## Hybrid Professional Master's Degree Oncology Nursing





## Hybrid Professional Master's Degree Oncology Nursing

Modality: Hybrid (Online + Clinical Internship) Duration: 12 months Certificate: TECH Global University 60 + 5 créditos ECTS Website: www.techtitute.com/us/nursing/hybrid-professional-master-degree/hybrid-professional-master-degree-oncology-nursing

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# 01 Introduction

Cancer is one of the leading causes of death in the world, and is of increasing concern given the progressive aging of the population and the increase in risk factors such as smoking and alcohol consumption. In this context, Nursing professionals specialized in Oncology must acquire an important and necessary role in medical institutions, with a renewed leadership and necessary role in medical institutions, with a renewed leadership directed towards the most important practical and theoretical advances. This requires constant updating on the part of the nurse in areas such as the administration of chemotherapy treatments or the psychosocial approach to the oncology patient. This program responds precisely to these needs, offering an exhaustive syllabus that, in addition, is complemented with a practical stay in a renowned and prestigious medical center.

It delves into the most urgent issues in Oncology Nursing for pediatric, adult and elderly patients, with modules dedicated to the most current nursing approach"

## tech 06 | Introduction

The responsibilities of the oncology nurse are increasing. With the inexorable increase in the number of oncology patients, it falls to the nursing professional to provide appropriate counseling. It is also vitally important to have a follow-up structure or organization for each case, recognizing emergency situations or treatment complications that must be addressed early on.

These increasingly demanding challenges are, in turn, an ideal opportunity to vindicate the essential role of the oncology nurse in all processes. Its advanced knowledge of a multitude of clinical manifestations, which is fundamental to tackle possible complications, as well as its essential role in the post-surgical care of oncology patients, means that it is also required to have a high level of gradual and periodic updating.

In order to provide the Oncology Nursing professional with the latest advances in the field, TECH has developed this comprehensive program. It combines theory and the most relevant research in the field of Oncology with a first class practical stay in a prestigious hospital center. The entire program has, therefore, an eminently practical approach, aimed directly at the daily work of the oncology nurse and with the latest developments in topics such as nutrition in cancer prevention, ICT and apps applied to oncology or early detection programs.

In addition, TECH's teaching methodology is 100% online, which allows total flexibility to combine the program with all kinds of professional or personal responsibilities. There are no fixed schedules or face-to-face classes, and the nurse decides when, where and how to assume the entire teaching load. In addition, all the content provided is downloadable from any device with internet connection, so it is still useful even after finishing the theoretical part as a quality reference material in daily practice.

Likewise, the practical stay will be guided at all times by a specific tutor with high competences in Oncology Nursing. This provides the nurse with the opportunity to apply the updated knowledge and techniques in a real environment, where to contextualize all the theoretical information acquired.

This **Hybrid Professional Master's Degree in Oncology Nursing** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of more than 100 clinical cases presented by nursing professionals with extensive experience in the treatment and approach to all types of oncology patients
- 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
- Treatment of all types of cancers, with a comprehensive care plan developed that includes the latest therapies and scientific evidence
- Innovative procedures to confirm or rule out cancer diagnosis in the shortest time possible
- State-of-the-art equipment with high-precision radiotherapy treatments, more effective, personalized and with fewer side effects
- 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
- In addition, you will be able to carry out a clinical internship in one of the best hospitals in the world



Put into practice all the advances acquired in the Hybrid Professional Master's Degree in Oncology Nursing in a highly prestigious center, surrounded by professionals committed to keeping you up to date"

## Introduction | 07 tech

Get up to date in the areas of Oncology Nursing with the most advances and research in recent years, with 10 extensive modules enriched with high quality multimedia content"

In this Professional Master's Degree proposal, of a professionalizing nature and hybrid modality, the program is aimed at updating Nursing professionals specialized in the area of Oncology. The content is based on the latest scientific evidence and is organized in a didactic way to integrate theoretical knowledge into nursing practice. The theoretical-practical elements allow professionals to update their knowledge and help them to make the right decisions in patient care.

Thanks to the multimedia content, developed with the latest educational technology, nursing professionals will benefit from situated and contextual learning, i.e., a simulated environment that will provide immersive learning programmed to train in real situations. This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

Incorporate the latest theoretical and pathophysiological fundamentals on pediatric, adult and elderly oncology patients into your daily practice.

It combines the latest oncology theory and research with your own practical application in real clinical settings, gaining a much greater understanding of all topics covered.

## 02 Why Study this Hybrid Professional Master's Degree?

This Hybrid Professional Master's Degree in Oncology Nursing is a unique academic opportunity for the nurse, as it provides both the most advanced theory and the most effective practice in the field today. Therefore, the program is a decisive step in the updating process of the nurse, as it covers the most relevant current events in oncology from both the theoretical and practical points of view.

Why Study this Hybrid Professional | 09 **tech** Master's Degree?

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This Hybrid Professional Master's Degree is unique, as it allows you to get involved with a team of highly qualified professionals in Oncology Nursing while at the same time accessing the most modern scientific postulates"

## tech 10 | Why Study this Hybrid Professional Master's Degree?

### 1. Updating from the latest technology available

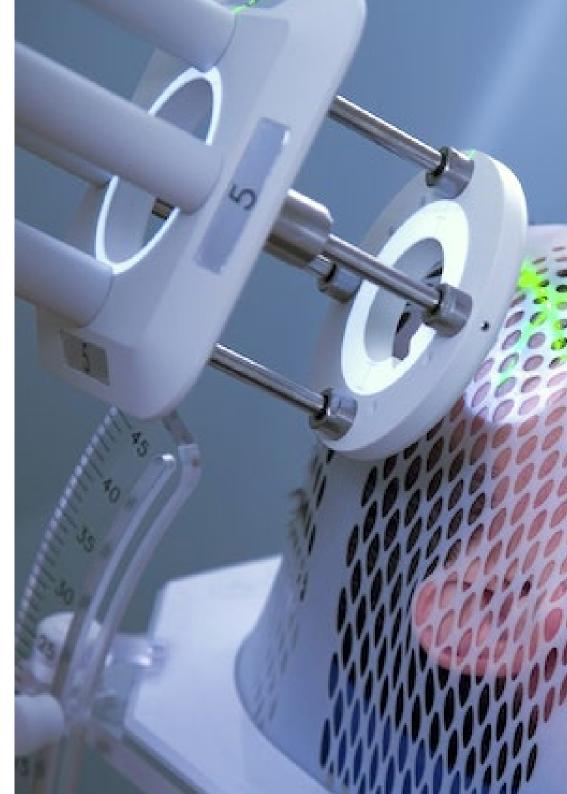
Technological advances in the oncology area are numerous. From modern radiological therapies to innovative treatments, the nurse must be aware of all of them, as his or her performance and aftercare depends on the incidence of these treatments. Therefore, both theory and practice concerning new oncological approaches as well as modern equipment will be observed.

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

The best nursing specialized in Oncology have written all the content of this program, so the student is accessing not only to the most advanced scientific theory and postulates, but also to the teachers' own practical experience. This experience will be fundamental in the clinical stay, as the nurse will also be accompanied by a specialized and highly competent team in the area of oncology patient care.

### 3. Entering First-Class Clinical Environments

By choosing this Hybrid Professional Master's Degree, nursing have the opportunity to develop their competencies in a first class clinical environment. This allows him not only to know the latest technological innovations or latest approaches in the field, but also the management and organization of a multidisciplinary team, demanding and efficient in the work of Oncology Nursing.



## Why Study this Hybrid Professional | 11 tech Master's Degree?

### 4. Combining the Best Theory with State-of-the-Art Practice

Thanks to the combination of theory and practice in this program, the update is much more effective and comprehensive, as the nurse immediately sees how the most rigorous scientific postulates are applied in real clinical settings.

### 5. Expanding the Boundaries of Knowledge

Thanks precisely to the combination of theory and practice offered by this Hybrid Professional Master's Degree, the nurse will be taking a decisive step in his or her professional updating. After graduation, you will be able to immediately apply all the knowledge and skills you have acquired in your daily practice, resulting in an immediate improvement.



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

# 03 **Objectives**

This Hybrid Professional Master's Degree in Oncology Nursing has been created with the ultimate goal of providing the nursing professional with the latest diagnostic techniques, approaches and practical methodology in the daily care of oncology patients. For this reason, the syllabus has been written by a specialized team with extensive experience in different medical centers of reference. This personal expertise has allowed them to provide the entire syllabus with numerous real cases and simulations that will undoubtedly be of great use during the practical stay and the treatment of specific patients.

You will surpass your own objectives of updating in Oncology Nursing thanks to the maximum involvement of both the teaching staff and the professional team of the practical stay"

## tech 14 | Objectives



## **General Objective**

• With an exhaustive update on issues such as the different types of tumors, cancer epidemiology or oncological treatments, the practical stay is a turning point for the nurse. The rigor and wide professional background of the medical team involved in the practical period is crucial, since it not only serves to verify the most advanced approach to Oncology Nursing, but also as a fundamental point of reference for the student to incorporate techniques and work guidelines in their daily practice

You will accumulate a series of theoretical and practical knowledge essential in the most demanding Oncology Nursing and put to the test in a prestigious medical center"



#### Module 1. Introduction to Oncology. Oncology Nursing

- Describe the professional skills of Oncology Nursing
- Become familiar with the main etiopathogenic theories of cancer, as well as the most important mechanisms of malignant transformation
- Differentiate and understand the alterations involved in the processes of carcinogenesis
- Determine the risk factors related to the occurrence of oncologic diseases and their effects on health
- Know the epidemiological data of the main malignant tumors
- Recognize the different levels of cancer prevention, as well as the activities and strategies for each type of prevention
- Acquire information on the characteristics and development of the main cancer early detection programs
- Perform a complete assessment of the oncology patient, which allows to detect needs and implement strategies to solve problems

### Module 2. Types of Tumors

- \* Know the main types of malignant tumors in relation to their anatomical location
- Acquire knowledge about prevalence and risk factors related to each group of neoplasms
- Identify the most frequent signs and symptoms in each group
- Describe the diagnostic tests most commonly used in tumor detection and staging
- Determine the current therapeutic options for each type of tumor
- Apply the acquired theoretical knowledge in the development of nursing care plans appropriate to the patients pathology

## Objectives | 15 tech

#### Module 3. Oncological Treatments

- Describe the therapeutic modalities that exist in the adult oncology patient, as well as the main indications for their choice
- Identify the surgical techniques used for the resection of the most frequent tumors and the nursing care derived from them
- Acquire knowledge about the different chemotherapeutic agents, their indications, as well as the most frequent adverse effects related to their use
- Distinguish between the different radiotherapy modalities and determine the necessary care in each one of them
- Perform nursing care plans that respond to the side effects of chemotherapy and radiotherapy treatment
- Know the characteristics and indications of other current oncological therapies: hormonal treatments, biologics and interventional procedures
- Determine the recommended pre-, post- and follow-up nursing care for the patient undergoing oncologic transplantation

#### Module 4. The Role of The Nurse in the Administration of Chemotherapy Treatment

- Recognize the steps in the process of administering chemotherapy treatment
- Gain in-depth knowledge of the protocol for receiving and storing cytostatics and guarantee the safety of the patient, the professional and the rest of the healthcare team during their handling
- Understand the meaning of pharmaceutical validation and demonstrate knowledge of compatibilities and incompatibilities of antineoplastic drugs
- Identify the resources available in the work area set up for the preparation of cytostatics, as well as the standards to be followed

- Explain how to act in the event of a spill of chemotherapeutic products and/or contamination of the work area
- Acquire advanced knowledge related to the administration of chemotherapy
- Classify the different routes of administration of cytostatics, knowing their indications, risks and benefits for the patient
- Prevent and recognize early complications associated with venous access during the administration of chemotherapy treatment and develop care plans aimed at their resolution
- Determine the drugs with the highest risk of producing extravasation and know how to prevent and treat it
- Expose the genetic risks derived from the handling of cytostatics and to know how they can be avoided or minimized
- Differentiate the types of waste generated after handling and administration of antineoplastic drugs
- Become familiar with the process and regulations for the treatment of cytostatic waste
- Teach patients and their families how to properly manage body excreta after chemotherapy administration

## tech 16 | Objectives

#### Module 5. Clinical manifestations and emergencies in the oncologic patient

- Apply the Nursing Care Process (NCP) in the oncology patient, establishing a comprehensive and individualized care plan
- Detect the main symptoms that may compromise the health of the oncology patient imminently
- Determine the most appropriate and updated nursing care to act on the symptoms that most affect the quality of life of the oncology patient
- Perform a comprehensive and systematic assessment of the person health status
- Explain the pathophysiological basis of pain in the oncologic patient and know its repercussion on the patient
- List the methods and tools for pain exploration and their appropriateness according to the patients characteristics
- Assess pain as a multidimensional entity and not only for its intensity
- Recognize the existing myths and prejudices regarding the use of opioid analgesics, both in patients and health professionals
- Establish the analgesic needs of an oncology patient based on the most recent evidence available
- Observe the individual's responses to analgesic treatment, assess its effectiveness and the occurrence of adverse effects

## Module 6. Nursing Approach to Nutrition and Post-Surgical Care of the Oncology Patient

- Deepen in the relationship between nutrition and cancer
- Determine the pathophysiological basis of oncologic malnutrition and its causes
- Acquire the necessary knowledge to assess the nutritional status of the oncologic patient and prevent possible complications
- Identify the nutritional needs of the oncology patient and their approach
- Develop skills to perform a nutritional and pharmacological therapeutic approach in cases of altered intake
- Update the aspects related to the indications, access routes and complications of artificial nutrition (enteral and parenteral)
- Assess the nutritional needs of terminal patients and address them from an ethical perspective
- Describe the postsurgical care of the most frequent types of cancer
- Put into practice nursing techniques and care in pulmonary rehabilitation and respiratory physiotherapy
- Recognize the different types of ostomies and their characteristics to provide quality care to the ostomized patient
- Demonstrate competence in the correct management of lymphedema as a complication of breast surgery

## Objectives | 17 tech

#### Module 7. Nursing Care in the Palliative and Terminal Patient

- Recognize the importance of palliative care and know its historical background
- Frame the palliative patient and his care within the state regulations, knowing his rights
- Identify the signs and symptoms that appear in the oncology patient at the end of life and know how to treat them to provide the greatest comfort and well-being
- Detect the patient's needs in the last days of life in order to provide comprehensive and quality care
- Develop skills to provide emotional and psychological support to the patient's family environment in times of agony
- Become familiar with the end-of-life process at home, as well as its historical background
- Distinguish the types of grief and its phases
- Design nursing care plans for family members going through bereavement processes
- Understand the different areas covered by bioethics in palliative care
- To develop care plans through the nursing care process including diagnoses (NANDA), objectives (NOC) and interventions (NIC)

## Module 8. Communication and Psychosocial Approach to the Oncology Patient in Nursing

- Communicate in an understandable way, appropriate to the patient's needs and providing true information that helps decision
- Develop assertive communication and self-regulation skills, as well as problem analysis and resolution techniques
- Facilitate the adaptation process and motivate patients with maladaptive denial to change
- Implement the phases of the deliberative process as a strategy to guide the patient in making decisions about their own health
- Manage the appearance of the conspiracy of silence through emotional validation, empathy, anticipation or agreement
- Assess the patient's decision-making capacity and identify the non-competent patient
- Recognize the external, internal and learning factors involved in the appearance of aggressiveness in the oncology patient
- Support and evaluate the emotional reactions derived from the possibility of limiting the therapeutic effort
- Anticipate and prevent family breakdown by identifying related factors and developing family intervention strategies
- Identify manifestations and risk indicators of complicated grief and implement family support techniques
- Guide the patient and family in advance planning for health care decisions

## tech 18 | Objectives

#### Module 9. Oncology Nursing in the Pediatric and Elderly Patient

- Determine the prevalence of cancer in pediatric age and become familiar with the most frequent tumors
- Describe the main treatments in children and adolescent patients, as well as their possible complications
- Identify the needs of the pediatric cancer patient and their family environment from a holistic perspective to provide quality care
- Develop skills to care for the pediatric patient in the last days of life, providing psychological and emotional support
- Assess the nutritional status of the pediatric patient and adapt nutrition to reduce complications and increase quality of life
- Provide psychological care to the patient and their environment during the different stages of the disease that favors an effective adaptation and improves their wellbeing
- Describe the most frequent tumors in the elderly population
- Know the specific characteristics of the elderly population and their influence on neoplastic diseases
- Acquire the knowledge necessary to perform a comprehensive geriatric assessment and identify the patient's needs in order to develop a therapeutic plan
- Review the fundamental aspects of oncologic pain in the elderly patient and its multidimensional approach



## Objectives | 19 tech



### Module 10. Oncology Nursing Research

- Expose the fundamentals of research in Health Sciences and its importance in the field of Oncology
- Distinguish the various areas of research in Oncology and Oncology Nursing, and their contribution to improving the quality of life of patients
- Deepen in the characteristics of translational research and its importance in Oncology
- Determine the main lines of nursing research in Oncology, both nationally and internationally
- Direct, organize and assess individual research projects and nursing or multidisciplinary work groups
- Understand and cope with the challenges and difficulties that new staff may face, based on different institutional support strategies
- Reflect on one's own practice, making critical judgments, showing a constructive attitude and taking into account the latest knowledge
- Differentiate the main models of critical reading, according to the type of study to be analyzed
- Interpret the information contained in the scientific literature to provide the patient with contrasted and quality evidence
- Use new information and communication technologies to improve daily practice and teamwork

# 04 **Skills**

The oncology area requires extremely refined competencies and skills, not only in patient care itself, but also in other responsibilities of the nurse, such as the preparation of cytostatic products, the treatment of waste products or the management of aggressive patients. The fact of including teachers with extensive experience in the field means that all the contents also include real case studies based on their own experience, in order to continue expanding the nurse's competencies.

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Emphasize the skills, competencies and techniques that will most influence your daily work, with a special focus on real-life situations and cases of oncology patient care"

## tech 22 | Skills

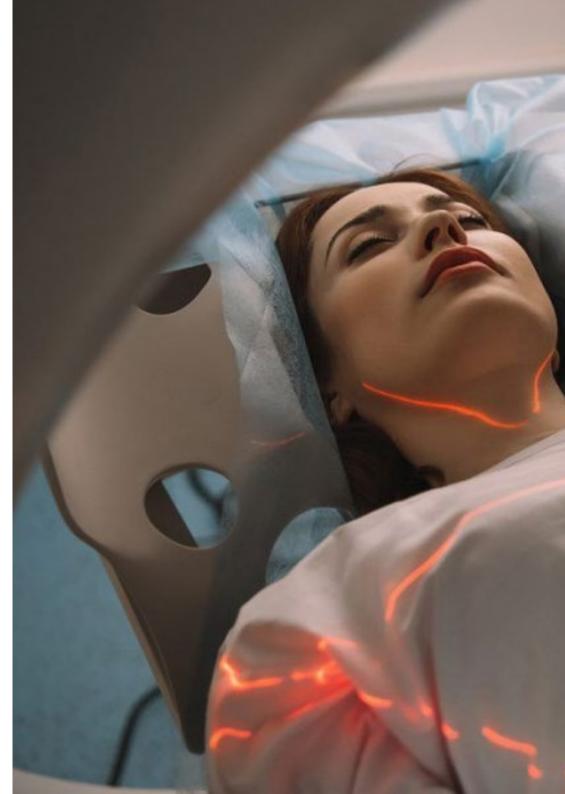


## **General Skills**

- Lead nursing care at all stages of the oncology process and at all levels of care
- Manage continuity of care by focusing attention on the needs of the patient and their environment
- Coordinate expert nursing consultations in oncology and palliative care
- Lead oncology care teams in all settings: inpatient units, day hospitals and outpatient clinics



666 Boost your career path with holistic teaching, allowing you to advance both theoretically and practically"



## Skills | 23 tech

## Specific Skills

- Provide specialized care to oncology patients, according to their particularities
- Coordinate and lead a team of nursing specialized in the oncology patient
- Care for the families of oncology patients, with special attention to those in the bereavement phase
- Administer prescribed treatments to patients, ensuring their safety
- Carry out the psychosocial approach to the patient in the different stages of the disease, paying special attention to the end of life
- Know the risk factors for each type of tumor
- Detect possible emergencies or side effects in patients receiving treatments
- Identify possible malnutrition or nutritional need in the oncology patient
- Detect the needs of palliative patients and address them
- Participate in new lines of nursing research in the field of oncology

# 05 Course Management

To write all the theoretical content and academic material for this program, TECH has relied on a large teaching team with experience in the area of Oncology Nursing and other related fields. Their professional background makes them a guarantee of quality for all the contents, written and created always thinking about the practical application of the same and the most effective update for the oncology nurse.

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You can rely on a teaching staff committed to the maximum with your update in the area of Oncology Nursing, providing you with the best knowledge and resources extracted from their own experience"

## tech 26 | Course Management

### Management



## Ms. Morán López, Marina

- Nurse in the Medical Oncology, General Surgery, Digestive and Traumatology
- Nurse at the Valdemoro Medical Center
- Nursing Assistant at the La Paz University Hospital
- Nursing Auxiliary at the Lafora Psychiatric Hospital

## Professors

#### Ms. Casado Pérez, Eva

- Nurse in the Nuclear Medicine Department of the Infanta Elena Hospital of Valdemoro
- Nurse in the General and Pediatric Emergency Department at La Moraleja Hospital and at the Gynecology and Assisted Reproduction Institute FIV Madrid
- Nurse in the Gynecology, Obstetrics and Assisted Reproduction Services of the Fundación Jiménez Díaz University Hospital
- Postgraduate Certificate in Nursing from the Fundación Jiménez Díaz School of Nursing

#### Ms. García Parra, Natalia

- Psychologist in Cáritas Diocese of Cartagena
- Volunteer coordinator at the Spanish Association Against Cancer and Infanta Elena Hospital
- Psycho-oncologist at the Spanish Association Against Cancer. Albacete
- Psychologist at the Spanish Association of Chronic Myeloid Leukemia Patients. (AELEMIC)
- Psychologist in the Child, Adolescent and Adult Psychology Service of the DRM Clinic. of Murcia
- Professional Master's Degree in Psycho-Oncology and Palliative Care at the Complutense University of Madrid
- Professional Master's Degree in Clinical and Health Psychology from the University of Murcia
- Degree in Psychology from the University of Murcia

## Course Management | 27 tech

#### Ms. Martínez Camacho, Minerva

- Nurse in the Oncology, Hematology and Nuclear Medicine Department of the Infanta Elena Hospital
- Nurse in the Internal Medicine Department of the Clínica Universal in Madrid
- Nurse in the Emergency Department of Gregorio Marañón Hospital, in Madrid
- Nurse in the Neurology Service of the university Ramón y Cajal Hospital

#### Ms. Meléndez Losada, Noelia

- Nurse at El Restón Health Center in Valdemoro
- Nurse at the Day Hospital
- Nurse in the COVID-19 Unit at the Infanta Elena University Hospital
- Nurse of the Hospitalization, Emergency, Outpatient and Extraction Departments of the Hospital HLA Universitario Moncloa in Madrid

#### Ms. Soriano Ruiz, Teresa

- Nurse at the Multipurpose Day Hospital and at the Infanta Elena University Hospital in Madrid
- Nurse at the General Surgery Department of Infanta Elena University Hospital
- Nurse at Amma Humanes Residences, Nuestra Señora de la Soledad, Day Care Center in Parla and Personalia Parla in Madrid

#### Ms. Carnés Martín, Bárbara

- Nurse at the El Restón Primary Care Center
- ICU Nurse at the University Hospital of Getafe
- Postgraduate Certificate in Nursing from the Alfonso X el Sabio University
- Technician in Pathological Anatomy by the Technical School of Specialized Education
- Postgraduate Certificate in Advanced Nursing Training in Emergency Medicine from the Autonomous University of Madrid

#### Ms. Villanueva Muñoz, Estefanía

- Nurse in the Hospitalization Service and Allergology Service of the Infanta Elena University Hospital
- Nurse in the Gynecology and Obstetrics Operating Room Service of the Fuenlabrada Hospital
- Nurse at the Móstoles University Hospital
- Nurse in the Emergency, Neonatology and Neurovascular Department at Getafe University Hospital
- Degree in Nursing from the European University
- Postgraduate Diploma in Nursing Processes and Interventions for the Adult Patient in Common Hospitalization Situations by CODEM
- Higher Technician in Clinical Diagnostic Laboratory by the European University

#### Ms. Costumero García, Mónica

- Adult and pediatric nurse at El Restón health center
- Nurse in the Polyvalent ICU, Neurotrauma and Coronary Unit at Nuestra Señora de Candelaria University Hospital
- Nurse in Multipurpose Intensive Care, in the Coronary Unit, Resuscitation and Emergencies of the 12 de Octubre University Hospital
- Nurse in Cardiac Surgery Intensive Care at Ramón y Cajal University Hospital
- Lecturer at the University of La Laguna
- Teaching at CEU Cardenal Herrera University
- Graduate in Nursing from the Complutense University of Madrid
- Instructor of Basic and Advanced Life Support by the Spanish Society of Intensive, Critical and Coronary Units (SEMICYUC)

## 06 Educational Plan

The entire syllabus has been written following TECH's pedagogical methodology, based on Relearning, which greatly relieves the teaching load. The most important oncological concepts, keys and approaches are reiterated throughout the program, thus saving the nurse many hours of study. In addition, each topic is accompanied by a good compendium of multimedia resources, self-knowledge exercises, complementary readings and detailed videos that consolidate all that has been studied.

The virtual classroom will be available 24 hours a day, and can be accessed from any device with an internet connection"

## tech 30 | Educational Plan

### Module 1. Introduction to Oncology. Oncology Nursing

- 1.1. Oncology and Oncology Nursing
  - 1.1.1. Introduction to Oncology Nursing
  - 1.1.2. Cancer Definition
  - 1.1.3. Essential Histological Concepts
- 1.2. Etiopathogenesis and Biology of Cancer
  - 1.2.1. Etiopathogenic Theories
    - 1.2.1.1. Viral Theory
    - 1.2.1.2. Oncogene Theory
    - 1.2.1.3. Suppressor Genes Theory
    - 1.2.1.4. Gene Theory
    - 1.2.1.5. Inflammatory Theory
  - 1.2.2. Biology of Cancer
    - 1.2.2.1. Concepts in Cell Biology
    - 1.2.2.2. Mechanisms of Malignant Transformation
- 1.3. Carcinogenesis
  - 1.3.1. Genetic Alterations
    - 1.3.1.1. Proto-Oncogenes
    - 1.3.1.2. Tumor Repair Genes
    - 1.3.1.3. DNA Repair Genes
  - 1.3.2. Epigenetic Alterations
  - 1.3.3. Carcinogenic Agents
- 1.4. Classification and Nomenclature of Tumors
  - 1.4.1. Benign Tumors
  - 1.4.2. Malignant tumours
- 1.5. Tumor Progression Staging
  - 1.5.1. Tumor Dissemination Routes
  - 1.5.2. Staging
    - 1.5.2.1. Depending on the Size
    - 1.5.2.2. Depending on the Level of Differentiation

- 1.6. Risk Factors
  - 1.6.1. Genetic Factors
  - 1.6.2. Hormonal Factors
  - 1.6.3. Radiation
  - 1.6.4. Tobacco
  - 1.6.5. Alcohol
  - 1.6.6. Diet
  - 1.6.7. Drugs:
  - 1.6.8. Physical Agents
  - 1.6.9. Chemical Agents
  - 1.6.10. Biological Agents
  - 1.6.11. Occupational Exposure
- 1.7. Epidemiology of Cancer
  - 1.7.1. Cancer Epidemiology Worldwide
  - 1.7.2. Cancer Epidemiology in Spain
    - 1.7.2.1. Incidence
    - 1.7.2.2. Prevalence
    - 1.7.2.3. Mortality
    - 1.7.2.4. Survival
- 1.8. Cancer Prevention
  - 1.8.1. Types of Prevention
  - 1.8.2. Primary prevention
    - 1.8.2.1. Intervention Against Smoking
    - 1.8.2.2. Intervention Against Alcohol Consumption
    - 1.8.2.3. Promotion of Healthy Diet
  - 1.8.3. Secondary prevention
  - 1.8.4. Tertiary prevention
  - 1.8.5. Quaternary Prevention
- 1.9. Early Detection Programs
  - 1.9.1. Colorectal Cancer Early Detection Program
  - 1.9.2. Breast Cancer Early Detection Program
  - 1.9.3. Cervical Cancer Early Detection Program

## Educational Plan | 31 tech

#### 1.10. Global Assessment the Oncologic Patient

- 1.10.1. Tumor Markers
- 1.10.2. Imaging Tests
- 1.10.3. Neurological Assessment Scales
  - 1.10.3.1. Quality of Life Rating Scales
    - 1.10.3.1.1. Symptom Assessment
    - 1.10.3.1.2. Functional Assessment
    - 1.10.3.1.3. Quality of life Assessment

## Module 2. Types of Tumors

- 2.1. Hematological Tumors
  - 2.1.1. Lymphoma
  - 2.1.2. Leukemia
  - 2.1.3. Myeloproliferative Syndromes
  - 2.1.4. Myelodysplastic Syndromes
  - 2.1.5. Plasma Cell Tumors
- 2.2. Osteomuscular Tumors
  - 2.2.1. Osteosarcoma
  - 2.2.2. Chondrosarcoma
  - 2.2.3. Ewing Sarcoma
  - 2.2.4. Soft Tissue Sarcomas
- 2.3. Tumors of the Digestive System
  - 2.3.1. Oesophageal Cancer
  - 2.3.2. Gastric Cancer
  - 2.3.3. Colorectal Cancer
  - 2.3.4. Carcinoma of the Anus
  - 2.3.5. Other Intestinal Tumors
  - 2.3.6. Hepatocellular Carcinoma
  - 2.3.7. Cholangiocarcinoma
  - 2.3.8. Gallbladder Carcinoma
  - 2.3.9. Pancreatic Cancer

- 2.4. Nervous System Tumours
  - 2.4.1. Astrocytoma
  - 2.4.2. Oligodendroglioma
  - 2.4.3. Glioblastoma
  - 2.4.4. Meningioma
  - 2.4.5. Neurinoma
  - 2.4.6. Schwannoma
- 2.5. Genitourinary Tumors
  - 2.5.1. Renal Carcinoma
  - 2.5.2. Urothelial Carcinoma
  - 2.5.3. Vesical Carcinoma
  - 2.5.4. Prostate Carcinoma
  - 2.5.5. Endometrial Cancer
  - 2.5.6. Ovarian Cancer
  - 2.5.7. Cervical Cancer
  - 2.5.8. Vulvar Cancer
  - 2.5.9. Testicular Cancer
  - 2.5.10. Penile Cancer
- 2.6. Endocrine Tumors
  - 2.6.1. Thyroid and Parathyroid Cancer
  - 2.6.2. Adrenal Carcinoma
  - 2.6.3. Neuroendocrine Tumors
  - 2.6.4. Gastric Carcinoid Tumour
  - 2.6.5. Multiple Endocrine Neoplasia Syndromes
- 2.7. Head and Neck Tumors
  - 2.7.1. Pituitary Tumors
  - 2.7.2. Oral Cavity Cancer
  - 2.7.3. Oropharyngeal and Nasopharyngeal Cancer
  - 2.7.4. Paranasal Sinus Cancer
  - 2.7.5. Cancer of Salivary Glands
  - 2.7.6. Laryngeal Cancer

## tech 32 | Educational Plan

- 2.8. Dermatological Tumors
  - 2.8.1. Melanoma
  - 2.8.2. Basal Cell Carcinoma
  - 2.8.3. Squamous cell carcinoma
- 2.9. Breast Cancer
  - 2.9.1. Histological Subtypes
  - 2.9.2. Molecular Subtypes
- 2.10. Thoracic Tumors
  - 2.10.1. Lung Cancer
  - 2.10.2. Thymoma
  - 2.10.3. Pleural Mesothelioma

#### Module 3. Oncological Treatments

- 3.1. Types of Treatment
  - 3.1.1. Neoadjuvant Therapy
  - 3.1.2. Adjuvant Treatment
  - 3.1.3. Palliative treatment
  - 3.1.4. Targeted Therapy
- 3.2. Surgical Oncology
  - 3.2.1. Essential Concepts
  - 3.2.2. Preoperative Assessment
  - 3.2.3. Surgical Techniques in the Main Tumors
  - 3.2.4. Surgical Emergencies
- 3.3. Chemotherapy Treatment
  - 3.3.1. Chemotherapy Fundamentals
  - 3.3.2. Chemotherapy Types
    - 3.3.2.1. Alkylating Agents
    - 3.3.2.2. Platinum Compounds
    - 3.3.2.3. Alkaloids of Plant Origin
    - 3.3.2.4. Antimetabolites
    - 3.3.2.5. Topoisomerase Inhibitors
    - 3.3.2.6. Antitumor Antibiotics
    - 3.3.2.7. Other agents
  - 3.3.3. Types of Response

- 3.4. Side Effects of Chemotherapy
  - 3.4.1. Digestive Toxicity
  - 3.4.2. Cutaneous Toxicity
  - 3.4.3. Hematological Toxicity
  - 3.4.4. Cardiovascular Toxicity
  - 3.4.5. Neurological Toxicity
  - 3.4.6. Other Side Effects
- 3.5. Radiotherapy Treatment
  - 3.5.1. Types of Radiotherapy
  - 3.5.2. Indications
- 3.6. Side Effects of Radiotherapy
  - 3.6.1. Head and Neck Radiotherapy
  - 3.6.2. Thoracic Radiotherapy
  - 3.6.3. Abdominal and Pelvic Radiotherapy
- 3.7. Interventional Radiology Techniques
  - 3.7.1. Radiofrequency
  - 3.7.2. Chemoembolization
  - 3.7.3. Radioembolization
  - 3.7.4. Others
- 3.8. Hormonal Treatment
  - 3.8.1. Antiestrogens
  - 3.8.2. Progestogens
  - 3.8.3. Aromatase Inhibitors
  - 3.8.4. Estrogens
  - 3.8.5. Antiandrógenos
  - 3.8.6. Gonadotropin Releasing Hormone Agonists
- 3.9. Biological Treatments
  - 3.9.1. Monoclonal Antibodies
  - 3.9.2. Kinase Inhibitors
  - 3.9.3. mTOR Inhibitors
  - 3.9.4. Immunoregulatory Cytokines

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#### 3.10. Transplants

- 3.10.1. Solid Organ Transplant
- 3.10.2. Bone Marrow Transplant
- 3.10.3. Peripheral Blood Transplant
- 3.10.4. Umbilical Cord Transplant

#### Module 4. Nursing role in the administration of chemotherapy treatment

- 4.1. Reception and Storage of Cytostatic Products
  - 4.1.1. Reception
  - 4.1.2. Storage
- 4.2. Cytostatic Product Validation
  - 4.2.1. Pharmaceutical Validation
  - 4.2.2. Worksheet
  - 4.2.3. Label
  - 4.2.4. Stability and Compatibility
- 4.3. Cytostatic Product Preparation
  - 4.3.1. Workspace
    - 4.3.1.1. Biological Safety Cabin
    - 4.3.1.2. Laboratory Isolators
    - 4.3.1.3. Work Area Standards
    - 4.3.1.4. Cleaning Standards
    - 4.3.1.5. Workplace Contamination
    - 4.3.1.6. Spills
    - 4.3.1.7. Accidental Exposures
- 4.4. Administration
  - 4.4.1. Administrator Protection
  - 4.4.2. Environmental Protection
  - 4.4.3. Error Prevention
  - 4.4.4. Venous Accesses
  - 4.4.5. Administration Techniques

- 4.5. Routes of Administration of Chemotherapy
  - 4.5.1. Definition
  - 4.5.2. Oral Chemotherapy
  - 4.5.3. Peripheral Venous Catheters
    - 4.5.3.1. Selection Criteria
    - 4.5.3.2. Type of Material
    - 4.5.3.3. Insertion Sites
    - 4.5.3.4. Placement Techniques
    - 4.5.3.5. Nursing Care
  - 4.5.4. Central Venous Catheter with Reservoir
    - 4.5.4.1. Selection Criteria
    - 4.5.4.2. Type of Material
    - 4.5.4.3. Insertion Sites
    - 4.5.4.4. Placement Techniques
    - 4.5.4.5. Nursing Care
  - 4.5.5. Percutaneous Insertion of Central Venous Catheter
    - 4.5.5.1. Selection Criteria
    - 4.5.5.2. Type of Material
    - 4.5.5.3. Insertion Sites
    - 4.5.5.4. Placement Techniques
    - 4.5.5.5. Nursing Care
  - 4.5.6. Peripherally Inserted Central Venous Catheter
    - 4.5.6.1. Selection Criteria
    - 4.5.6.2. Type of Material
    - 4.5.6.3. Insertion Sites
    - 4.5.6.4. Placement Techniques
    - 4.5.6.5. Nursing Care
  - 4.5.7. Intraperitoneal Chemotherapy
    - 4.5.7.1. Selection Criteria
    - 4.5.7.2. Administration Techniques
    - 4.5.7.3. Nursing Care

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- 4.6. Complications of Venous Access
  - 4.6.1. Introduction
  - 4.6.2. Complicaciones tempranas
    - 4.6.2.1. Infections
    - 4.6.2.2. Pneumothorax
    - 4.6.2.3. Catheter placement
    - 4.6.2.4. Catheter Malposition and Extravasation
    - 4.6.2.5. Arrhythmias
    - 4.6.2.6. Migration or Dislocation of the Catheter
    - 4.6.2.7. Catheter Fracture and Embolism
    - 4.6.2.8. Catheter Occlusion or Obstruction
  - 4.6.3. Late Complications
    - 4.6.3.1. Catheter Fracture
    - 4.6.3.2. Thrombosis
    - 4.6.3.3. Skin Necrosis Around the Device
- 4.7. Phlebitis Management
  - 4.7.1. Definition
  - 4.7.2. Causes
  - 4.7.3. Signs and Symptoms
  - 4.7.4. Classification
  - 4.7.5. Risk Factors
  - 4.7.6. How to prevent phlebitis?
  - 4.7.7. Nursing Care
- 4.8. Extravasation Management
  - 4.8.1. Definition
  - 4.8.2. Extravasation Related Factors
  - 4.8.3. How to prevent extravasation?
  - 4.8.4. Cytostatic Classification According to Extravasation Effects
  - 4.8.5. Extravasation Manifestations Depending on the Cytostatic

- 4.8.6. General Treatment
- 4.8.7. Specific Treatment
- 4.8.8. Surgical Management
- 4.8.9. Nursing Care
- 4.9. Exposure Risks During Administration
  - 4.9.1. Affected Personnel
  - 4.9.2. Penetration Routes
  - 4.9.3. Genetic Risks
- 4.10. Treatment of Cytostatic Waste and Excreta
  - 4.10.1. Treating Excreta
    - 4.10.1.1. Urine
    - 4.10.1.2. Feces
    - 4.10.1.3. Sweat
    - 4.10.1.4. Trace
  - 4.10.2. Cytostatic Waste Treatment
    - 4.10.2.1. Regulations
    - 4.10.2.2. Types of Waste
    - 4.10.2.3. Necessary Material
    - 4.10.2.4. Required Material
    - 4.10.2.5. Elimination

#### Module 5. Clinical manifestations and emergencies in the oncologic patient

- 5.1. Introduction to Semiology in the Oncologic Patient
  - 5.1.1. Nurse Assessment of the Oncologic Patient
  - 5.1.2. NANDA-NOC-NIC Care Plan
- 5.2. Respiratory Manifestations
  - 5.2.1. Dyspnoea
  - 5.2.2. Cough
  - 5.2.3. Hiccup
  - 5.2.4. Hemoptysis
  - 5.2.5. Neoplastic Pleural Effusion



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- 5.3. Digestive System Manifestations
  - 5.3.1. Dry Mouth
  - 5.3.2. Nausea and Vomiting
  - 5.3.3. Constipation. Fecaloma
  - 5.3.4. Diarrhea
  - 5.3.5. Gastric Crush Syndrome
  - 5.3.6. Dysphagia
  - 5.3.7. Sialorrhea
  - 5.3.8. Intestinal Obstruction
  - 5.3.9. Neoplastic Ascites
- 5.4. Urinary Manifestations
  - 5.4.1. Bladder Spasm
  - 5.4.2. Urinary Incontinence
  - 5.4.3. Vesical Tenesmus
  - 5.4.4. Dysuria
  - 5.4.5. Hematuria
- 5.5. Psychological Manifestations
  - 5.5.1. Acute Confusional Syndrome
  - 5.5.2. Anxiety
  - 5.5.3. Depression
  - 5.5.4. Insomnia
- 5.6. Nervous System Manifestations
  - 5.6.1. Seizures
  - 5.6.2. Spinal Cord Compression
  - 5.6.3. Intracranial Hypertension
  - 5.6.4. Muscle Spasms
  - 5.6.5. Metabolic Encephalopathy
- 5.7. Hematologic and Circulatory Manifestations
  - 5.7.1. Hemorrhages
  - 5.7.2. Anaemia
  - 5.7.3. Superior Vena Cava Syndrome
  - 5.7.4. Neoplastic Pericardial Effusion

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- 5.8. Miscellaneous: Systemic Symptoms and Constitutional Syndrome
  - 5.8.1. Asthenia
  - 5.8.2. Anorexia. Cachexia
  - 5.8.3. Diaphoresis
  - 5.8.4. Neoplastic Lymphedema
  - 5.8.5. Tumor Ulcers
  - 5.8.6. Pruritus
  - 5.8.7. Neoplastic Fever
- 5.9. Basis of Pain in Oncologic Patients
  - 5.9.1. Anatomophysiology
  - 5.9.2. Etiology
  - 5.9.3. Subjective Assessment
  - 5.9.4. Objective Assessment
  - 5.9.5. Measuring Tools
- 5.10. Analgesic Treatment Importance
  - 5.10.1. Analgesic Treatment Myths
  - 5.10.2. Analgesia Modalities

## **Module 6.** Nursing Approach to Nutrition and Post-Surgical Care of the Oncology Patient

- 6.1. Nutrition in cancer prevention
  - 6.1.1. Dietary Carcinogenesis
  - 6.1.2. Food and Nutrients
  - 6.1.3. Risk Factors and Protective Elements
  - 6.1.4. Lifestyle
- 6.2. General Principles of Malnutrition in Oncology Patients
  - 6.2.1. Epidemiology of Malnutrition
  - 6.2.2. Pathophysiology
  - 6.2.3. Types of Malnutrition

- 6.2.4. Causes of Malnutrition in Oncology Patients
  - 6.2.4.1. Tumor-Related
  - 6.2.4.2. Patient-Related
  - 6.2.4.3. Treatment-Related
- 6.2.5. Clinical Manifestations of Malnutrition6.2.5.1. Tumor Cachexia6.2.5.2. Sarcopenia
- 6.3. Assessment of Nutritional Status
  - 6.3.1. Clinical Record and Subjective Nutritional Assessment
  - 6.3.2. Screening Tests
    - 6.3.2.1. Malnutrition Screening Tool
    - 6.3.2.2. Patient-Generated Subjective Global Assessment
  - 6.3.3. Anthropometric Measurements
  - 6.3.4. Biochemical Measurements
- 6.4. Nutritional and Pharmacological Approach
  - 6.4.1. General Recommendations
  - 6.4.2. Recommendations in Altered Intake Situations
    - 6.4.2.1. Anorexia
    - 6.4.2.2. Nausea and Vomiting
    - 6.4.2.3. Dysphagia
    - 6.4.2.4. Dysgeusia
    - 6.4.2.5. Oral Mucositis
    - 6.4.2.6. Xerostomia
    - 6.4.2.7. Dysphagia to Liquids and Solids
  - 6.4.3. Nutritional Supplements
  - 6.4.4. Pharmacotherapy
- 6.5. Enteral Nutrition
  - 6.5.1. Indications
  - 6.5.2. Access Routes
  - 6.5.3. Enteral Nutrition Formulas
  - 6.5.4. Complications

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- 6.6. Parenteral Nutrition
  - 6.6.1. Indications
  - 6.6.2. Access Routes
  - 6.6.3. Types of Parenteral Nutrition
  - 6.6.4. Nutritional Requirements
  - 6.6.5. Complications
- 6.7. End-Of-Life Nutrition
  - 6.7.1. Nutritional Intervention
  - 6.7.2. Assisted Nutrition and Hydration
  - 6.7.3. Ethical, Cultural and Religious Aspects
- 6.8. Post-Surgical Care After Thoracic Surgery
  - 6.8.1. Pulmonary Rehabilitation
  - 6.8.2. Respiratory Physiotherapy
- 6.9. Care of Ostomized Patients
  - 6.9.1. General Concepts
  - 6.9.2. Ostomies Classification
    - 6.9.2.1. Digestive Ostomies
      - 6.9.2.1.1. Digestive Ostomy Types
      - 6.9.2.1.2. Hygiene and Care
      - 6.9.2.1.3. Diet
      - 6.9.2.1.4. Psychological Aspects
      - 6.9.2.1.5. Complications
    - 6.9.2.2. Urinary Ostomies
      - 6.9.2.2.1. Types of Urinary Ostomy
    - 6.9.2.2.2. Hygiene and Care
    - 6.9.2.3. Ostomías respiratorias
      - 6.9.2.3.1. Types of Respiratory Ostomy
      - 6.9.2.3.2. Hygiene and Care
- 6.10. Post-Surgical Care After Breast Tumor Surgery
  - 6.10.1. Breast Cancer Surgery
    - 6.10.1.1. Psychological Impact

- 6.10.2. Lymphedema
  - 6.10.2.1. Classification6.10.2.2. Epidemiology6.10.2.3. Etiology6.10.2.4. Clinical Manifestations
  - 6.10.2.5. Diagnosis
  - 6.10.2.6. Nursing Care

#### Module 7. Nursing care in the palliative and terminal patient

- 7.1. Principles and Organization of Palliative Care
  - 7.1.1. Palliative Care Definition7.1.1.1. Palliative Care Objectives7.1.1.2. Principles of Palliative Care
  - 7.1.2. History of Palliative Care
  - 7.1.3. Quality of Life
- 7.2. Legislation and Ethical Aspects Related to Palliative Care
  - 7.2.1. State Legislation
  - 7.2.2. Rights and Responsibilities of the Patients
  - 7.2.3. Quaternary Prevention
  - 7.2.4. Informed Consent
- 7.3. Main signs and symptoms in terminal patients
  - 7.3.1. Digestive Manifestations
    - 7.3.1.1. Anorexia
    - 7.3.1.2. Constipation
    - 7.3.1.3. Nausea and Vomiting
    - 7.3.1.4. Cachexia
    - 7.3.1.5. Dryness and Mouth Lesions
  - 7.3.2. Respiratory Manifestations
    - 7.3.2.1. Dyspnoea
    - 7.3.2.2. Cough
    - 7.3.2.3. Hiccup
    - 7.3.2.4. Premortem Sterns

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7.3.3. Neuropsychological Manifestations

- 7.3.3.1. Tiredness and Fatigue
- 7.3.3.2. Insomnia
- 7.3.3.3. Depression
- 7.3.3.4. Delirium
- 7.3.4. Genitourinary Manifestations 7.3.4.1. Urinary Retention
- 7.3.5. Pain
- 7.3.6. Fever and Dysthermia
- 7.3.7. Emergencies in the Terminally ill Patient 7.3.7.1. Massive Hemorrhage 7.3.7.2. Seizures

  - 7.3.7.3. Acute Respiratory Depression
- 7.4. Nursing Care
  - 7.4.1. Virginia Henderson Needs Model
    - 7.4.1.1. Need 1: Breathing
    - 7.4.1.2. Need 2: Food/Hydration
    - 7.4.1.3. Need 3: Elimination
    - 7.4.1.4. Need 4: Mobilization
    - 7.4.1.5. Need 5: Rest/Sleep
    - 7.4.1.6. Need 6: Getting Dressed
    - 7.4.1.7. Need 7: Temperature
    - 7.4.1.8. Need 8: Hygiene/Skin
    - 7.4.1.9. Need 9: Safety
    - 7.4.1.10. Need 10: Communication
    - 7.4.1.11. Need 11: Religion/Beliefs
    - 7.4.1.12. Need 12: Development
    - 7.4.1.13. Need 13: Recreational/Leisure Activities
    - 7.4.1.14. Need 14: Learn/Discover
- End of Life 7.5.
  - 7.5.1. Last Days
  - 7.5.2. Agony
    - 7.5.2.1. Agony Situation Characteristics
    - 7.5.2.2. Care of the Dying

- 7.5.3. Spiritual Care 7.5.4. Sedation 7.5.4.1. Refractory Symptoms 7.5.4.2. Sedation Types 7.5.4.3. Drugs Used 7.5.4.4. Ethical Considerations 7.6. Palliative Care and Comprehensive Care of Oncology Patient 7.6.1. Multidisciplinary Team Role 7.6.2. Care Models 7.6.3. Family Care 7.6.3.1. Family Symptoms in the Care of the Terminally III Patient 7.6.3.2. Psychosocial Care 7.7. Palliative Home Care 7.7.1. Background 7.7.2. Home Care Process 773 Dying at Home Grief 781 Definition 7.8.2. Stages of Grief 7.8.3. Manifestations of Grief 7.8.4. Types of Grief 7.8.4.1. Uncomplicated Grief 7.8.4.2. Pathological Grief 7.8.4.3. Anticipatory Grief 7.8.4.4. Non-Complicated or Prolonged Grief 7.8.5. Grief Completion 7.8.6. Nursing Interventions in Grief Grief Management 7.8.7. 7.9. Palliative Care Bioethics Bioethics 7.9.1. 7.9.2. Human Dignity
  - Quality of Life 7.9.3.

7.8.

Ethical and Bioethical Issues at the End of Life 794

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#### 7.10. Nursing Care Process (NCP) at the End of Life

- 7.10.1. Comprehensive Nursing Assessment
- 7.10.2. Need for NCP in Palliative Patients
- 7.10.3. Nursing Diagnosis (NANDA)
- 7.10.4. Nursing Outcomes (NOC)
- 7.10.5. Nursing Interventions (NIC)

## **Module 8.** Communication and Psychosocial Approach to the Oncology Patient in Nursing

- 8.1. Communication in Oncology
  - 8.1.1. The Role of Communication in Oncology
  - 8.1.2. Somatic-Psychological Interaction
  - 8.1.3. Bioethical Support
  - 8.1.4. Counseling
    - 8.1.4.1. Knowledge
    - 8.1.4.2. Attitudes
    - 8.1.4.3. Relational Strategies
- 8.2. Denial Management Adaptive and Maladaptive Denial
  - 8.2.1. Causes of Denial
  - 8.2.2. Nursing Professional Objectives
  - 8.2.3. Denial Management
    - 8.2.3.1. Factors Involved
    - 8.2.3.2. Nursing Interventions
- 8.3. Communicating Bad News
  - 8.3.1. How to Deliver Bad News
  - 8.3.2. Nursing Professional Objectives
  - 8.3.3. Factors Involved
  - 8.3.4. Bad News Delivery Strategies
- 8.4. Decision Making
  - 8.4.1. From Communication to Deliberation
  - 8.4.2. Difficulty in Decision-Making

- 8.4.3. Nursing Professional Objectives
- 8.4.4. Factors Involved
- 8.4.5. Deliberative Process
- 8.4.6. Criteria for Assessing Decision-Making Capacity
- 8.4.7. Problems in Decision-Making Capacity Nursing Approach
- 8.5. Conspiracy of Silence
  - 8.5.1. The Conspiracy of Silence
  - 8.5.2. Causes of The Conspiracy of Silence
  - 8.5.3. Factors Involved
  - 8.5.4. Nursing Approach
- 8.6. Aggressiveness Management
  - 8.6.1. Oncologic Patient Aggressiveness
  - 8.6.2. Causes of Hostile Reactions
  - 8.6.3. Nursing Professional Objectives
  - 8.6.4. Factors Involved
  - 8.6.5. Aggressive Patient Management
- 8.7. Therapeutic Effort Limitation
  - 8.7.1. The Therapeutic Effort Limitation
  - 8.7.2. Need to Limit Therapeutic Effort
  - 8.7.3. Nursing Professional Objectives
  - 8.7.4. Factors Involved
  - 8.7.5. Approach and Intervention
- 8.8. Family Claudication
  - 8.8.1. Familiar Claudication Prevention
  - 8.8.2. Claudication Causes
  - 8.8.3. Nursing Professional Objectives
  - 8.8.4. Factors Involved
  - 8.8.5. Approach and Intervention With Regards To Family Claudication
- 8.9. Prevention of Complicated Family Grief
  - 8.9.1. Complicated Family Grief
  - 8.9.2. Causes of Problems in the Grieving Process
    - 8.9.2.1. Personal Factors
    - 8.9.2.2. Situational factors
    - 8.9.2.3. Interpersonal Factors

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- 8.9.3. Nursing Professional Objectives
- 8.9.4. Factors Involved
- 8.9.5. Approach
  - 8.9.5.1. During Illness
  - 8.9.5.2. At the Time of Death
- 8.10. Advance Directives
  - 8.10.1. Advance Planning of Health Care Decisions
  - 8.10.2. Need for Advance Directives
  - 8.10.3. Nursing Professional Objectives
  - 8.10.4. Factors Involved
  - 8.10.5. Approach
  - 8.10.6. Specific Considerations

#### Module 9. Oncology Nursing in the Pediatric and Elderly Patient

- 9.1. General Context of Pediatric Oncology
  - 9.1.1. Epidemiology of Pediatric Cancer
  - 9.1.2. Most Frequent Tumors in Pediatric Age
    - 9.1.2.1. Leukemia Types
    - 9.1.2.2. Lymphoma
    - 9.1.2.3. Brain Tumors
    - 9.1.2.4. Wilms Tumor (Nephroblastoma)
    - 9.1.2.5. Neuroblastoma
    - 9.1.2.6. Rhabdomyosarcoma
    - 9.1.2.7. Bone Tumors
- 9.2. Main Treatments in the Pediatric Patient
  - 9.2.1. Surgery
  - 9.2.2. Chemotherapy
  - 9.2.3. Radiotherapy
  - 9.2.4. Hematopoietic Progenitor Transplantation
  - 9.2.5. Side effects

- 9.3. Child and Family Focused Care
  - 9.3.1. Quality of Life
  - 9.3.2. Family Role
  - 9.3.3. Emotional Impact
  - 9.3.4. Nurse Assessment and Management
- 9.4. Pediatric Patient Nutrition
  - 9.4.1. General Aspects
  - 9.4.2. Malnutrition Consequences
  - 9.4.3. Assessment
  - 9.4.4. Nutritional Support
- 9.5. Psychological Care in Pediatric Oncology Patients
  - 9.5.1. Emotional Support During Diagnosis
  - 9.5.2. Emotional Support During Treatment
  - 9.5.3. Emotional Support after the End of Treatment
- 9.6. Palliative Care for Pediatric Patients
  - 9.6.1. Most Frequents Symptoms
  - 9.6.2. Symptom Control Pain Management
  - 9.6.3. Palliative Sedation
  - 9.6.4. Coping with Death
  - 9.6.5. Spirituality
  - 9.6.6. Grief
- 9.7. General Context of Oncogeriatrics
  - 9.7.1. Cancer Epidemiology in the Elderly Population
  - 9.7.2. Specific Characteristics of the Elderly Cancer Patient
    - 9.7.2.1. Physiological Aging
    - 9.7.2.2. Polypharmacy
    - 9.7.2.3. Associated Pathology
- 9.8. Particularities of Oncologic Treatment in the Elderly Patient
  - 9.8.1. Chemotherapy
  - 9.8.2. Radiotherapy
  - 9.8.3. Surgery
  - 9.8.4. Hormone Therapy

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- 9.9. Comprehensive Assessment in Elderly Oncologic Patients
  - 9.9.1. Geriatric Assessment Methodology
  - 9.9.2. Frailty Screening
- 9.10. Oncologic Pain in the Elderly Patient
  - 9.10.1. Features
  - 9.10.2. Assessment
  - 9.10.3. Pharmacological and Non Pharmacological Treatment

#### Module 10. Oncology Nursing Research

- 10.1. Research Bases in Health Sciences
  - 10.1.1. The Scientific Method. Structure
  - 10.1.2. Quantitative and Qualitative Research Designs
  - 10.1.3. Variables Definition Sampling
  - 10.1.4. Data Analysis
  - 10.1.5. Presentation of Results
- 10.2. Oncology Applied Research
  - 10.2.1. Background
  - 10.2.2. Current Overview
- 10.3. Oncology Research Areas
  - 10.3.1. Surgical Oncology
  - 10.3.2. Radiotherapy oncology
  - 10.3.3. Medical oncology
- 10.4. Oncology Translational Research
  - 10.4.1. Basic and Clinical Research
  - 10.4.2. Translational Research as a Roadmap
- 10.5. Nursing Oncology Research Areas
  - 10.5.1. Nursing Care Research
  - 10.5.2. Research on Oncology Patient Problems
  - 10.5.3. Research in Activities Derived from Other Disciplines
  - 10.5.4. Resource Management and Leadership

- 10.6. Challenges for the Future of Oncology Nursing Research
  - 10.6.1. History of Nursing Research
  - 10.6.2. Nursing Research Difficulties
  - 10.6.3. Future Outlook
- 10.7. Guidelines for Junior Researchers
  - 10.7.1. Research Project Design
  - 10.7.2. Main Groups and Research Lines
  - 10.7.3. Resources for junior researchers
  - 10.7.4. Financing Means
- 10.8. Evidence-Based Nursing10.8.1. Evidence-Based Practices in Oncology
- 10.9. Critical Reading of Scientific Literature
  - 10.9.1. Principles of Critical Reading
  - 10.9.2. Models of Critical Reading
- 10.10. Research: ICT and Apps Applied to Oncology 10.10.1. Use and Communication between Professionals
  - 10.10.2. Patient Outreach



Download all the contents of the Hybrid Professional Master's Degree in Oncology Nursing and acquire a useful reference guide even after completing the degree"

# 07 Clinical Internship

The clinical internship period included in this Hybrid Professional Master's Degree will be carried out in a clinical center of high reference in the field of Oncology. The nurse will have access not only to a tutor and professional team that will accompany him/her throughout the process, but also to state-of-the-art medical and technical equipment, being able to work in highly demanding and prestigious clinical environments.

Surround yourself with highly trained professionals in the approach to all types of oncological complications, being part of work teams that will bring you up to date in a practical, agile and detailed way"

## tech 44 | Clinical Internship

The Internship Program of this Oncology Nursing program consists of a 3 week clinical internship in a major referral center, from Monday to Friday, with 8 consecutive hours of Internship Program with a previously designated specialist. This allows us to see real patients in the oncology area, analyzing and following the whole process of their care and attention based on the most rigorous nursing practice.

All the activities that the nurse will carry out during their practical stay are aimed at improving their competencies and skills in the area of Oncology Nursing, pursuing the objectives of updating the professional's knowledge, designing patient care plans and integrating emotional management strategies in the different stages of the disease process, among a multitude of competencies in research and oncological approach.

The practical part will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of the professors and other training partners to facilitate teamwork and multidisciplinary integration as transversal competencies for the praxis of Oncology Nursing (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:



Integrate yourself into the organizational chart and daily work of a professional group with which you will analyze and manage the most important aspects of nursing care for oncology patients"

## Clinical Internship | 45 tech



Module	Practical Activity
Oncology Nursing and Treatments	Offer support in the global assessment of the oncology patient
	Assist in oncologic surgery procedures
	Assist in chemotherapy, radiotherapy and interventional radiology treatments
	Analyze the biological treatments applicable to oncology patients
	Palliate possible side effects derived from radiotherapy treatments
	Proper management of the storage of cytostatic products
The role of the nurse	Practice chemotherapy administration routes
in the oncological	Managing phlebitis or extravasation
treatment and emergency processes	Assisting in the analysis and examination of urinary, respiratory or digestive system manifestations
	Apply analgesic treatments in the oncology patient
Specific nursing care in post-surgical, palliative and terminal patients	Apply post-surgical care after thoracic or breast surgeries
	Assisting ostomized patients
	Intervene in the care of terminally ill patients, analyzing signs and symptoms that may develop
	Approach the Grief from the point of view of Nurse
	To know modern pharmacology applicable to palliative or terminal patients
Research and the future of Oncology Nursing	To develop the practical bases of nursing research in the oncology area
	To know the application of ICT and apps in the field of Oncology
	Manage potential resources to address nursing care research and oncology patient issues
	To deepen in the areas of Surgical Oncology, Radiation Oncology and Medical Oncolog from the nurse's point of view

## tech 46 | Clinical Internship

### **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.

For this purpose, this educational entity undertakes to take out a liability insurance policy to cover any eventuality that may arise during the stay at the internship 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 if they have to deal with an unexpected situation and will be covered until the end of the practical 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 Hybrid Professional Master's Degree, 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 Hybrid Professional Master's Degree, 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 Hybrid Professional Master's Degree will receive a certificate accrediting their stay at the center.

**5. EMPLOYMENT RELATIONSHIP:** the Hybrid Professional Master's Degree shall not constitute an employment relationship of any kind.

**6. PRIOR EDUCATION:** Some centers may require a certificate of prior education for the Hybrid Professional Master's Degree. 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 Hybrid Professional Master's Degree 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.

## 08 Where Can I Do the Clinical Internship?

This Hybrid Professional Master's Degree program includes, in its itinerary, a practical internship in a prestigious clinical center, where the student will put into practice all the material presented in the theoretical part. This includes patient assessments, palliative care, management of complications and other oncology nursing activities. In this sense, and in order to bring this degree closer to more professionals, TECH offers nursing the opportunity to take it in different clinical centers, being able to choose the one that best suits their own interests or personal situation.

## Where Can I Do the Clinical Internship? | 49 tech

It complements the theoretical part of this degree with a practical stay that will help you to give a much more real and direct approach to all the knowledge acquired"

## tech 50 | Where Can I Do the Clinical Internship?

Students can take the practical part of this Hybrid Professional Master's Degree at the following centers:



Address: Av. Carlos Cano, s/n, 11207 Algeciras, Cádiz

International Center for Oncology Care, Diagnosis and Treatment

> Related internship programs: Oncology Nursing



GenesisCare Granada - Hospital la Inmaculada

Country City Spain Granada

Address: Calle Dr. Alejandro Otero, 8, 18004 Granada

International Center for Oncology Care, Diagnosis and Treatment

> Related internship programs: Oncology Nursing



#### GenesisCare - Sevilla

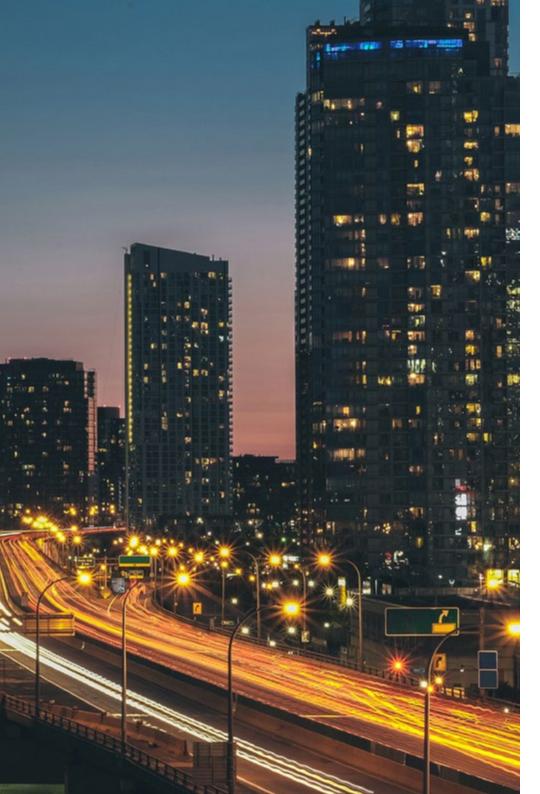
Country	City
Spain	Seville

Address: C. Américo Vespucio, 31, 41092 Sevilla

International Center for Oncology Care, Diagnosis and Treatment

Related internship programs: Oncology Nursing





## Where Can I Do the Clinical Internship? | 51 tech



#### GenesisCare Córdoba - Hospital San Juan de Dios

Country City Spain Cordoba

Address: Av. del Brillante, 106, 14012 Córdoba

International Center for Oncology Care, Diagnosis and Treatment

> Related internship programs: Oncology Nursing



#### GenesisCare - Toledo

Country City Spain Toledo

Address: Carr. de la Peraleda, 5, 45004 Toledo

International Center for Oncology Care, Diagnosis and Treatment

> Related internship programs: Oncology Nursing

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#### GenesisCare Cádiz - Jerez de la Frontera

Country	City
Spain	Cadiz

Address: C. Newton, 13, 11407 Jerez de la Frontera, Cádiz

International Center for Oncology Care, Diagnosis and Treatment

> Related internship programs: Oncology Nursing



#### GenesisCare Ciudad Real

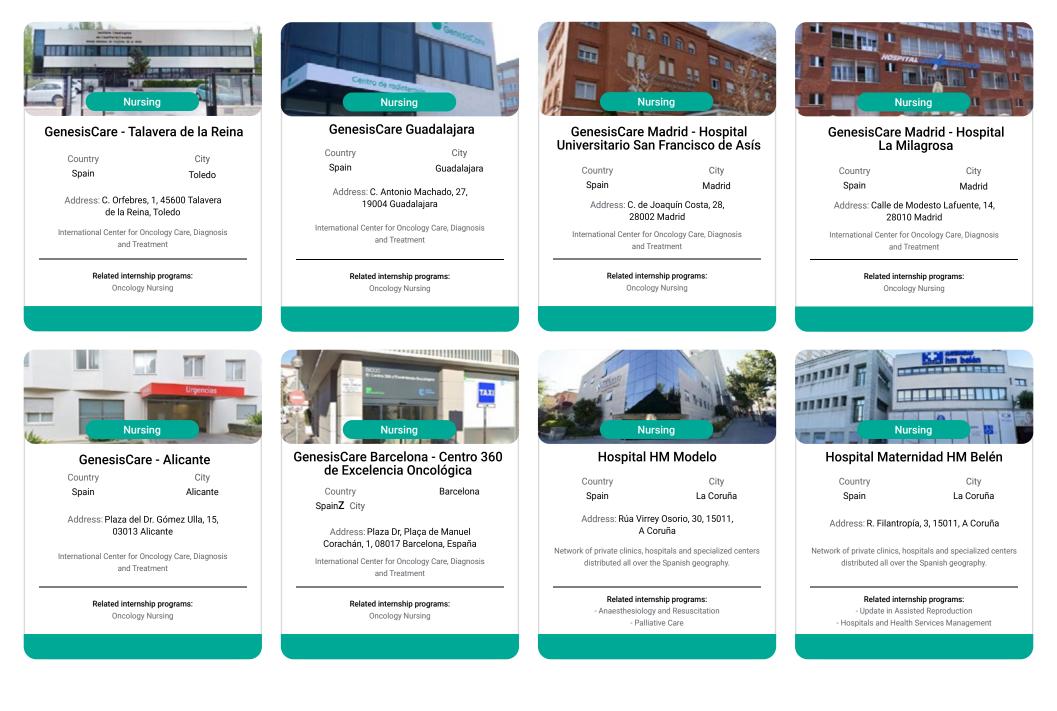
Country City Spain Ciudad Real.

Address: C. Jesús González Merlo, 4, 13600 Alcázar de San Juan, Cdad. Real

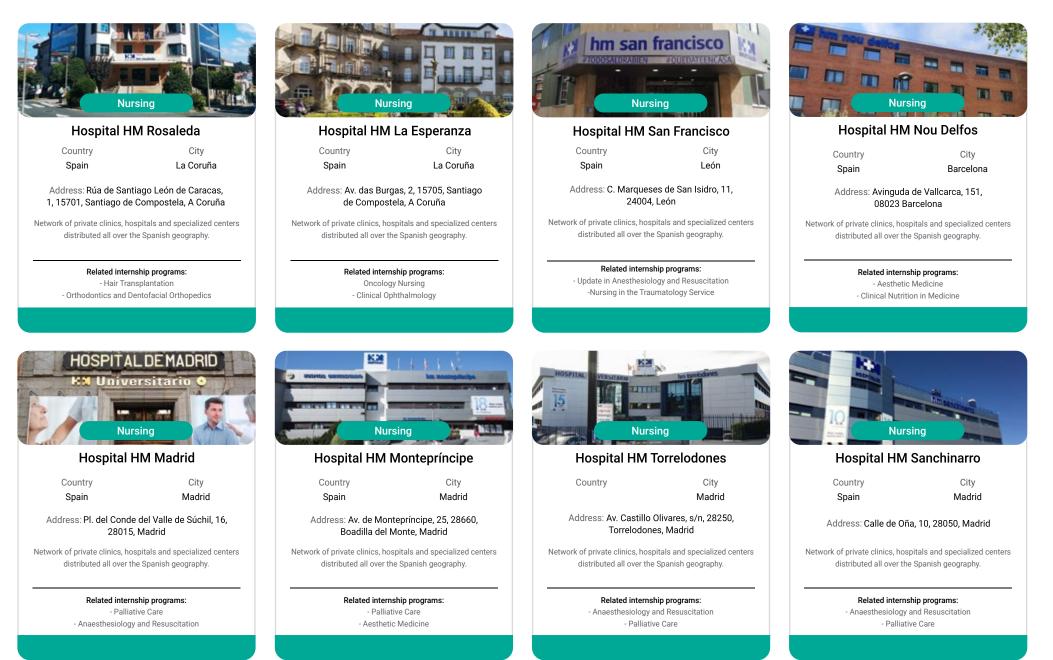
International Center for Oncology Care, Diagnosis and Treatment

> Related internship programs: Oncology Nursing

## tech 52 | Where Can I Do the Clinical Internship?



### Where Can I Do the Clinical Internship? | 53 tech



## tech 54 | Where Can I Do the Clinical Internship?



Hospital HM Nuevo Belén Country City Spain Madrid

Address: Calle José Silva, 7, 28043, Madrid

Network of private clinics, hospitals and specialized centers distributed all over the Spanish geography.

Related internship programs: - General and Digestive System Surgery - Clinical Nutrition in 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 all over the Spanish geography.

Related internship programs: - Palliative Care - Clinical Ophthalmology



#### 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 all over the Spanish geography.

Related internship programs: - Gynecologic Oncology - Clinical Ophthalmology



#### 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 all over the Spanish geography.

Related internship programs: - Gynecologic Oncology - Clinical Ophthalmology





## Where Can I Do the Clinical Internship? | 55 tech



#### **HM CIOCC Barcelona**

Country Spain

City Barcelona

Address: Avenida de Vallcarca, 151, 08023, Barcelona

Network of private clinics, hospitals and specialized centers distributed all over. The Spanish Geography

> Related internship programs: - Advances in Hematology and Hemotherapy Oncology Nursing



#### HM CIOCC Galicia

Country Spain La Coruña

Address: Avenida das Burgas, 2, 15705,

City

Santiago de Compostela

Network of private clinics, hospitals and specialized centers distributed all over the Spanish geography.

> Related internship programs: - Gynecologic Oncology - Clinical Ophthalmology

# 09 **Methodology**

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.** 

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.



Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

## tech 58 | Methodology

#### At TECH Nursing School we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Nurses learn better, faster, and more sustainably over time.

With TECH, nurses can experience a learning methodology that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the real conditions in professional nursing practice.

Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

The effectiveness of the method is justified by four fundamental achievements:

- 1. Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
- 2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
- **3.** Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- 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.



## tech 60 | Methodology

#### **Relearning Methodology**

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.

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



## Methodology | 61 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 we have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.



## tech 62 | Methodology

This program offers the best educational material, prepared with professionals in mind:



#### **Study Material**

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is really specific and precise.

20%

15%

3%

15%

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



#### **Nursing Techniques and Procedures on Video**

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



#### **Interactive Summaries**

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.

## Methodology | 63 tech



#### **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.

20%

3%

7%

17%



#### **Testing & Retesting**

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



#### Classes

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

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



#### Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.

## 10 **Certificate**

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



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

## tech 66 | Certificate

This program will allow you to obtain your **Hybrid Professional Master's Degree diploma in Oncology Nursing** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics. This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

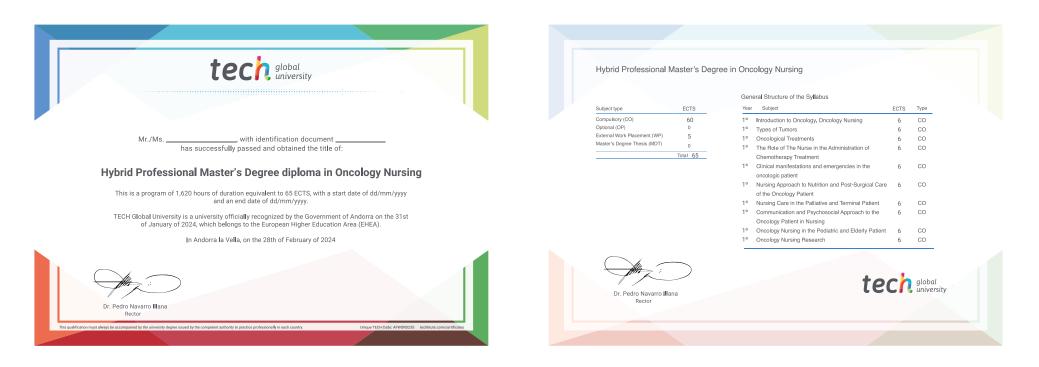
Title: Hybrid Professional Master's Degree in Oncology Nursing

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

Recognition: 60 + 5 ECTS Credits



\*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.

tecn global university Hybrid Professional Master's Degree **Oncology Nursing** Modality: Hybrid (Online + Clinical Internship) Duration: 12 months Certificate: TECH Global University 60 + 5 créditos ECTS

## Hybrid Professional Master's Degree Oncology Nursing

