

Internship Program Radiation Oncology



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Internship Program
Radiation Oncology

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01 Introduction

Advances such as systemic radiotherapy, intraoperative radiotherapy or brachytherapy have contributed satisfactorily to the management of tumor pathologies. For this reason, the healthcare environment is in search of specialists who know how to apply the new knowledge in the field of Radiation Oncology in a comprehensive manner. However, for the physician, this kind of updating is a challenge because most teaching programs have a high theoretical load. Therefore, this program offers medical professionals a unique opportunity to learn the main advances in this field of healthcare in an exclusively practical and face-to-face format. For 3 weeks, the graduate will move to a hospital institution where, together with great experts, they will handle the latest technology and apply innovative treatments.

“

Enroll in this Internship Program in Radiation Oncology and take one more step towards updating your knowledge and professional excellence”





Radiotherapy has been, for years, one of the most recurrent health care alternatives for the treatment of oncology patients. However, in recent years, this therapeutic option has undergone great advances, as evidence of the scientific and technological evolution that medicine undergoes on a daily basis. Proof of this is the development of intraoperative and systemic techniques, where more efficient patient recovery results are sought in the shortest possible time. Keeping up-to-date on these aspects is a major challenge for specialists, since there are not many educational programs on the subject and the existing ones are characterized by a greater emphasis on theoretical aspects. Despite this context, professionals in the field are still required to have the most up-to-date qualifications possible.

For this reason, TECH has designed this Internship Program where the physician will have the opportunity to develop the most complete skills for this sector in a face-to-face, intensive and immersive way. This qualification includes the permanence of the specialist, for 3 weeks, in a health institution of international prestige. The facility will be equipped with the latest equipment in relation to Radiation Oncology and students will be able to learn about its use through direct handling from the first day of classes. In addition, they will have the possibility of choosing an institution that is closer or better adjusted to their personal geographic location.

The centers participating in this academic modality, in addition to having the best care resources, have a staff of renowned experts. In this way, the physician will have the opportunity to acquire knowledge from the joint work and experiences previously developed by them. In addition, they will have the personalized guidance of an assistant tutor, who will be in charge of explaining the latest professional dynamics and checking the educational progress of the specialist during the entire internship. Therefore, the graduates of this program will be able to be at the forefront of Radiation Oncology in the most exhaustive, fast and efficient way possible.

02

Why Study an Internship Program?

With this TECH program, the physician will be able to improve their skills in Radiation Oncology beyond the theoretical level. In an exceptional way, the specialist will develop a practical and on-site internship where they will examine the latest techniques in Radiotherapy and the technological devices that facilitate this type of treatment. During 3 weeks, they will have the opportunity to join a prestigious hospital institution and, with the help of experts, expand their knowledge of this medical environment.



Thanks to TECH, you will participate directly in the clinical approach of patients with malignant tumors, assimilating the most advanced radiotherapy methodologies on the market"

1. Updating from the latest technology available

Linear accelerators and simulation CTs are some of the technologies that have transformed today's radiotherapy. Therefore, this program offers you the opportunity to learn how to handle them for the benefit of the patient in a fully face-to-face, practical and immersive way, under the guidance of leading experts.

2. Gaining In-Depth Knowledge from the Experience of Top Specialists

With TECH, each specialist has the opportunity to receive personalized guidance from an attending tutor. This teaching figure, designed for the Internship Programs, will be responsible for involving them in the healthcare dynamics of the facility where the clinical stay takes place. Therefore, each physician will be closely and effectively advised, achieving significant progress in the shortest possible time.

3. Entering First-Class Clinical Environments

TECH maintains close ties with leading hospitals all over the world. In particular, it has coordinated this Internship Program with several prestigious institutions dedicated to the treatment of patients with oncological pathologies by means of Radiotherapy techniques. These facilities, in addition to having the best experts in the sector, have up-to-date technologies that the specialist will be able to use from the very first moment.



4. Putting the acquired knowledge into daily practice from the very first moment

The academic market does not offer enough pedagogical solutions for those specialists who wish to update their knowledge of Radiation Oncology in a practical way. However, this immersive, on-site internship breaks with this scheme by offering the best practical education for the specialist, from day one, in the care of real patients in situ.

5. Expanding the Boundaries of Knowledge

This Internship Program will lead the physician towards professional excellence, according to the international standards of Radiation Oncology, from this very complete and intensive on-site internship. The institutions chosen for this program, located in different geographical locations, will be at the disposal of the specialist thanks to a network of agreements and collaborations that only TECH, the largest digital university in the world, could have.



You will have full practical immersion at the center of your choice"

03

Objectives

This program in Radiation Oncology brings specialists up-to-date on the most innovative diagnostic and therapeutic procedures in this specialty, in an exclusively practical way. Based on an on-site and immersive internship, the physician will assess, diagnose and treat patients with different tumor pathologies, in real time, in order to enhance their skills according to the latest scientific and technological advances.



General Objectives

- ♦ Master the global current affairs of Radiation Oncology and all its aspects, through useful knowledge and, at the same time, generate interest in expanding the information and discover its application in daily practice
- ♦ Acquire an overview of the different types of radiotherapeutic treatments available and their future evolution
- ♦ Learn about radiotherapeutic advances that allow differential diagnosis, enable precise definition of the resection field, and provide information on prognosis and monitoring after treatment of the different types of cancers





Specific Objectives

- Review the different types of cancer that warrant radiotherapeutic management and show the specific issues for each tumor
- Manage the basics of radiotherapy, as well as the different techniques available and their efficacy in order to know the role of each one in the management of different ENT tumors
- Gain knowledge about the different types of lung cancer, its diagnosis and treatment.
- Analyze how the advances of the last decades in both diagnosis and treatment of cancer have managed to increase survival
- Delve into the most up-to-date knowledge on hepatobiliary tumors and their effects on the digestive system
- Identify the conditions of a high-risk situation with respect to prostate tumors and the gynecological sphere
- Apply all techniques of treatment and approach to hematological tumors
- Analyze the causes and consequences of malnutrition in oncology patients, as well as nutritional risk factors

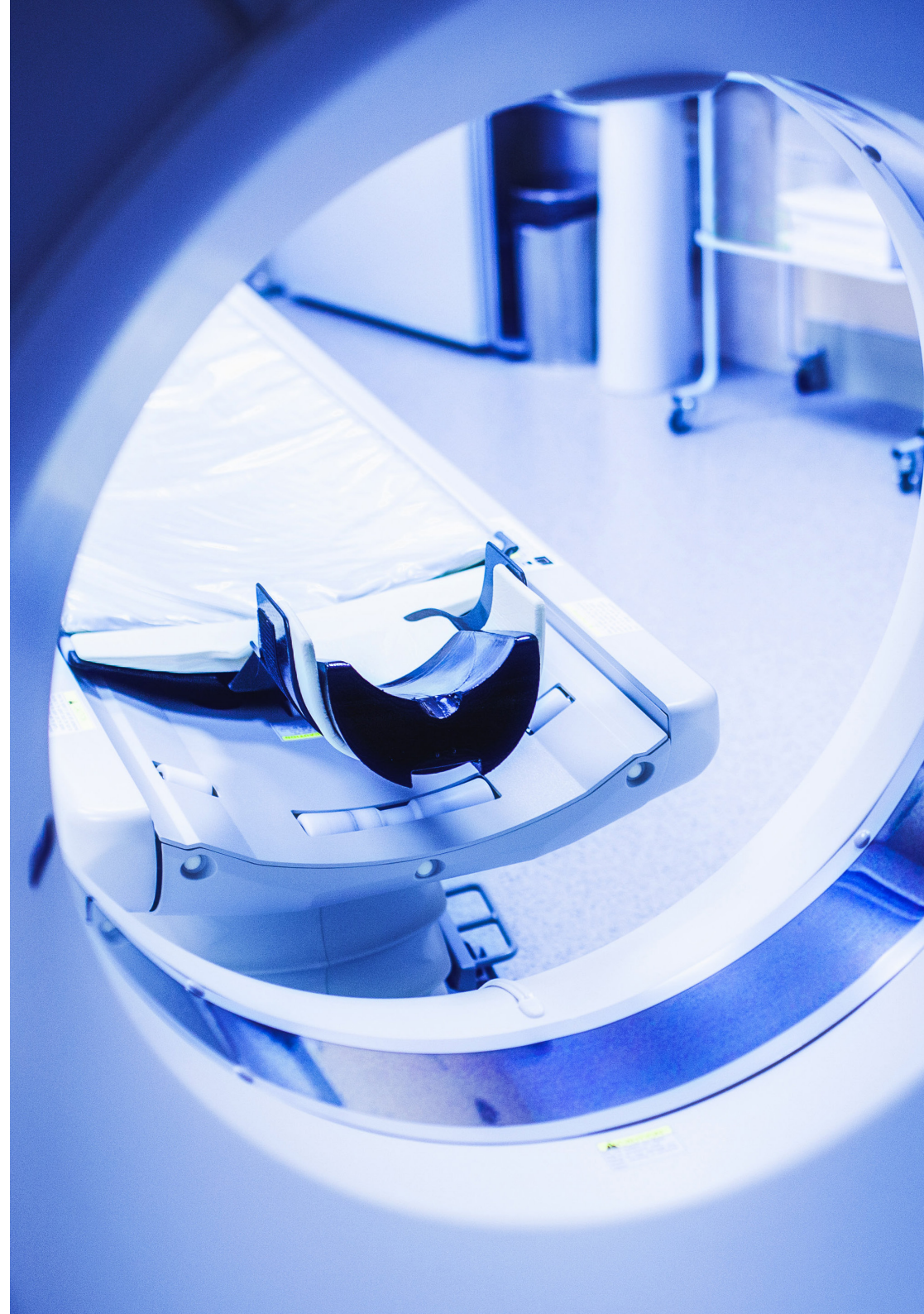
04 Educational Plan

This Internship Program in Radiation Oncology will have an extension of 3 weeks, which will be developed throughout 8-hour shifts, from Monday to Friday. During the learning period, the physician will move to a hospital institution, equipped with the latest devices to treat malignant tumors. Also, in this educational process, the specialist will apply specific treatments on real patients, acquiring in situ the most requested skills by the health sector for the approach of cancer pathologies.

In this completely practical Internship Program, the activities are aimed at developing and perfecting the skills necessary to provide healthcare care in areas and conditions that require highly qualified professionals, and are oriented towards specific expertise for practicing the activity, in a safe environment for the patient and with highly professional performance.

In addition, this program will give the physician the opportunity to delve into the most up-to-date criteria for the nutritional and pain management of patients undergoing radiotherapeutic treatment. Therefore, they will become a professional with a high profile and international recognition for their high capabilities.

The practical teaching will be carried out with the active participation of the student performing the activities and procedures of each area of knowledge (learning to learn and learning to do), with the accompaniment and guidance of teachers and other fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for the practice of Medicine (learning to be and learning to relate).



The procedures described below will form the basis of the practical part of the training, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:

Module	Practical Activity
Current Modalities of Radiation Oncology	Apply neoadjuvant radiotherapy to those patients who need, as a first treatment, to reduce the tumor that affects them
	Administer a single dose of radical radiotherapy to cure the disease and/or maintain organ function
	Assess the use of adjuvant radiotherapy, after a previous treatment such as surgery, to destroy the malignant cells that may have remained
	Treat with concomitant radiotherapy patients who are already receiving a parallel treatment, such as chemotherapy, to improve their results
	Perform intraoperative radiotherapy during surgery, specifically after removal of the tumor, to increase the control of the treatment
Main Equipment for the Development of Radiation Oncology Techniques	Implement the use of Simulation CT equipment to define more precisely the tumor and the volumes to be irradiated
	Determine the radioactive source (Iridium, Cesium or Cobalt) that best fits the type of cancer of the patient to be treated
	Manage the necessary calculations to indicate the treatment of patients with devices such as Linear Accelerators that allow Intensity Modulated Radiotherapy
	Design treatment plans based on strategic systems such as iPlan Net and RayStation
Latest Trends in Radiation Therapy for Urologic and Gynecologic Tumors	Address cervical and uterine cancer by means of Brachytherapy (Internal Radiotherapy) with high dose rates and on an outpatient basis
	Follow up the evolution of the malignant tumor during treatment by means of image-guided external radiotherapy
	Identify the main side effects of radiation that the patient may be suffering and indicate different methods to reduce their impact
	Plan the treatment with permanent Iodine 125 implant in real time

Module	Practical Activity
Radiotherapies for the Management of Thoracic, Digestive and Oral Tumors	Use external beam radiotherapy to treat lung cancer and avoid damage to secondary tissues
	Inject or administer a liquid radioactive source in patients with digestive tumors requiring systemic radiotherapy
	Implement molecular or radionuclide radiotherapy in patients suffering from rare conditions such as neuroendocrine gastroenteropancreatic tumor
Up-to-date Criteria for the Nutritional and Pain Approach in the Patient under Radiotherapeutic Treatment	Assess the use and contraindications of Morphine, oral Oxycodone and transdermal Fentanyl as major opioids for patients with acute oncologic pain
	Implement pharmacological therapy with non-steroidal anti-inflammatory drugs in the control of oncologic pain
	Check that the patient consumes adequate protein and calories to heal, fight infections and have enough energy
	Prevent cachexia or lack of fat fixation in oncology patients through specific diets
	Assess the relevance of enteral (tube feeding) or parenteral (directly into the bloodstream) nutrition in oncology patients who need assistance in swallowing food

05

Where Can I Do the Internship Program?

This Internship Program integrates in its program the internship in a renowned hospital clinic, where the specialist will be able to complete their academic education and will deal with all practical issues. This extension of the program will take place during 3 weeks and will bring the hematologist closer to the daily challenges of the profession by facing real cases of hematological pathologies.

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Extend the theoretical academic endowment with an internship in a hospital center, which will help you in your daily clinical tasks”





The student will be able to do this program at the following centers:



Medicine

Hospital HM Modelo

Country: Spain City: La Coruña

Address: Rúa Virrey Osorio, 30, 15011, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Anaesthesiology and Resuscitation
- Palliative Care



Medicine

Hospital HM Rosaleda

Country: Spain City: La Coruña

Address: Rúa de Santiago León de Caracas, 1, 15701, Santiago de Compostela, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Hair Transplantation
- Orthodontics and Dentofacial Orthopedics



Medicine

Hospital HM La Esperanza

Country: Spain City: La Coruña

Address: Av. das Burgas, 2, 15705, Santiago de Compostela, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Oncology Nursing
- Clinical Ophthalmology



Medicine

Hospital HM San Francisco

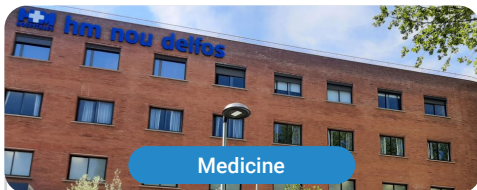
Country: Spain City: León

Address: C. Marqueses de San Isidro, 11, 24004, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Update in Anesthesiology and Resuscitation
- Trauma Nursing



Medicine

Hospital HM Nou Delfos

Country: Spain City: Barcelona

Address: Avinguda de Vallcarca, 151, 08023 Barcelona

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Aesthetic Medicine
- Clinical Nutrition in Medicine



Medicine

Hospital HM Madrid

Country: Spain City: Madrid

Address: Pl. del Conde del Valle de Súchil, 16, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Palliative Care
- Anaesthesiology and Resuscitation



Medicine

Hospital HM Montepríncipe

Country: Spain City: Madrid

Address: Av. de Montepríncipe, 25, 28660, Boadilla del Monte, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Palliative Care
- Aesthetic Medicine



Medicine

Hospital HM Torrelodones

Country: Spain City: Madrid

Address: Av. Castillo Olivares, s/n, 28250, Torrelodones, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Anaesthesiology and Resuscitation
- Palliative Care



Medicine

Hospital HM Sanchinarro

Country	City
Spain	Madrid

Address: Calle de Oña, 10, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Anaesthesiology and Resuscitation
- Palliative Care



Medicine

Hospital HM Nuevo Belén

Country	City
Spain	Madrid

Address: Calle José Silva, 7, 28043, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- General and Digestive System Surgery
- Clinical Nutrition in Medicine



Medicine

Hospital HM Puerta del Sur

Country	City
Spain	Madrid

Address: Av. Carlos V, 70, 28938, Móstoles, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Palliative Care
- Clinical Ophthalmology



Medicine

Hospital HM Vallés

Country	City
Spain	Madrid

Address: Calle Santiago, 14, 28801, Alcalá de Henares, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Gynecologic Oncology
- Clinical Ophthalmology



Medicine

HM CIOCC - Centro Integral Oncológico Clara Campal

Country	City
Spain	Madrid

Address: Calle de Oña, 10, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Gynecologic Oncology
- Clinical Ophthalmology



Medicine

HM CIOCC Barcelona

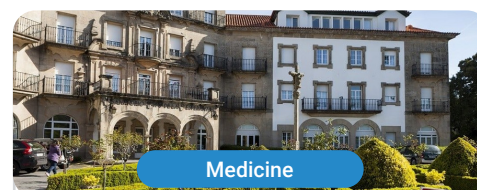
Country	City
Spain	Barcelona

Address: Avenida de Vallcarca, 151, 08023, Barcelona

Network of private clinics, hospitals and specialized centers distributed throughout the Spanish geography

Related internship programs:

- Advances in Hematology and Hemotherapy
- Oncology Nursing



Medicine

HM CIOCC Galicia

Country	City
Spain	La Coruña

Address: Avenida das Burgas, 2, 15705, Santiago de Compostela

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Gynecologic Oncology
- Clinical Ophthalmology



Medicine

Policlínico HM Cruz Verde

Country	City
Spain	Madrid

Address: Plaza de la Cruz Verde, 1-3, 28807, Alcalá de Henares, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Advanced Clinical Podiatry
- Optical Technologies and Clinical Optometry



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Take advantage of this opportunity to surround yourself with expert professionals and learn from their work methodology”

06

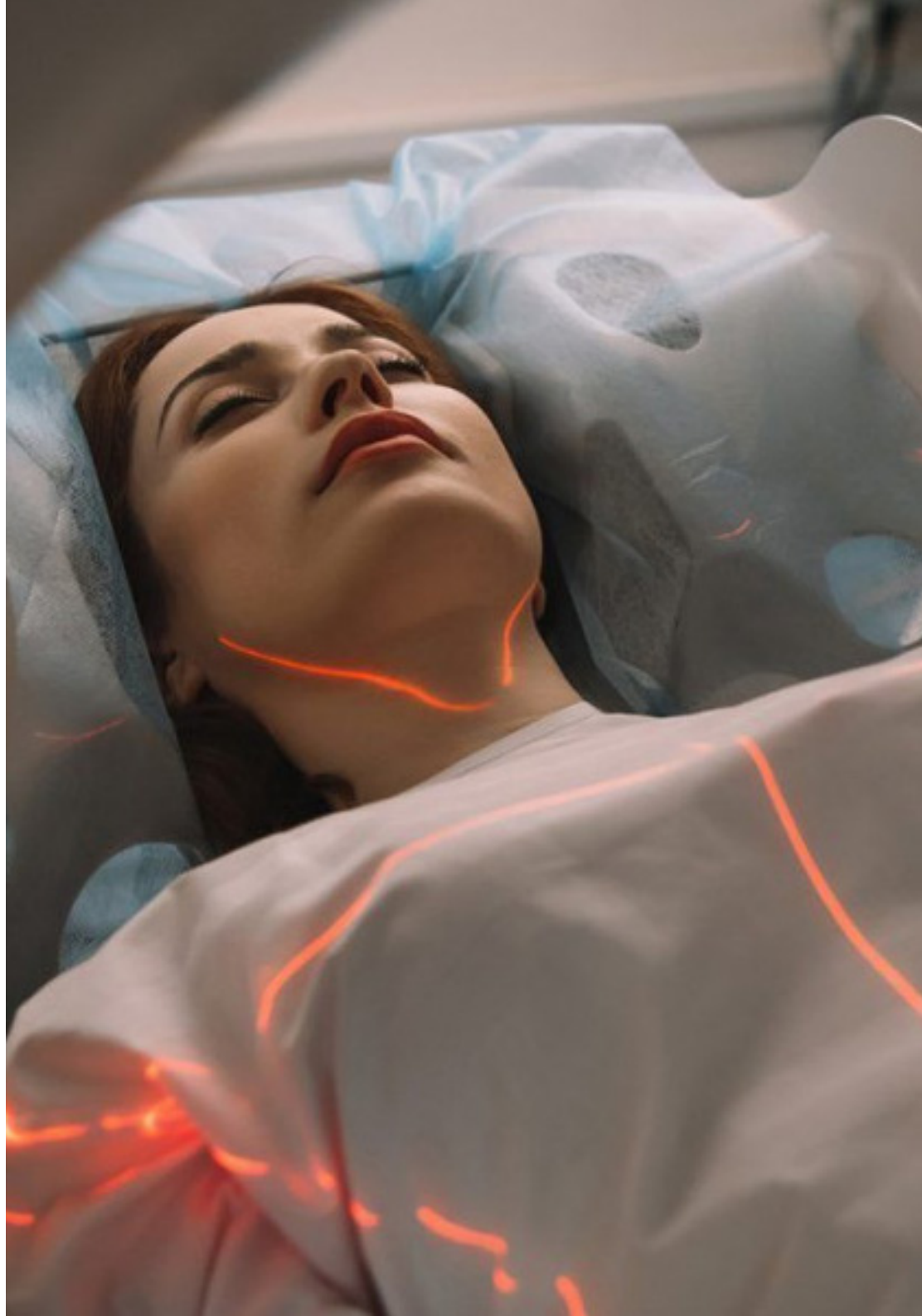
General Conditions

Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



General Conditions of the Internship Program

The general terms and conditions of the internship agreement for the program are as follows:

1. TUTOR: During the Internship Program, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor, whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

3. ABSENCE: If the students does not show up on the start date of the Internship Program, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

4. CERTIFICATION: Professionals who pass the Internship Program will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: The Internship Program shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Internship Program. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOES NOT INCLUDE: The Internship Program will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

07 Certificate

This **Radiation Oncology** contains the most complete and up-to-date program in the professional and academic landscape.

After the student has passed the evaluations, they will receive their corresponding TECH Internship Program diploma issued by TECH Technological University via tracked delivery.

The diploma issued by TECH will reflect the grade obtained in the test.

Title: **Internship Program in Radiation Oncology**

Duration: **3 weeks**

Attendance: **Monday to Friday, 8-hour consecutive shifts**

Total Hours: **120 h. of professional practice**



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Radiation Oncology

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