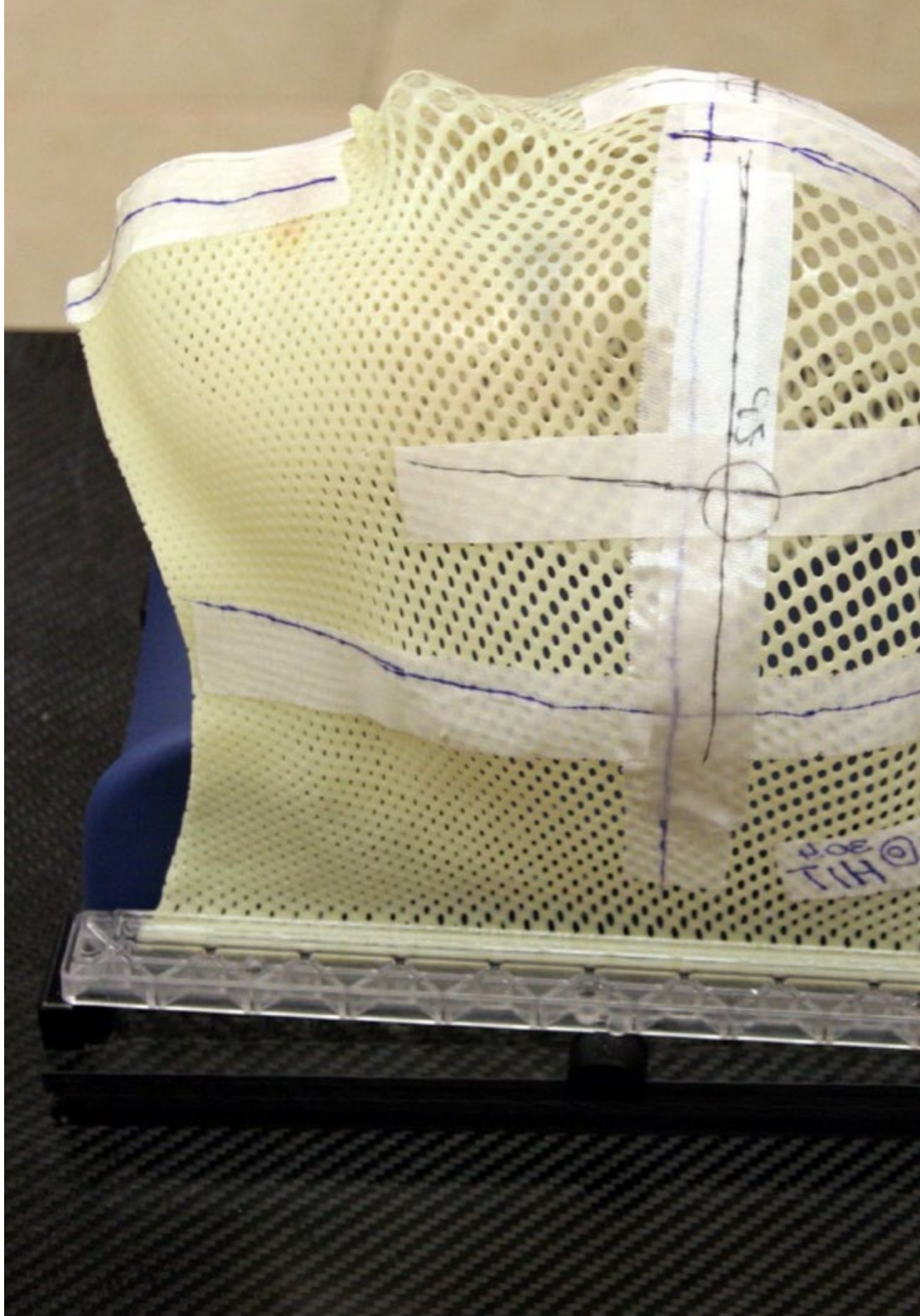
Teaching Objectives

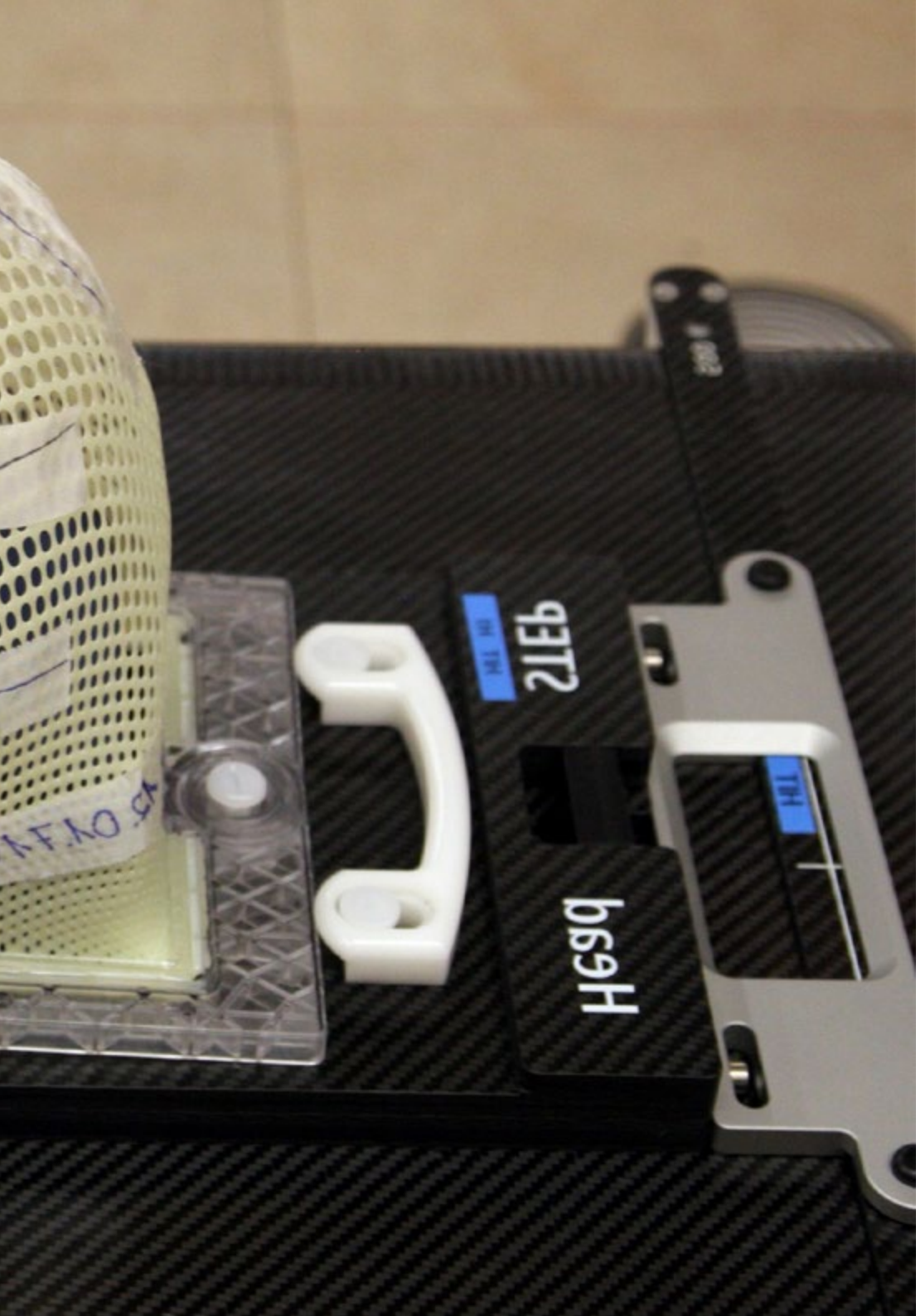
This university degree promotes the development of specialized competencies in Radiation Oncology, ensuring the ability to design and implement advanced therapeutic strategies. By mastering precision radiotherapy techniques, it enables the integration of imaging and dosimetric planning to optimize treatment delivery. It also encourages the evaluation of therapeutic responses, helping to minimize toxicities while maximizing clinical effectiveness. In addition, it strengthens clinical decision-making in complex cases, incorporating scientific evidence and technological advances. In this way, it supports the improvement of treatment protocols, fostering a multidisciplinary and personalized approach to cancer care.

You will adjust radiation doses and volumes to maximize cancer control while minimizing side effects"

General Objectives

- Understand the biological and physical principles of Radiotherapy to optimize its application in cancer treatment
- Develop skills to design and plan personalized radiotherapy treatments, maximizing therapeutic effectiveness and minimizing toxicity
- Analyze the indications and advanced radiotherapy techniques for different types of tumors, adapting treatment strategies to each clinical case
- Integrate Radiotherapy with other oncological treatments, such as surgery and systemic therapy, to improve clinical outcomes
- Evaluate tumor response and adverse effects of Radiotherapy, optimizing follow-up and patients' quality of life
- Apply innovative strategies in Radiotherapy by incorporating new technologies and evidence-based therapeutic approaches





Specific Objectives

Module 1. Foundations of Radiotherapy Treatment. Radiobiology

- Analyze the mechanisms of DNA damage induced by ionizing radiation and their impact on therapeutic effectiveness
- Identify non-clonal effects of radiation and their relevance in tissue response
- Apply the linear-quadratic model to optimize dose fractionation in Radiotherapy
- Explain the relationship between the oxygen effect and tumor hypoxia, as well as their implications in radiation resistance
- Evaluate the acute and late effects of irradiation on healthy tissues based on their repair kinetics
- Design predictive assay methods to determine tumor radiosensitivity in clinical practice

Module 2. Update of Radiotherapy Treatment in Central Nervous System Tumors (Adults)

- Classify low- and high-grade gliomas based on their histological characteristics and their implications for Radiotherapy
- Describe Radiotherapy treatment strategies for benign brain tumors, pituitary tumors, and spinal cord tumors
- Examine Radiotherapy options for orbital, ocular, and optic nerve tumors
- Evaluate the indications and techniques of Radiotherapy in Primary Central Nervous System Lymphoma and brain metastases

Module 3. Update on Radiotherapeutic Treatment of ENT Tumors

- Identify the anatomical and clinical characteristics of Oral Cavity Tumors and their

Radiotherapeutic management

- Establish Radiotherapy treatment protocols for Oropharyngeal Tumors according to stage and location
- Determine therapeutic strategies for Nasopharyngeal Tumors, considering their association with Epstein-Barr virus and their radiosensitivity
- Differentiate anatomical variants and histological subtypes of Laryngeal and Hypopharyngeal Tumors to optimize Radiotherapy treatment

Module 4. Update on Radiotherapeutic Treatment of Thoracic Tumors (Pulmonary, Pleural, Cardiac)

- Characterize the general features of Non-Small Cell Lung Cancer and its radiotherapeutic management across different stages
- Organize radiotherapy treatment strategies for Small Cell Lung Cancer, including prophylactic cranial irradiation
- Review the radiotherapeutic management of Uncommon Thoracic Tumors
- Evaluate the indications and radiotherapy techniques for Pulmonary Metastases, with an emphasis on the oligometastatic setting

Module 5. Update on Radiotherapy Treatment in Breast Tumors

- Explore the general characteristics of invasive Breast Cancer to understand its impact on Radiotherapy treatment
- Design the simulation process, image acquisition, and volume delineation in Radiotherapy, incorporating advanced techniques
- Establish indications for Radiotherapy following breast-conserving surgery and mastectomy, evaluating the evidence on fractionation
- Describe boost techniques and partial breast irradiation, and their rationale in treatment
- Coordinate Radiotherapy treatment with systemic therapies, considering sequencing and toxicities

Module 6. Update on Radiotherapy Treatment in Digestive Tumors

- Classify radiotherapy treatment approaches for Esophageal Tumors in different clinical contexts
- Determine the role of Radiotherapy in Gastric Tumors and gastroesophageal junction cancers
- Plan radiotherapy treatment strategies for Colorectal Cancer, including re-irradiation of recurrences
- Provide the rationale for using Radiotherapy in Anal Canal Cancer and Perianal Skin Cancer

Module 7. Update on Radiotherapy Treatment in Anesthesia Tumors

- Examine the epidemiological aspects, risk factors, and dissemination pathways of Endometrial Cancer and its radiotherapy treatment
- Define radiotherapy treatment guidelines for Uterine Sarcomas according to their classification and prognostic factors
- Organize therapeutic approaches in Cervical Cancer, including surgical treatment

Module 8. Update on Radiotherapeutic Treatment of Prostate and Other Urological Tumors

- Detail radiotherapy treatment strategies for Prostate Cancer according to risk stratification and techniques employed
- Implement preoperative and postoperative radiotherapy protocols in Bladder Cancer, evaluating their impact

Module 9. Update on Radiotherapy Treatment in Low Incidence and Miscellaneous Tumors

- Develop radiotherapy treatment strategies for orbital and ocular tumors based on their anatomical complexity
- Design radiotherapy protocols for skin tumors, tailored to their location and extent

Module 10. Pain and Nutrition in Radiation Oncology

- Describe oncologic pain from a multidimensional perspective, establishing a comprehensive approach
- Apply pharmacological and radiotherapy treatment strategies for managing oncologic pain
- Assess the nutritional status of oncology patients and design nutritional support plans
- Establish nutritional follow-up protocols for patients undergoing radiotherapy

Configure Radiotherapy treatment planning, taking into account tumor Radiosensitivity and healthy tissue repair capacity"

05

Study Methodology

TECH is the first university in the world to combine case study methodology with Relearning, a 100% online learning system based on guided repetition.

This innovative pedagogical strategy has been conceived to offer professionals the opportunity to update knowledge and develop skills in an intensive and rigorous way. A learning model that places the student at the center of the academic process and gives them the leading role, adapting to their needs and leaving aside the more conventional methodologies.

TECH prepares you to face new challenges in uncertain environments and achieve success in your career"

The student: the priority of all TECH programs.

In TECH's study methodology, the student is the absolute protagonist.
The pedagogical tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is the student who chooses the time they spend studying, how they decide to establish their routines and all this from the comfort of the electronic device of their choice. The student will not have to attend live classes, which many times they cannot attend. The learning activities will be done when it is convenient for them. You will always be able to decide when and from where to study.

At TECH you will NOT have in person classes (which you might not be able to attend)"

The most comprehensive curriculums at the international level

TECH is characterized by offering the most comprehensive academic itineraries in the university environment. This comprehensiveness is achieved through the creation of curriculums that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly updated, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive preparation that provides them with a notable competitive advantage to advance in their careers.

And what's more, they will be able to do so from any device, PC, tablet or smartphone.

"TECH's model is asynchronous, so it allows you to study with your PC, tablet or smartphone wherever you want, whenever you want and for as long as you want"

Case Studies or Case Method

The case method has been the learning system most used by the best business schools in the world. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to solve them. In 1924 it was established as a standard teaching method at Harvard.

With this teaching model, it is the student who builds their professional competence through strategies such as Learning by Doing or Design Thinking, which are used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, argue and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.

Relearning **Method**

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, they are able to review and reiterate the key concepts of each subject and learn to apply them in a real environment.

Along the same lines, and according to multiple scientific researches, repetition is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

Relearning will allow you to learn with less effort and more performance, involving you more in your specialization, developing a critical spirit, defending arguments and contrasting opinions: a direct equation to success.

A 100% online Virtual Campus with the best teaching resources

To apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on reiteration, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neurosciences points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus for long-term retention. This is a model called Neurocognitive Context-Dependent E-Learning that is consciously applied in this university program.

Furthermore, in order to maximize tutor-student contact, a wide range of communication possibilities are provided, both in real time and deferred (internal messaging, discussion forums, telephone answering service, e-mail contact with the technical secretary, chat and videoconferencing).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, in accordance with their accelerated professional updating.

"The online mode of study of this program will allow you to organize your time and your learning pace, adapting it to your schedule"

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 assess 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.

The university methodology best rated by its students

The results of this innovative academic model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution has become the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is up to date with the technological and pedagogical vanguard.

You will be able to learn with the advantages of access to simulated learning environments and the learning by observation approach, that is, the "Learning from an Expert" approach.

Therefore, the best educational materials, thoroughly prepared, will be available in this program:

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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.

Practicing Skills and Abilities

You will carry out activities to develop specific skills and abilities in each thematic area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the context of the globalization in which we live.

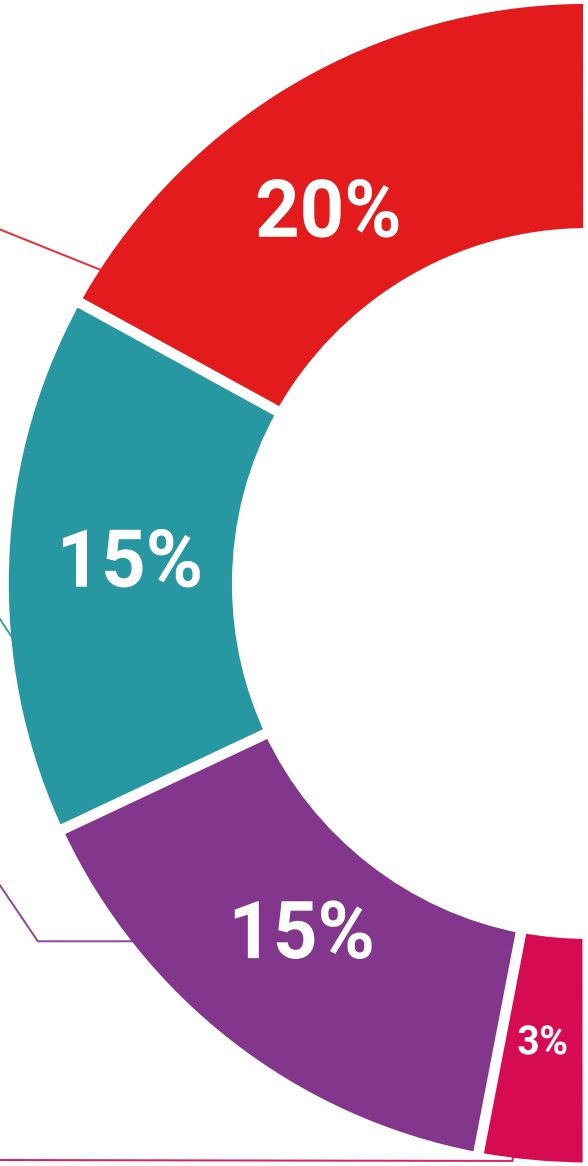
Interactive Summaries

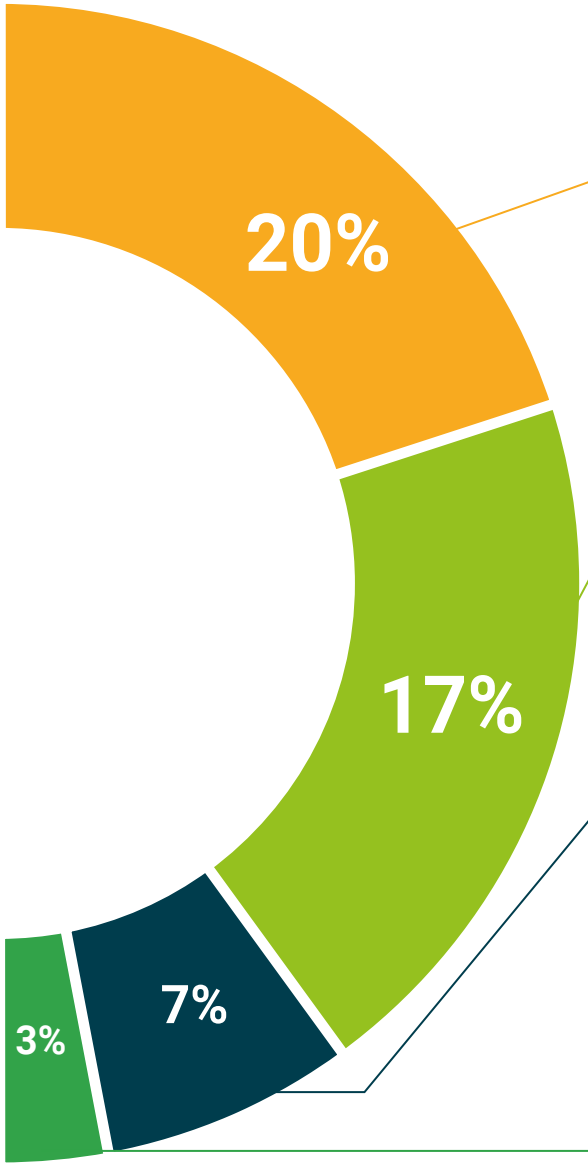
We present the contents in an attractive and dynamic way in multimedia pills that include audio, videos, images, diagrams and concept maps in order to reinforce knowledge.

This unique educational system for the presentation of multimedia content was awarded by Microsoft as "Successful Case in Europe."

Additional Reading

Recent articles, consensus documents, international guidelines... In our virtual library you will have access to everything you need to complete your course.





Case Studies

You will complete a selection of the best case studies in the field. Cases presented, analyzed and tutored by the best specialists in the world.

Testing & Retesting

We periodically evaluate and re-evaluate your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.

Masterclasses

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an expert strengthens knowledge and recall, and generates confidence in our 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

Teaching Staff

TECH has brought together leading professionals in Radiation Oncology and related fields to form an outstanding faculty team. Their extensive clinical and research experience is reflected in every aspect of the syllabus, ensuring rigorous and applied academic updates. Additionally, the academic program includes collaboration with renowned experts whose interdisciplinary approach and innovative vision provide a comprehensive perspective essential for the professional development of students.

You will gain insights from distinguished specialists on the latest advances in Radiation Oncology procedures"

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. One of his most outstanding contributions 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 conducted more than 350 clinical studies and scientific publications that have facilitated the understanding of malignant tumors. For example, its trial "***PARSPOT***" 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 areas in order to provide excellent services.

Dr. Nutting, Christopher

- Medical Director and Oncology Consultant at The Royal Marsden Hospital in London, United Kingdom
- President 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
- President 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
- Member of: UK College of Physicians and UK College of Radiologists

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

Management

Dr. Morera López, Rosa María

- Medical Specialist in Radiation Oncology
- Head of the Radiation Oncology Service. La Paz University Hospital
- Head of the Radiation Oncology Service. Ciudad Real General University Hospital
- Medical Specialist of the Radiation Oncology Service. Ramón y Cajal University Hospital
- Coordinator of the Tomotherapy Unit La Milagrosa Clinic
- Coordinator of the Stereotactic Body Radiotherapy Working Group (SBRT). Spanish Society of Radiation Oncology
- Member of the National Commission of Radiation Oncology
- Doctor of Medicine. Complutense University of Madrid
- Degree in Medicine and General Surgery. Complutense University of Madrid
- Specialist in Radiation Oncology University Hospital 12 de Octubre
- Master's Degree in Health Services Management and Administration. Pompeu Fabra University
- Member of: Member of the National Executive Committee of the Spanish Association Against Cancer (AECC)

Dr. Rodríguez Rodríguez, Isabel

- Specialist in Radiation Oncology La Paz University Hospital, Madrid
- Coordinator of the Brachytherapy Unit of the Radiation Oncology Service La Paz University Hospital, Madrid
- Collaborator in Basic and Clinical Research in the Spanish Pharmaceutical Industry PharmaMar
- National Coordinator of the Alliance for the Prevention of Colorectal Cancer
- Research Coordinator Clinical Symptoms of the Foundation for Urology Research Ramón y Cajal University Hospital.
- Participation as Lead Investigator and Collaborator in a large number of clinical research projects.
- Editor of several dozen articles in high-impact scientific journals

Dr. Belinchón Olmeda, Belén

- Attending physician of the Radiotherapy Oncology Department. Ruber International Hospital
- Resident Medical Intern in the field of Radiation Oncology. Puerto de Hierro University Hospital Majadahonda
- Bachelor's Degree in Medicine and Surgery. Alcalá de Henares University.
- Diploma of Advanced Studies. Autonomous University of Madrid
- Attending physician of the Radiotherapy Oncology Department. La Paz University Hospital
- Author of various articles in high-impact scientific journals and frequent collaborator in chapters of books and presentations at congresses
- Member of: Sarcomas and Soft Tissue Tumors Group, Spanish Breast Radiation Oncology (GEORM), Brachytherapy and Digestive Tumors (GEORGI) and the Spanish Society of Radiation Oncology (SEOR)

Professors

Dr. Romero Fernández, Jesús

- Medical Specialist in Radiation Oncology
- Head of the Radiation Oncology Service. Puerta de Hierro University Hospital
- Speaker and trainer at various national congresses and specialized conferences

Dr. Samper Orts, Pilar

- Head of the Radiation Oncology Department at the Rey Juan Carlos Hospital
- Attending Physician of Radiation Oncology at La Defensa Gómez Ulla Central Hospital
- Medical Specialist of the Ministry of Defense
- Radiation Oncologist at La Defensa Gómez Ulla Central Hospital
- Doctor of Medicine from the University of Alicante
- Degree in Medicine and Surgery from the University of Alicante
- Member of: Quality Working Group of the Spanish Society of Radiation Oncology (SEOR)

Dr. Vallejo Ocaña, Carmen

- Head of Radiation Oncology Service Ramón y Cajal University Hospital, Madrid
- Specialist in Radiotherapy
- Degree in Medicine and Surgery

Dr. Gómez Camaño, Antonio

- Head of the Radiation Oncology Service. University Clinical Hospital of Santiago de Compostela
- President of the Spanish Society of Radiation Oncology (SEOR)
- Professor of the Faculty. Spanish School of Radiation Oncology
- Director of the University Program. Continuing Education University Campus of Oncology SEOR. Francisco de Vitoria University
- Associate Professor in Health Sciences. University of Santiago de Compostela
- Bachelor's Degree in Medicine and Surgery. University of Santiago de Compostela
- Specialist in Radiation Oncology University Clinical Hospital of Santiago de Compostela
- Member of: IDIS Foundation, Molecular Imaging and In vivo Physics Group (GI-2133). University of Santiago de Compostela and the International Radiogenomic Consortium

Dr. Rubio Rodríguez, Carmen

- Head of Radiation Oncology Service of HM Hospitals
- Head of Radiation Oncology HM Sanchinarro University Hospital
- Head of Radiation Oncology HM Puerta del Sur University Hospital
- Radiation Oncologist. San Francisco de Asis University Hospital. Ocular Microsurgery Institute Group (IMO)
- Radiation Oncologist. Jiménez Díaz Foundation Hospital
- Doctor of Medicine and Surgery. University of Salamanca.
- Vice President of the Spanish Society of Radiation Oncology (SEOR)

- Member of the Board of Directors of the Spanish Society of Radiosurgery

Dr. Rodríguez Pérez, Aurora

- Head of the Radiation Oncology Service at the Ruber Internacional Hospital
- Acting Chief at the University Hospital of Fuenlabrada
- Commander and Military Doctor participating in several international missions
- Specialist in Radiation Oncology at La Defensa Gómez Ulla Central Hospital
- Doctor of Medicine from the Complutense University of Madrid.
- Master's Degree in Total Quality Management by the School of Industrial Organization
- Degree in Medicine and Surgery from the Autonomous University of Madrid.
- Member of: Spanish Society of Radiation Oncology, Member of the Board of Directors of the Clinical Research Group in Radiation Oncology, Spanish Group of Breast Radiation Oncology, Spanish Group of Lung Cancer and Spanish Society of Brachytherapy

Dr. Celada Álvarez, Francisco Javier

- Head of Radiation Oncology Service La Fe Polytechnic University Hospital Valencia
- Faculty Specialist. Resident tutor
- Radiation Oncology Service. La Fe Polytechnic University Hospital Valencia

Dr. Conde Moreno, Antonio José

- Head of the Radiation Oncology Service. La Fe Polytechnic University Hospital Valencia
- Head of the Radiation Oncology Service. Castellón Provincial Hospital Consortium
- Postgraduate Professor of Medicine
- Author and co-author of scientific articles
- Speaker at Oncology Congresses

Dr. Palacios Eito, Amalia

- Head of Radiation Oncology Service Reina Sofía University ospital
- Associate Professor, School of Medicine. University of Córdoba
- Physician Specialist of the Radiation Oncology Department Reina Sofía Hospital of Córdoba
- Doctor of Medicine. University of Zaragoza
- Specialist in Radiation Oncology via Internal Medical Resident. Lozano Blesa University Clinical Hospital

Dr. Lozano Martín, Eva María

- Head of the Radiation Oncology Service. Toledo University Hospital
- Head of the Radiation Oncology Service. General University Hospital of Ciudad Real
- Physician Specialist of the Radiation Oncology Department. Ruber International Hospital
- Speaker at several seminars and congresses related to Oncology

07

Certificate

The Master's Degree in Radiation Oncology guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the Master's Degree issued by TECH Global University.

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

This private qualification will allow you to obtain a diploma for the **Master's Degree in Radiation 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 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: **Master's Degree in Radiation Oncology**

Modality: **Online**

Duration: **12 months.**

Accreditation: **60 ECTS**


tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Master's Degree in Radiation Oncology

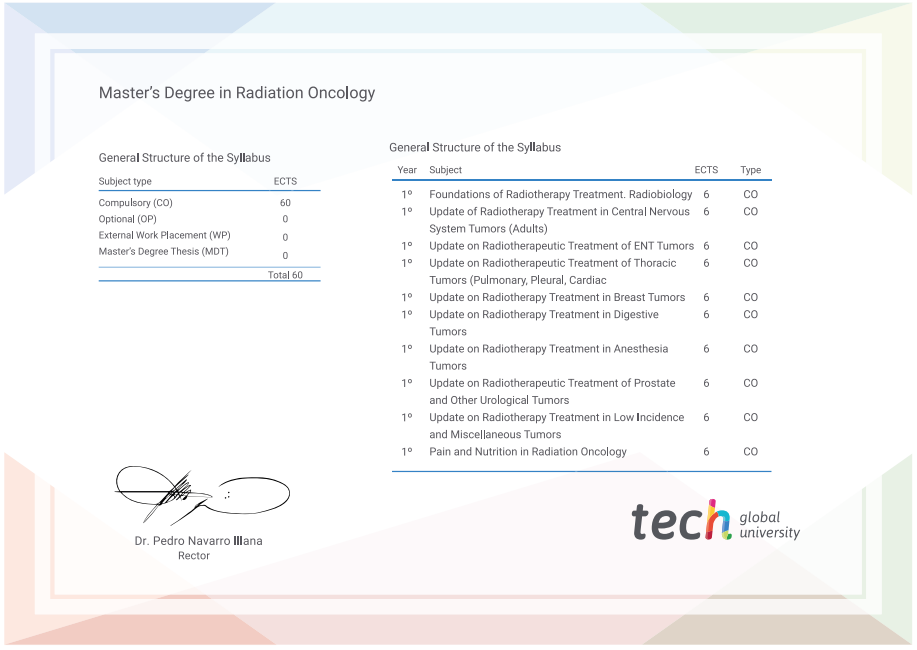
This is a program of 1,500 hours of duration equivalent to 60 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

Dr. Pedro Navarro Illana
Rector

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates


Master's Degree in Radiation Oncology

General Structure of the Syllabus

Subject type	ECTS
Compulsory (CO)	60
Optional (OP)	0
External Work Placement (WP)	0
Master's Degree Thesis (MDT)	0
	Total 60

General Structure of the Syllabus

Year	Subject	ECTS	Type
1º	Foundations of Radiotherapy Treatment. Radiobiology	6	CO
1º	Update of Radiotherapy Treatment in Central Nervous System Tumors (Adults)	6	CO
1º	Update on Radiotherapeutic Treatment of ENT Tumors	6	CO
1º	Update on Radiotherapeutic Treatment of Thoracic Tumors (Pulmonary, Pleural, Cardiac	6	CO
1º	Update on Radiotherapy Treatment in Breast Tumors	6	CO
1º	Update on Radiotherapy Treatment in Digestive Tumors	6	CO
1º	Update on Radiotherapy Treatment in Anesthesia Tumors	6	CO
1º	Update on Radiotherapeutic Treatment of Prostate and Other Urological Tumors	6	CO
1º	Update on Radiotherapy Treatment in Low Incidence and Miscellaneous Tumors	6	CO
1º	Pain and Nutrition in Radiation Oncology	6	CO

Dr. Pedro Navarro Illana
Rector

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

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