

Hybrid Professional Master's Degree

Applied Mastology and Breast Cancer Treatment





Hybrid Professional Master's Degree Applied Mastology and Breast Cancer Treatment

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1,620 h.

Website: www.techtitute.com/us/medicine/hybrid-professional-master-degree/hybrid-professional-master-degree-applied-mastology-breast-cancer-treatment

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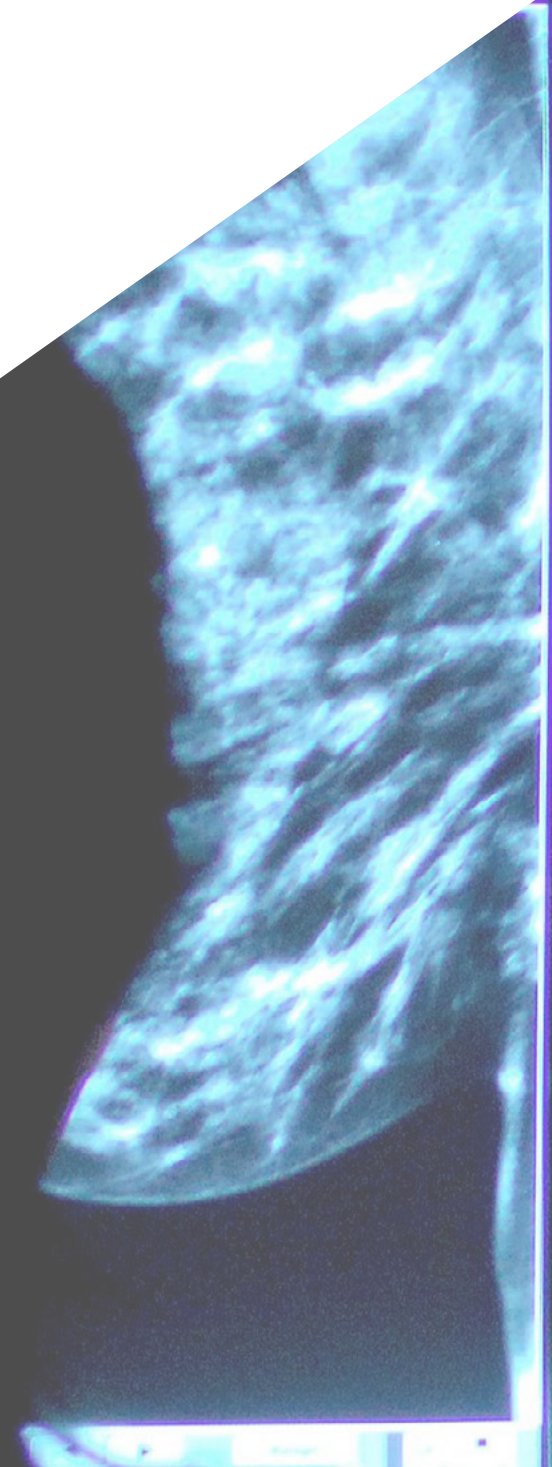
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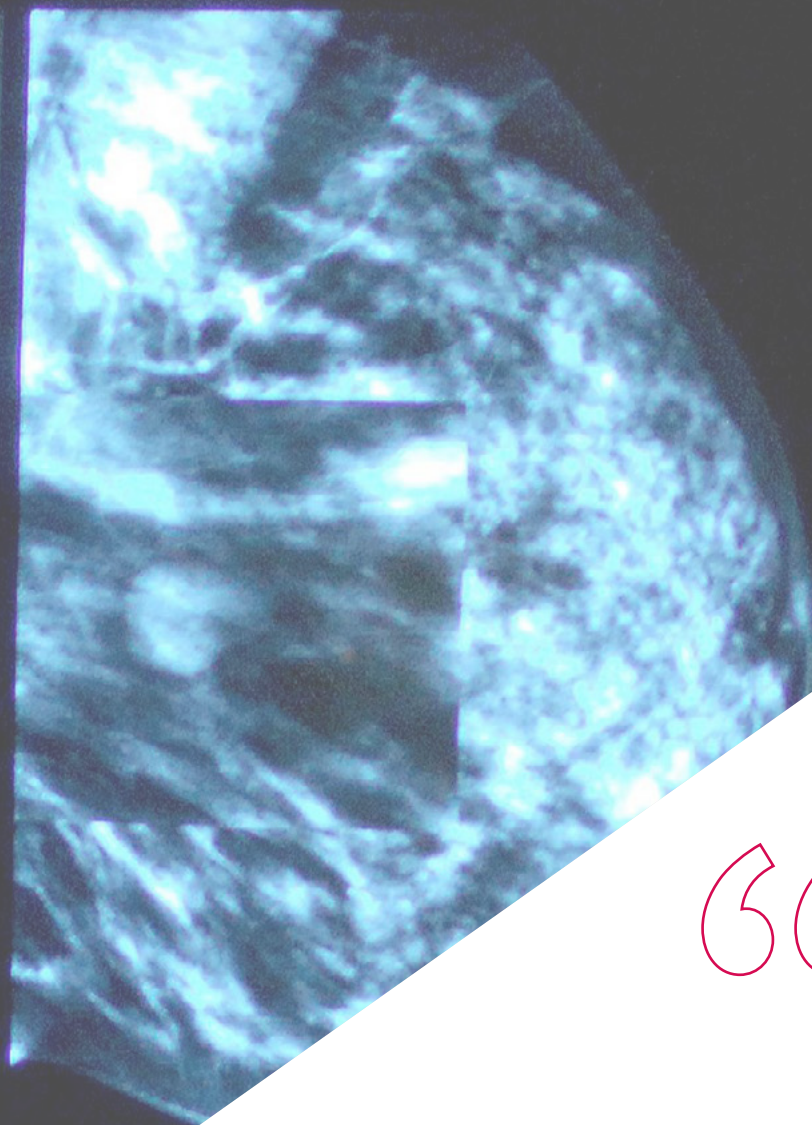
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01

Introduction

Technological innovation in early diagnosis methods for breast cancer is just one example of the growth experienced by this medical area in recent years. However, specialists are unable to keep up to date with all these aspects, due to the lack of academic programs that analyze the most important novelties. This is why this program, the only one of its kind, integrates the most recent discoveries in Applied Mastology in two well-defined stages of educational preparation. On the one hand, the physician will develop the theoretical learning of its contents in a 100% online platform and without restrictive schedules for the pedagogical process. Then, they will complement the acquisition of practical skills with a 3-week immersive face-to-face stay in a renowned hospital center.





Doby City Breast Screening
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MLO

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This Hybrid Professional Master's Degree offers an exceptional training in which the theoretical contents are complemented with the development of high quality practical skills in a first level hospital”

Recently, breast cancer was declared by the World Health Organization as the most frequent type of malignant tumor, with up to 2 million patients reported every year. With these high figures, it is not surprising that the medical sciences are constantly searching for new therapeutic methodologies to help solve this serious health problem. As a result of this context, in recent years new surgical procedures and other non-invasive techniques have emerged to halt the progression and metastasis of these neoplasms. At the same time, researchers are looking into increasingly innovative diagnostic methods that provide much earlier detection of these conditions. Another branch that is also advancing is the search for breast reconstructive procedures to help patients overcome the psychological implications of this type of discomfort.

Maintaining a complete mastery of all these aspects is imperative for the physician dedicated to this area of health. However, these specialists rarely find an academic program that integrates the most modern theoretical contents and offers them study facilities. With TECH, all these elements are guaranteed. In order to bring its students up to date, it has designed this Hybrid Professional Master's Degree in Applied Mastology and Breast Cancer Treatment, which has a novel academic modality. Divided into two phases, it first dedicates 1,500 hours to theoretical and online learning of the most recent discoveries in this field of care.

Then, the program establishes a practical stay, lasting 3 weeks, in a hospital facility where all the knowledge acquired can be applied directly and on real patients. In addition, the graduates will have at their disposal a wide range of prestigious institutions and will be able to choose the one that best suits their educational interests and geographical location. To complete this stage, the graduates will have to complete 8 consecutive hours of work, from Monday to Friday, under the supervision of an assistant tutor. This expert will evaluate your progress and will influence the development of more comprehensive competencies in an exceptional manner.

This Hybrid Professional Master's Degree in Applied Mastology and Breast Cancer Treatment contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Development of more than 100 clinical cases presented by experts in Applied Mastology
- ♦ 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
- ♦ Assessment and monitoring of the patient with breast cancer, using the most modern tools
- ♦ Comprehensive systematized action plans for the main pathologies related to breast cancer
- ♦ Presentation of practical workshops on procedures diagnosis, and treatment techniques
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ♦ 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



The teaching materials of this program, elaborated by these specialists, have contents that are completely applicable to your professional experiences”

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The theoretical syllabus of this program is complemented by 3 weeks of intensive stay in a rigorous hospital center dedicated to the in-depth study of Breast Cancer”

In this proposed Hybrid Professional Master's Degree, of a professionalizing nature and blended learning modality, the program is aimed at updating professionals in oncological medicine, focused on the approach to Breast Cancer. The contents are based on the latest scientific evidence, and oriented in a didactic way to integrate theoretical knowledge in the work practice of specialists who diagnose, treat and offer personalized follow-up to tumors of this anatomical area.

Thanks to its multimedia content elaborated with the latest educational technology, it will allow the medical professional to obtain situated and contextual learning, that is to say, 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 students will be assisted by an innovative interactive video system created by renowned experts.

During the first stage of this academic program, you will be able to study with no pre-established schedules or evaluations, in a 100% online and interactive learning platform.

You will acquire, in the practical phase of this Hybrid Professional Master's Degree, the practical mastery of the most advanced surgical techniques for the removal of tumors and nodes of the breast, as well as its reconstruction.



02

Why Study this Hybrid Professional Master's Degree?

The health sector is increasingly demanding more and more professionals specialized in Applied Mastology. TECH, aware of this, has developed a program of excellence where the most innovative procedures for the diagnosis and therapy of Breast Cancer are collected. To achieve optimal training of the specialist, it has designed a unique academic modality that integrates theoretical learning, in the facilities of its 100% online platform, with a practical and face-to-face stay in a hospital center of first level care.



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In this learning opportunity, pioneer in its modality, TECH puts in your hands the latest pharmacological, radiotherapy and chemotherapeutic protocols for the approach of breast tumors”

1. Updating from the latest technology available

Nowadays, Mastology has undergone considerable technological innovation, from the emergence of surgical tools and other assistance products for the recovery of its patients. Throughout this study program, the physician will learn, in a theoretical and practical way, how to manage all these advances and apply them for the benefit of the health of patients with severe breast neoplasms.

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

TECH provides personalized advice throughout all the educational phases of this Hybrid Professional Master's Degree. For the learning of its framework, the oncologists will have at their disposal the best faculty of professors. In turn, during the professional practice, in a prestigious medical center, they will have a designated tutor who will help them to insert themselves holistically in the dynamics of care.

3. Entering First-Class Clinical Environments

Taking care of the most exhaustive details, TECH has chosen the hospital institutions available for the practical training of this program. Thanks to this, the specialists will receive rigorous training in the latest developments in Applied Mastology, applying their theoretical knowledge and developing direct competencies in the approach to real patients with various complications.



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

After assimilating the theoretical contents of great importance, in TECH's 100% online platform, the doctor will have the opportunity to complete a first level practical training. This academic modality includes a 3-week intensive face-to-face stay in a hospital facility equipped with the necessary resources to apply different techniques and methodologies for breast cancer care.

5. Expanding the Boundaries of Knowledge

This academic program offers a practical learning stay in a recognized center in the field of Applied Mastology in the international sphere. Thus, each specialist can expand the frontiers of their knowledge based on the network of contacts and collaborations of TECH, the largest digital university in the world.

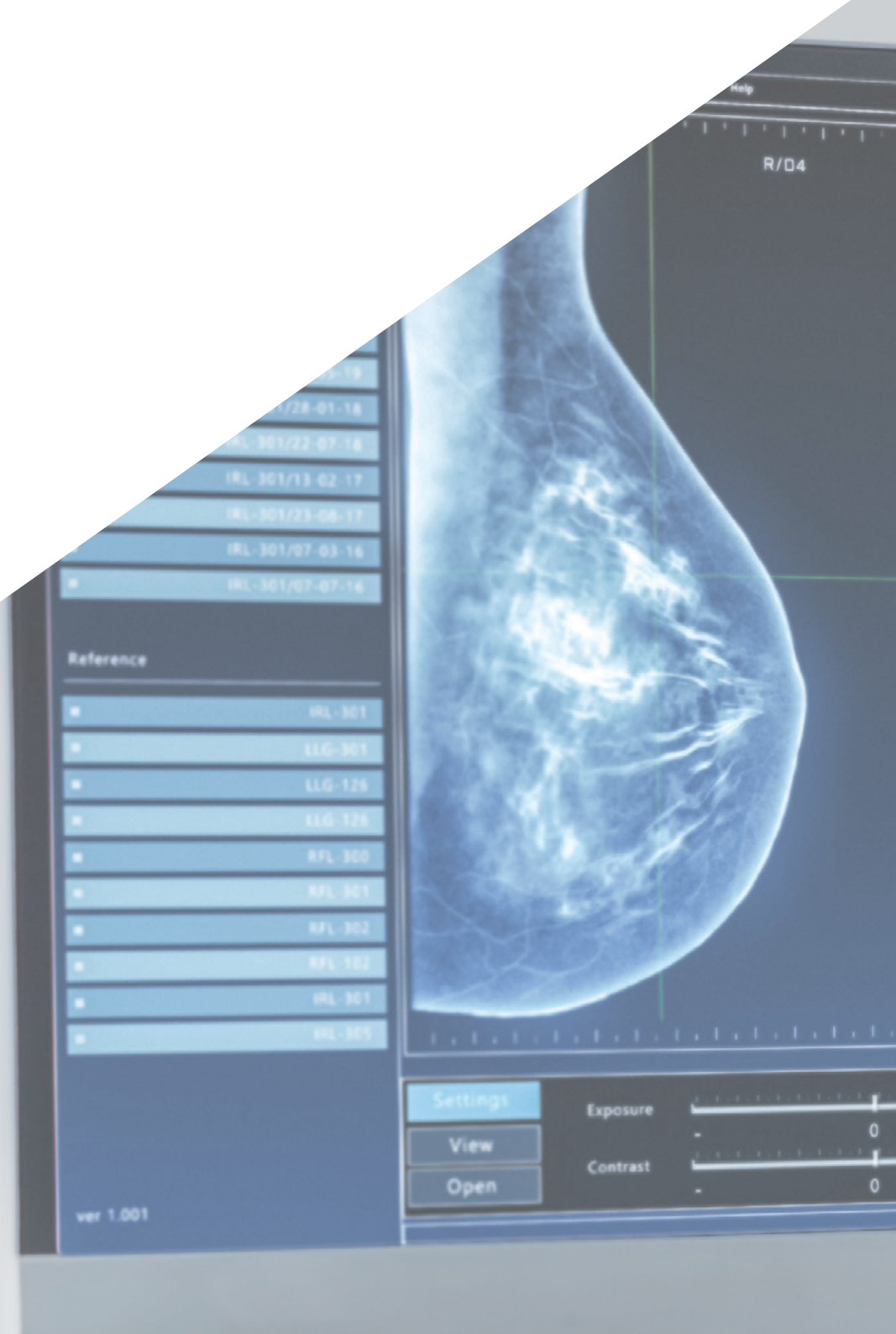


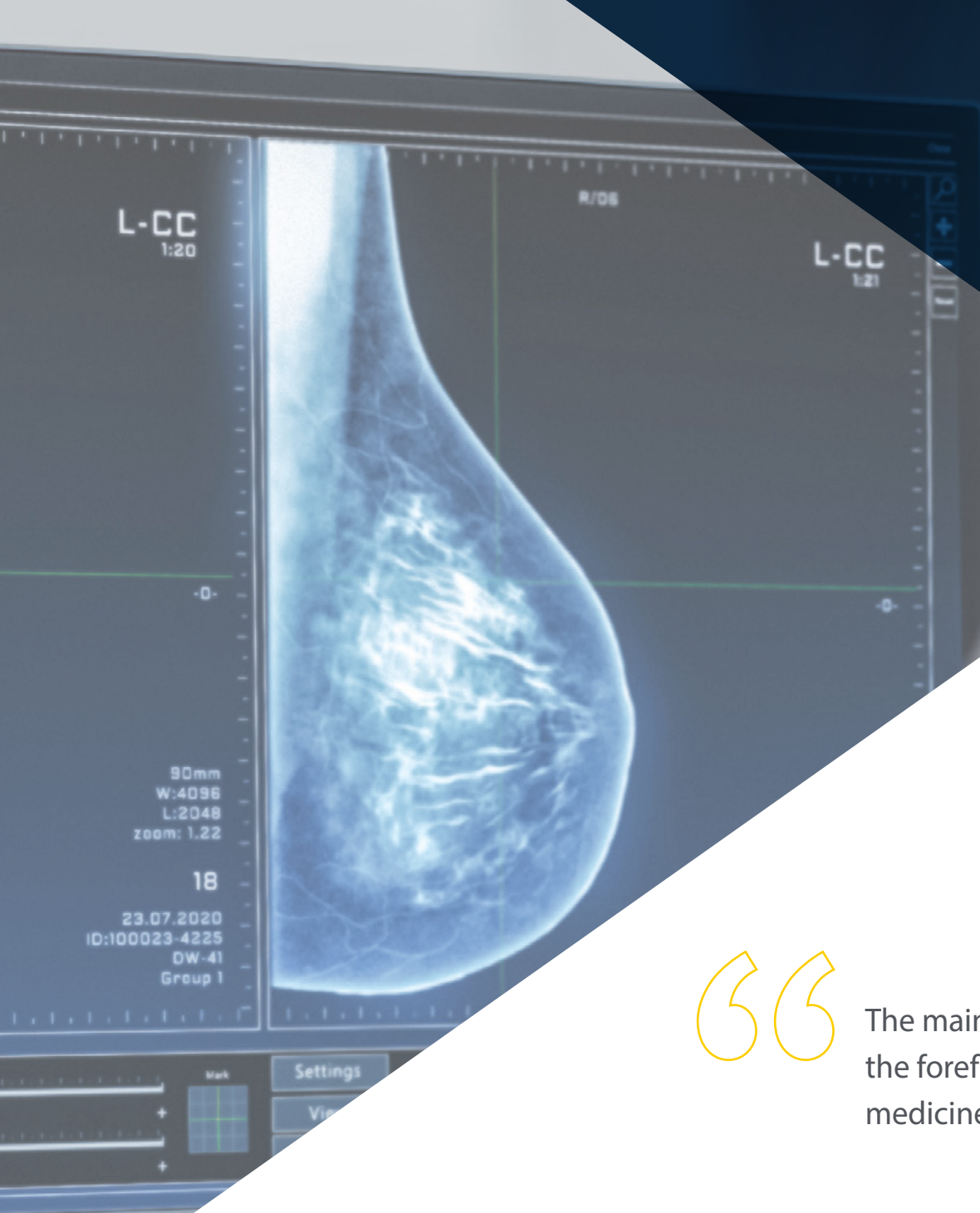
You will have full practical immersion
at the center of your choice"

03

Objectives

With the personalized and rigorous guidance of this program, the oncologists will acquire the most comprehensive knowledge based on the latest scientific evidence in the area of Applied Mastology. In this way, they will be up to date on the most competent health innovations of the moment for the treatment of Breast Cancer.





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The main goal of this study program is to put you at the forefront of such a complex area of oncological medicine as Applied Mastology”

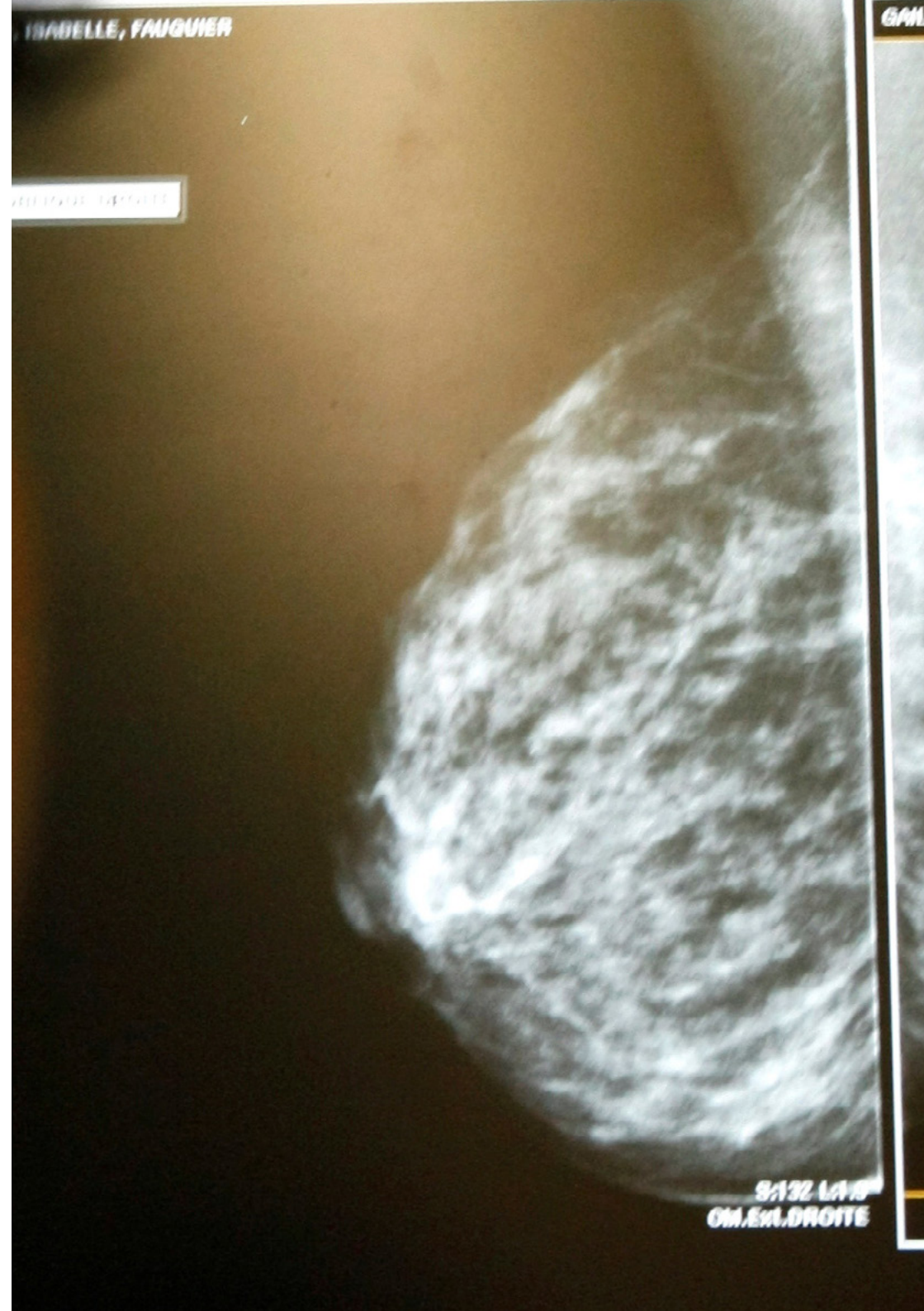


General Objective

- TECH aspires that all its graduates master the most advanced concepts of embryology, anatomy, physiology and genetics in relation to Breast Cancer. Based on the theoretical and practical knowledge offered by this Hybrid Professional Master's Degree, the doctor will manage the early diagnosis techniques and the most modern therapeutics against this type of tumors, establishing a battery of alternatives to provide an efficient solution to all of them. At the same time, you will get a complete state of the art regarding the latest research and clinical trials related to breast pathology



If the time has come to get up to date on the most recent discoveries in Applied Mastology, TECH offers you the ideal opportunity to achieve this through a personalized, rigorous and flexible educational model focused on the most flexible learning”





Specific Objectives

Module 1. Definition, History, Ethical Concepts, Epidemiology

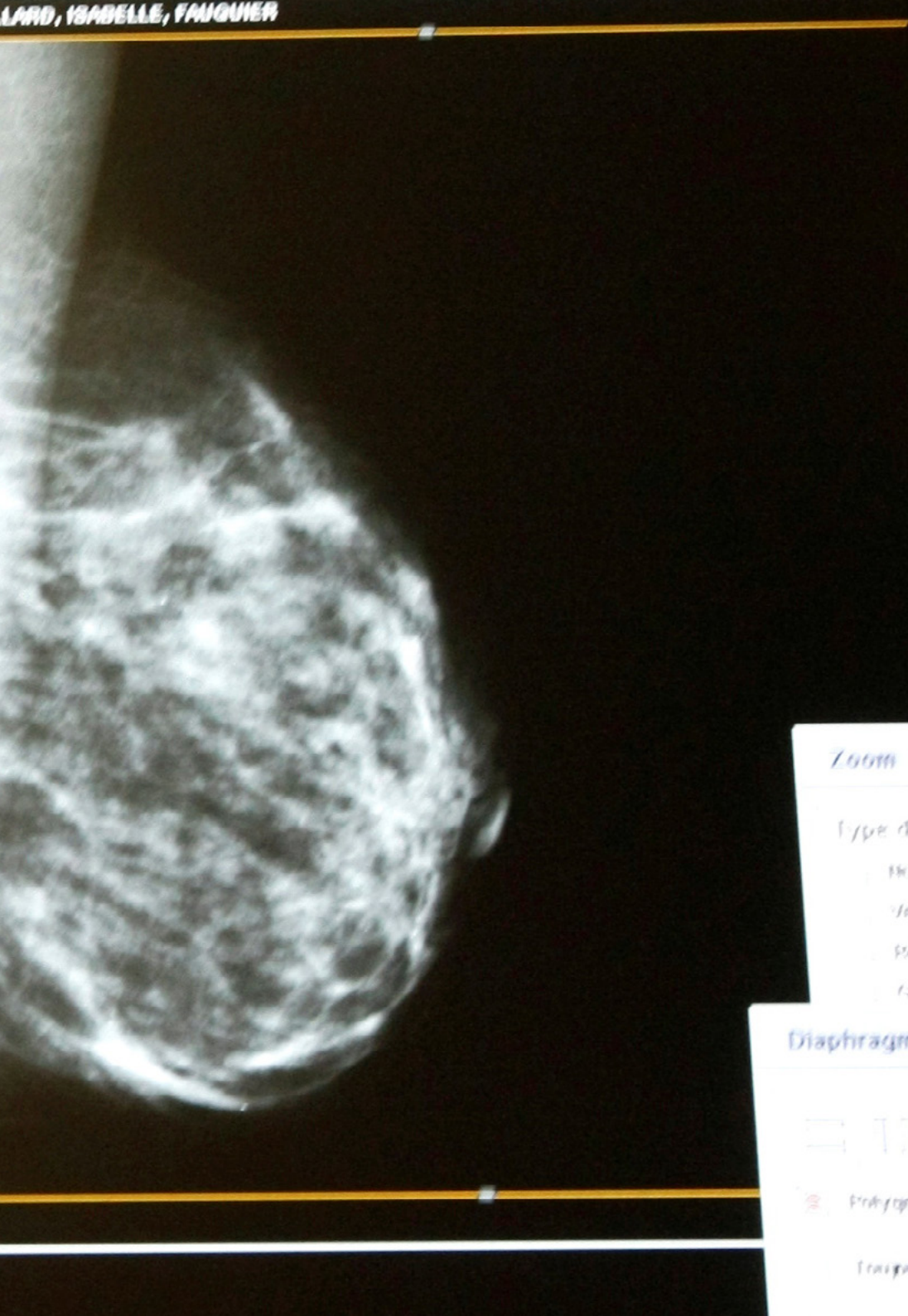
- ◆ Acquire a broad and developed knowledge of Mastology and Senology and their historical perspective from classical antiquity to the present day
- ◆ Review the ethical and legal principles applied to Mastology
- ◆ In-depth study of the European Specialty Law and Specialty Law accreditation in America
- ◆ Know the role of the Spanish colleges of surgery as pioneers of Mastology applied to the treatment of Breast Cancer

Module 2. Diagnostics in Mastology

- ◆ Interpretation of radiology in breast pathology
- ◆ Properly manage the diagnosis of microcalcifications and distortion of breast architecture
- ◆ Explore pre-treatment clinical staging in breast cancer
- ◆ Learn in detail about the latest advances in diagnostic and interventional breast surgery

Module 3. Pathological Anatomy

- ◆ Delve into the characteristics of mammary embryology to obtain a broad and exhaustive knowledge of its characteristics
- ◆ Gain knowledge of the molecular types of breast cancer and the subtypes of triple negative breast cancer
- ◆ Know the latest scientific evidence related to the treatment of fibroepithelial and mesenchymal tumors
- ◆ Special emphasis on special clinicopathological situations in which genetic tumor syndromes are present



Module 4. Functional Anatomy

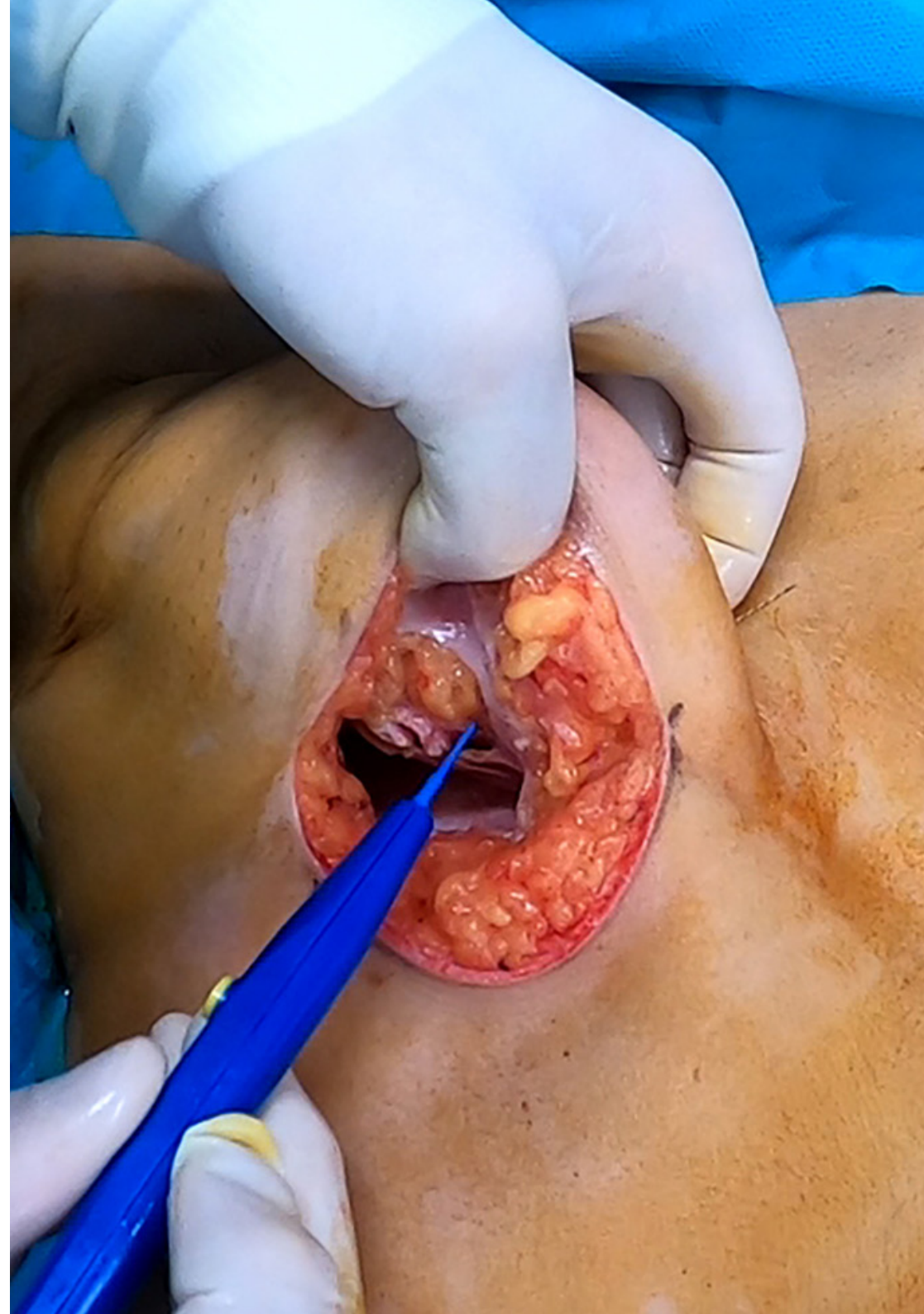
- Delve into the key points of vascularization in skin and areola preservation, as well as muscle preservation and local flaps
- In-depth knowledge of the latest developments in lymphatic drainage
- Study the radiological anatomy of the breast region and donor sites in reconstructive surgery
- Obtain a broad and specialized knowledge of the vascular, nervous and ganglionic content of the axillary cavity

Module 5. Embryology, Malformations and Intersexual States

- Delve into the embryology and physiology of the breast
- Have adequate medical knowledge to identify the different types of breast malformations and their characteristics
- Delve into the specifics of macromastia and micromastia for better clinical management
- Learn in detail about the latest oncological advances in the treatment of inflammatory breast diseases

Module 6. Locoregional Surgical Treatment in Malignant Breast Pathology

- Highlight the basics of breast conserving surgery and the incidence of lumpectomy
- In-depth understanding of the role of loco regional treatment within a multimodal, patient-based approach
- Identify the most current drugs in the treatment of malignant breast pathology, focusing on antibiotic and thromboembolic prophylaxis
- Describe the current modified radical mastectomy, with special emphasis on its indications and alternatives



Module 7. Plastic and Reconstructive Surgery

- ♦ Be able to implement in the professional practice of the graduate the most innovative strategies and techniques in augmentation, reduction and mastopexy
- ♦ Know the most effective indications, modalities and current techniques in prosthetic reconstruction in detail
- ♦ Obtain a comprehensive and up-to-date knowledge of the possible sequelae of breast-conserving surgery and their treatment
- ♦ Understand the importance of specialized scar management with patients who have undergone plastic and reconstructive surgery

Module 8. Systemic Therapy in Breast Cancer

- ♦ Update the graduate on cell cycle, oncogenesis and pharmacogenomics in Breast Cancer
- ♦ Perform a detailed approach to chemotherapy and its advances
- ♦ Learn about the latest developments with respect to target therapies and support
- ♦ Delve into the possible complications of breast cancer and their management depending on the affected area

Module 9. Radiotherapy

- ♦ Specify the indications for treatment with radiotherapy in patients with breast cancer
- ♦ Obtain a broad and comprehensive view of radiology and immunotherapy
- ♦ Know the new techniques of partial breast irradiation: IORT, SBRT and External Beam Radiation Therapy
- ♦ Detail the recommendations regarding the patient's lifestyle during radiological treatment

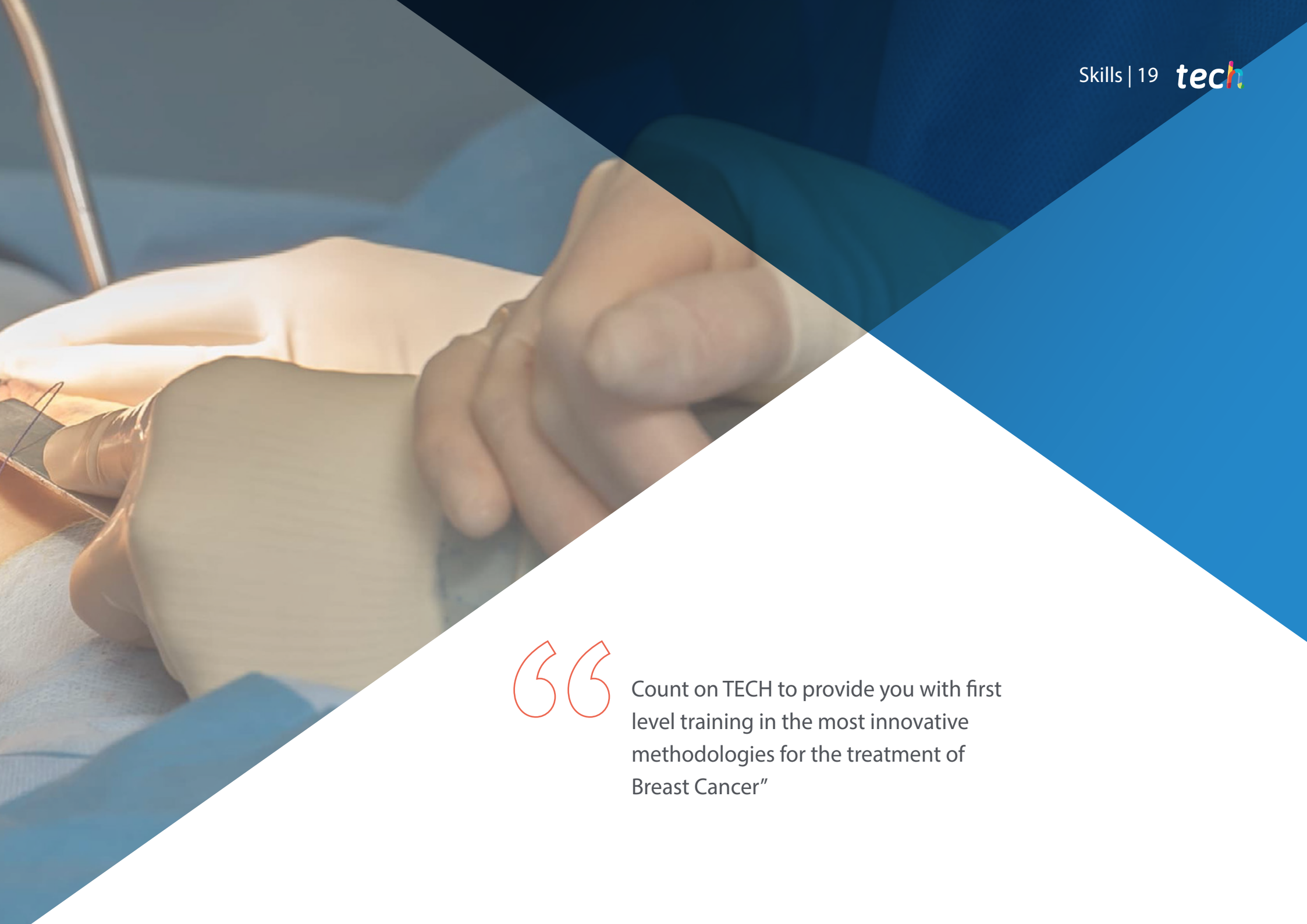
Module 10. Precision Oncology and Breast Cancer

- ♦ Learn about the evolution of precision medicine, especially in its application in breast cancer
- ♦ Delve into targeted therapies based on personalized diagnosis through genetic testing
- ♦ Obtain a broad, specialized and up-to-date knowledge of epigenetics
- ♦ Improve their skills in intervention and management of breast cancer patients according to the most current and innovative therapies in the field of oncology

04 Skills

With 1,500 hours of theoretical learning and 3 weeks of face-to-face practical training in a prestigious hospital center, this Hybrid Professional Master's Degree is an ideal option to develop the most sought-after skills in the field of Mastology. Upon completion of this program, the specialists will know the most innovative technologies and procedures and, in turn, will be able to apply them with ease and professionalism in their personal field of work.





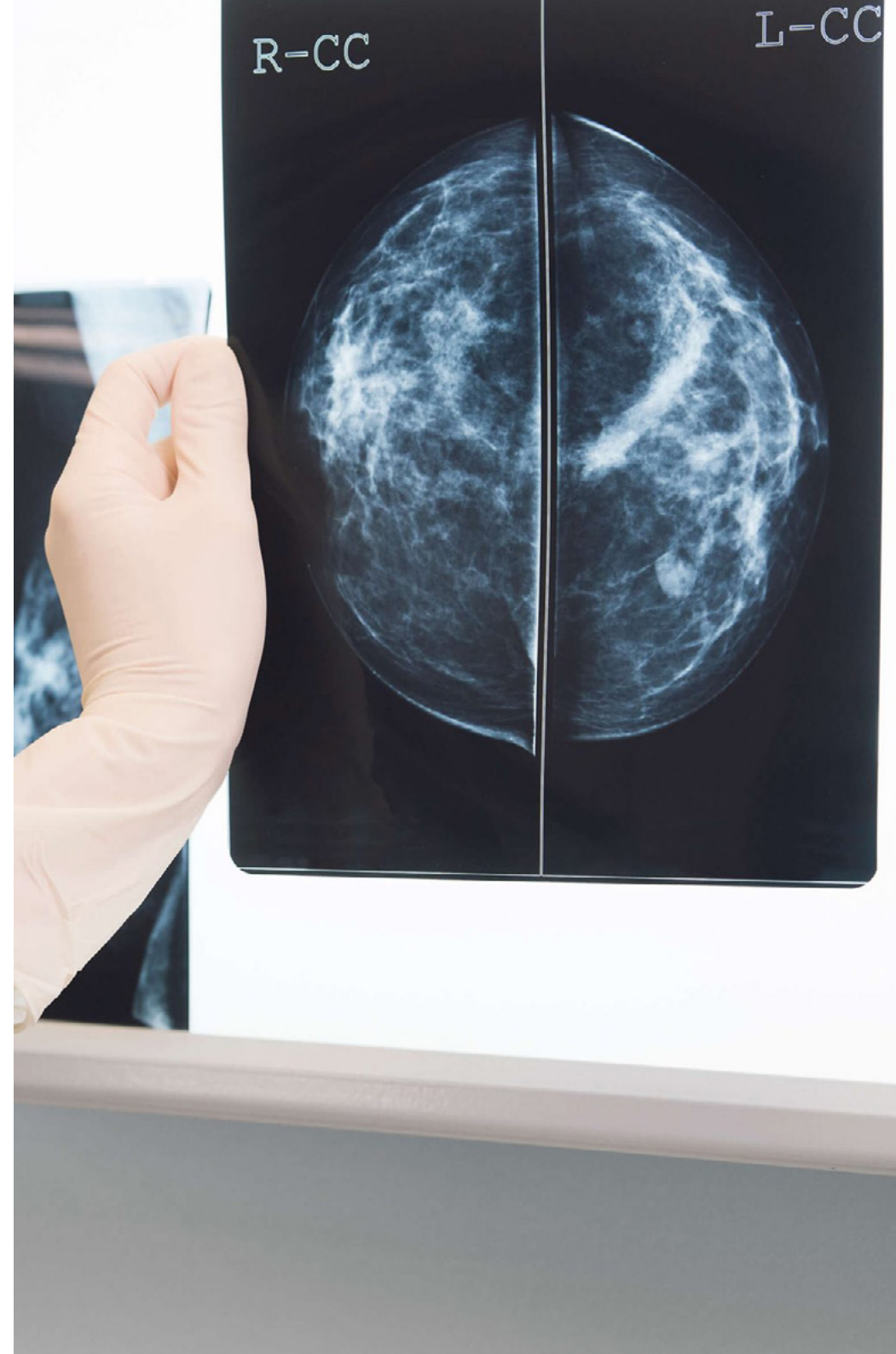
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Count on TECH to provide you with first level training in the most innovative methodologies for the treatment of Breast Cancer”



General Skills

- ♦ Apply acquired knowledge and problem-solving skills in new or unfamiliar environments, within broader (or multidisciplinary) contexts related to their area of study
- ♦ Integrate knowledge and face the complexity of making judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments
- ♦ Communicate their conclusions and the ultimate knowledge and rationale behind them to specialized and non-specialized audiences in a clear and unambiguous manner
- ♦ Acquire the learning skills that will enable them to continue studying in a manner that will be largely self-directed or autonomous





Specific Skills

- ♦ Have detailed knowledge of all the aspects related to the breast anatomy, physiology and genetics and its practical application with patients
 - ♦ Establish diagnostic test systems for the various breast conditions both in a prophylactic manner and to determine the extent of malignant disease
 - ♦ Determine the needs for the creation of and access to the different multidisciplinary units for benign and malignant breast pathology
 - ♦ Perform an appropriate assessment and clinical orientation of the breast pathology
 - ♦ Have exhaustive knowledge of the different types of benign breast pathology and the correct management and treatment for them
 - ♦ Use surgical treatment of benign and malignant breast pathology in a minimally invasive and conventional manner
 - ♦ Identify and classify the different types of axillary mammary conditions and implement the appropriate treatment for each of them
 - ♦ Identify the situations in which it is necessary to implement breast and/ or axillary radiotherapy
 - ♦ Establish the appropriate systemic treatment for each patient along with the correct management of the complications that arise in association with it
 - ♦ Describe new target therapies and the management of biologic treatments and immunotherapy in breast cancer
- ♦ Provide appropriate care to patients with early and locally advanced breast cancer
 - ♦ Identify the peculiarities of locoregional recurrences and metastatic breast cancer
 - ♦ Establish medical practice, according to the latest scientific evidence, in the application of breast cancer clinical trials
 - ♦ Highlight the main scientific and patient associations in the field of breast pathology



Enroll now in this program and develop the most sought after medical skills in the field of Applied Mastology from a practical and theoretical point of view”

05

Course Management

In this program, TECH has invited the participation of a teaching staff with a prestigious professional career. The members of this team have been part of hospitals and clinics specialized in the approach to breast cancer, reaching some positions of responsibility. Through these professionals, the oncologist will be able to update, from a theoretical point of view, about the new complexities of this field of Medicine This is possible because the experts have developed a comprehensive syllabus, always available from any mobile device, for study.





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This Hybrid Professional Master's Degree offers you a first class teaching staff that has chosen the most innovative content to bring you up to date in the field of malignant neoplasms of the breast”

International Guest Director

Dr. Nour Abuhadra is a leading international medical oncologist, recognized for her expertise and significant contributions in the field of Breast Cancer. As such, she has held important and highly responsible roles at Memorial Sloan Kettering Cancer Center (MSK), in New York, as Director of the Rare Breast Cancer Program, and also as Co-Director of the Triple Negative Breast Cancer Clinical Research Program. Indeed, her role at MSK, one of the world's leading cancer centers, has underscored her commitment to research and treatment of the most complex types of this condition.

A Doctor of Medicine from Weill Cornell Medical College in Qatar, she has had the opportunity to collaborate with thought leaders at MD Anderson Cancer Center, which has allowed her to broaden her knowledge and skills in Breast Oncology. This has significantly influenced her approach to clinical research, which has led her to focus on the development of predictive and prognostic biomarker models, particularly in Triple Negative Breast Cancer.

She has authored numerous scientific publications and has contributed significantly to the understanding of the mechanisms and treatments of Breast Cancer. In addition, her research has ranged from the identification of biomarkers to the classification of the tumor immune microenvironment to improve the use of immunotherapy.

Throughout her career, Dr. Nour Abuhadra has also been the recipient of numerous awards and recognitions, including the Conquest of Cancer Career Development Award from the American Society of Clinical Oncology (ASCO) and the Conquest of Cancer Foundation Award of Merit, also from ASCO. She has also been recognized by the American Association for Cancer Research (AACR) with the Associate Member Award.



Dra. Abuhadra, Nour

- Director of the Rare Breast Cancer Program at MSK, New York, United States
- Co-Director of the Triple Negative Breast Cancer Clinical Research Program at
- Memorial Sloan Kettering Cancer Center (MSK), New York
- Physician at MD Anderson Cancer Center, Texas
- Breast Cancer Specialist at the Cleveland Clinic Foundation, Ohio
- Doctor of Medicine from Weill Cornell Medicine, Qatar, Cornell University
- Awards: Career Development Award in Conquest of Cancer, ASCO (2023) , Conquest of Cancer Foundation Merit Award, ASCO (2019-2021) , Associate Member Award, AACR (2020)
- Member of: American Association for Cancer Research (AACR)



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

Management



Dr. Muñoz Madero, Vicente

- ♦ Physician of the Oncological Surgery Unit, VOT Hospital of San Francisco de Asís (Madrid)
- ♦ Surgeon at SESCAM Toledo
- ♦ Oncological Surgeon at MD Anderson International and the TEDECA Foundation
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid
- ♦ Specialist in General and Digestive System Surgery via MIR at the Virgen de la Salud Hospital in Toledo
- ♦ Member of: European Board of Surgical Oncology, American Society of Surgical Oncology

Professors

Dr. Borobia Melendo, Enrique Luis

- ♦ Specialist Physician at the General Surgery Unit of the Hospital de la VOT
- ♦ General and Digestive System Surgeon at Hospital Viamed Fuensanta in Madrid
- ♦ Chief of Surgery Service at Hospital del Aire, Hospital Central de la Defensa Gómez Ulla (Madrid)
- ♦ Chief of Service of the Spanish Air Force
- ♦ PhD in Medicine and Surgery, from the Complutense University of Madrid

Dr. Muñoz Jiménez, Beatriz

- ♦ Area Specialist in General and Digestive System Surgery, Hospital Virgen del Puerto (Cáceres)
- ♦ FEA in General Surgery and Digestive System, University Health Care Complex of Salamanca
- ♦ Degree in Medicine from the University of Seville
- ♦ Specialization in Medicine by the Università Politecnica delle Marche

Dr. Muñoz Muñoz, Paula

- ♦ Physician at the General and Digestive System Surgery Service at the Hospital Quirónsalud Torrevieja
- ♦ Resident Medical Intern of General and Digestive System Surgery at the Ramón y Cajal University Hospital
- ♦ Degree in Medicine

Dr. Hernández Gutiérrez, Jara

- ♦ Specialist in General and Digestive System Surgery
- ♦ Physician in the General and Digestive System Surgery Service at the Toledo University Hospital Complex
- ♦ Medical Specialist in General and Digestive System Surgery at Hospital Quirónsalud Toledo
- ♦ Award for the best clinical case at the National Surgery Meeting

Dr. García Marirrodiga, Ignacio

- ♦ Specialist in General and Digestive System Surgery
- ♦ Assistant Physician at La Defensa Gómez Ulla Central Hospital
- ♦ Degree in Medicine and Surgery from the Autonomous University of Madrid
- ♦ Member of: Network of Esophagogastric Surgery and Obesity Teams of the Community of Madrid and Central Zone

Dr. De Benito Moreno, Luis María

- ♦ Radiologist Expert in Breast Cancer
- ♦ Radiologist at Hospital Viamed Fuensanta in Madrid
- ♦ Head of the Breast Interventional Radiology Section at the Hospital Central de la Defensa Gómez Ulla (Madrid)
- ♦ Area Coordinator of the Breast Screening Program of the Autonomous Community of Madrid

Dr. Ruiz Martín, Juan

- ♦ Specialist in Pathological Anatomy at Toledo Hospital Complex
- ♦ Coordinator of the Digital Pathology Club of the Spanish Society of Anatomic Pathology (SEAP)
- ♦ Collaborator of the Quality Assurance program of the SEAP
- ♦ PhD in Medicine
- ♦ Member of: Spanish Society of Pathological Anatomy (SEAP)

Dr. González Ageitos, Ana María

- ♦ Deputy Medical Oncologist at the Hospital Virgen de la Salud Hospital Complex (Toledo)
- ♦ Oncologist at Quirónsalud University Hospital
- ♦ Member of: Thrombosis Research Group
- ♦ Degree in Medicine and Surgery from the University of Santiago de Compostela
- ♦ D. in Medicine and Surgery Cum Laude from the Autonomous University of Madrid

Dr. López Ramírez, María Escarlata

- ♦ Specialist in Radiation Oncology, Head of Service
- ♦ Head of Radiation Oncology Department Jiménez Díaz Foundation. Madrid (Spain)
- ♦ Co-Director of the Spanish School of Radiation Oncology (EOR)
- ♦ Adjunct Physician at the Virgen de las Nieves Hospital
- ♦ Professor accredited by the National Agency for Quality Assessment and Accreditation (ANECA)
- ♦ PhD Cum Laude and Extraordinary Award from the University of Granada
- ♦ Degree in Medicine and Surgery
- ♦ Expert in Radiation Oncology. Health Quality Agency of the Andalusian Health Service (SAS)
- ♦ Member of: Spanish Society of Radiation Oncology, Spanish Society of Radiosurgery, Iberolatinoamerican Society of Radiosurgery

Ms. Rodrigo Martínez, Ana Belén

- ♦ Responsible for Coordinating National Projects, Scientific Support and Marketing and Operations at BioSequence-ONCODNA
- ♦ Degree in Biotechnology
- ♦ Master in Clinical Trials, Clinical Research Associate (CRA) at BioSequence-ONCODNA
- ♦ Expert in Molecular Biology, Genetics and Microbiology
- ♦ Management of Research and Development Projects, Oncologists and Laboratories

Dr. García, Graciela

- ♦ Specialist in Breast Cancer and Palliative Medicine
- ♦ Breast Cancer Program Coordinator at GenesisCare
- ♦ Head of GenesisCare's Radiotherapy Service at the San Francisco de Asís Hospital
- ♦ Associate in the Radiotherapy Unit of La Milagrosa in Tomoterapia
- ♦ Start-up and Coordination of the Breast Cancer Unit of the La Milagrosa Hospital in GenesisCare-Imoncology
- ♦ Advisor to the Technical Committee of the Spanish Association Against Cancer
- ♦ University and medical practice teacher
- ♦ Responsible for the Primary and Secondary Prevention programs of the Spanish Association against Cancer
- ♦ National Coordinator of the Association's Nutrition and Cancer Strategy
- ♦ Associate Physician at the Radiotherapy and Nuclear Medicine Clinic in Valladolid
- ♦ PhD in Research Sufficiency from the University Sports Institute at the Faculty of Medicine of Valladolid
- ♦ Master's Degree in Aesthetic Medicine from the Complutense University of Madrid
- ♦ Radiation Oncology Specialty in the Oncology Service of the University Hospital of Valladolid
- ♦ University specialist in Palliative Medicine from the Institute of Medical Sciences
- ♦ Degree in Medicine and Surgery from the Medical University of Oviedo
- ♦ Post-university complementary training at the Gustave-Roussy Institute in Paris

Dr. Serradilla, Ana

- ♦ Specialist in Radiation Oncology
- ♦ Physician Specialist in the Area of Radiation Oncology at the Torrecárdenas University Hospital (Almería)
- ♦ Coordinator at GenesisCare Clinic (Cádiz)
- ♦ Medical Director at Clínica Oncosur (Cádiz)
- ♦ Medical Director at Radon Clinic (Cádiz)
- ♦ Associate Physician in Radiation Oncology at CROASA (Málaga)
- ♦ Degree in Medicine and Surgery from the University of Malaga
- ♦ Specialist in Radiation Oncology at the Regional Hospital of Málaga
- ♦ Member of: ESTRO, SER, SAC, GECAPRO

Ms. Martín López, Irene

- ♦ Clinical Research Associate on behalf of GSK at PPD
- ♦ Clinical Research Associate in BioSequence-ONCODNA
- ♦ Scientific-technical Coordinator at Bemygene Health Company
- ♦ Master's in Biomedicine and Molecular Oncology from the University of Oviedo
- ♦ Professional Master's Degree in Direction and Monitoring of Clinical Trials
- ♦ Graduate in Biotechnology, Polytechnic University of Valencia

Dr. Flores Sánchez, Álvaro

- ♦ Specialist in Oncology Radiotherapy
- ♦ Radiation Oncology Consultant at the GenesisCare Clinic (Spain)
- ♦ Medical Specialist in Radiation Oncology at GenesisCare Campo from Gibraltar (Cádiz)
- ♦ Specialist in Radiation Oncology at GenesisCare (Málaga)
- ♦ Radiation Oncologist at Ceuta Medical Center
- ♦ Consultant Clinical Oncologist in St. Bernard's Hospital (UK)
- ♦ Specialist in Radiation Oncology at GenesisCare (Jerez)
- ♦ Radiation Oncology Consultant in Cork University Hospital (Ireland)
- ♦ Radiation Oncologist in University Hospital Galway (Ireland)
- ♦ Specialist in Radiation Oncology at IMO Seville
- ♦ Rotations and International Fellows: Memorial Sloan Kettering Cancer Center (New York)
Ramón y Cajal University Hospital (Madrid), Virgen del Rocío University Hospital (Seville)



Study the latest surgical and non-interventional developments in Applied Mastology with the didactic assistance of the most prestigious teaching faculty."

06

Educational Plan

The syllabus of this Hybrid Professional Master's Degree contains the most up-to-date content in relation to Applied Mastology and Breast Cancer Treatment. Through in-depth academic modules, the doctors will delve into the epidemiology of this type of tumor, the anatomy of the breast and other physiological aspects that can determine the appearance of this type of tumor. Likewise, it will analyze the main diagnostic methods of this specialty and their evolution in recent years. Another point of interest will be the therapeutic trends that currently have better results against this pathology and the clinical trials that approve them. All this theoretical knowledge will be accompanied by multimedia resources of great educational value such as videos and infographics.





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Are you looking for a study opportunity that does not conflict with your schedules and obligations? This Hybrid Professional Master's Degree, without schedules or rigid theoretical study schedules, is at your fingertips in a 100% online learning platform”

Module 1. Definition, History, Ethical Concepts, Epidemiology

- 1.1. Introduction
- 1.2. Concept of Mastology-Senology
- 1.3. Historical Perspective of Mastology
- 1.4. First Historical References: Classical Greco-Roman Antiquity
- 1.5. The Middle Ages, Modern Times, the Enlightenment
- 1.6. Contemporary Era 19th century-present day
- 1.7. Ethical and Legal Foundations Applied in Mastology
- 1.8. The Teaching of Mastology in Curricula Through the Ages
- 1.9. Spanish Colleges of Surgeons as Pioneers
- 1.10. Accreditation in the Law of Specialities in Europe
Accreditation in the Law of Specialities in America

Module 2. Diagnostics in Mastology

- 2.1. Introduction to Imaging Diagnosis in Mastology
- 2.2. Radiological Interpretation in Breast Pathologies
- 2.3. Nodule and Asymmetries Breasts
- 2.4. Diagnostic Management of Microcalcifications and Distortion of the Breast Architecture
- 2.5. Mammary Interventionism
- 2.6. Pre-Treatment Clinical Staging in Breast Cancer
- 2.7. Other Indications of Mammary Magnetic Resonance
- 2.8. Treated and Operated Breast
- 2.9. Rare Breast Pathology. Special Situations
- 2.10. Advances in Mammary Diagnosis and Interventionism

Module 3. Pathological Anatomy

- 3.1. Introduction to Breast Pathological Anatomy
 - 3.1.1. Concepts. Anatomopathological Language
 - 3.1.2. Methods for Studying Pathological Anatomy
 - 3.1.3. Types of Samples
 - 3.1.4. Clinical and Radiological Correlation
 - 3.1.4.1. Surgical Specimen Orientation
 - 3.1.5. Diagnosis: The Anatomopathological Report
 - 3.1.6. Normal Breast

- 3.2. Benign Epithelial Tumors Papillary Neoplasms Premalignant Lesions
 - 3.2.1. Benign Epithelial Proliferations and Precursors
 - 3.2.1.1. Usual Ductal Hyperplasia
 - 3.2.1.2. Columnar Cell Lesions, Including Flat Epithelial Atypia
 - 3.2.1.3. Atypical Ductal Hyperplasia
 - 3.2.2. Adenosis and Benign Sclerosing Lesions
 - 3.2.2.1. Sclerosing Adenosis
 - 3.2.2.2. Adenosis and Apocrine Adenoma
 - 3.2.2.3. Adenosis Microglandular
 - 3.2.2.4. Radial Scar and Complex Sclerosing Lesion
 - 3.2.3. Adenomas
 - 3.2.3.1. Tubular Adenoma
 - 3.2.3.2. Lactational Adenoma
 - 3.2.3.3. Ductal Adenoma
 - 3.2.4. Epithelial-Myoepithelial Tumors
 - 3.2.4.1. Pleomorphic Adenoma
 - 3.2.4.2. Adenomyoepithelioma
 - 3.2.5. Papillary Neoplasms
 - 3.2.5.1. Intraductal Papilloma
 - 3.2.5.2. Papillary Ductal Carcinoma in situ
 - 3.2.5.3. Encapsulated Papillary Carcinoma
 - 3.2.5.4. Solid Papillary Carcinoma in situ
 - 3.2.6. Non-Invasive Lobular Neoplasia
 - 3.2.6.1. Atypical Lobular Hyperplasia
 - 3.2.6.2. Lobular Carcinoma in situ
 - 3.2.7. Ductal Carcinoma in situ
- 3.3. Malignant Epithelial Tumors
 - 3.3.1. Infiltrating Carcinoma and Subtypes
 - 3.3.1.1. Infiltrating Carcinoma Without a Special Subtype
 - 3.3.1.2. Microinfiltrating Carcinoma
 - 3.3.1.3. Infiltrating Lobular Carcinoma
 - 3.3.1.4. Tubular Carcinoma
 - 3.3.1.5. Cribriform Carcinoma
 - 3.3.1.6. Mucinous Carcinoma

- 3.3.1.7. Mucinous Cystadenocarcinoma
- 3.3.1.8. Infiltrating Micropapillary Carcinoma
- 3.3.1.9. Infiltrating Solid Papillary Carcinoma
- 3.3.1.10. Infiltrating Papillary Carcinoma
- 3.3.1.11. Carcinoma with Apocrine Differentiation
- 3.3.1.12. Metaplastic Carcinoma
- 3.3.2. Saliva Gland Type Carcinomas
 - 3.3.2.1. Acinar Cell Carcinoma
 - 3.3.2.2. Adenoid Cystic Carcinoma
 - 3.3.2.3. Secretor Carcinoma
 - 3.3.2.4. Mucoepidermoid Carcinoma
 - 3.3.2.5. Polymorphous Adenocarcinoma
 - 3.2.2.6. Tall Cell Carcinoma with Reverse Polarization
- 3.3.3. Neuroendocrine Neoplasms
 - 3.3.3.1. Neuroendocrine Tumor
 - 3.3.3.2. Neuroendocrine Carcinoma
- 3.4. Fibroepithelial Tumors Nipple-areola complex Tumors Hematolymphoid Tumors
 - 3.4.1. Fibroepithelial Tumors
 - 3.4.1.1. Hamartoma
 - 3.4.1.2. Fibroadenoma
 - 3.4.1.3. Tumor Phyllodes
 - 3.4.2. Nipple-areola Complex Tumors
 - 3.4.2.1. Syringomatous Tumor
 - 3.4.2.2. Nipple Adenoma
 - 3.4.2.3. Paget's Disease of the Breast
 - 3.4.3. Hematolymphoid Tumors
 - 3.4.3.1. MALT Lymphoma
 - 3.4.3.2. Follicular Lymphoma
 - 3.4.3.3. Diffuse Large B-cell Lymphoma
 - 3.4.3.4. Burkitt Lymphoma
 - 3.4.3.5. Anaplastic Large Cell Lymphoma Associated with Breast Implantation
- 3.5. Mesenchymal Tumors
 - 3.5.1. Vascular Tumours
 - 3.5.1.1. Hemangioma
 - 3.5.1.2. Angiomatosis
 - 3.5.1.3. Atypical Vascular Lesions
 - 3.5.1.4. Primary Angiosarcoma
 - 3.5.1.5. Post-Radiation Angiosarcoma
 - 3.5.2. Fibroblastic and Myofibroblastic Tumors
 - 3.5.2.1. Nodular Fascitis
 - 3.5.2.2. Myofibroblastoma
 - 3.5.2.3. Desmoid Fibromatosis
 - 3.5.2.4. Inflammatory Myofibroblastic Tumor
 - 3.5.3. Peripheral Nerve Sheath Tumors
 - 3.5.3.1. Schwannoma
 - 3.5.3.2. Neurofibroma
 - 3.5.3.3. Granular Cells Tumor
 - 3.5.4. Smooth Muscle Tumors
 - 3.5.4.1. Leiomyoma
 - 3.5.4.2. Leiomyosarcoma
 - 3.5.5. Adipocytic Tumors
 - 3.5.5.1. Lipoma
 - 3.5.5.2. Angiolipoma
 - 3.5.5.3. Liposarcomas
- 3.6. Clinical Pathological Special Situations Genetic Tumor Syndromes
 - 3.6.1. Clinical Pathological Special Situations
 - 3.6.1.1. Young Woman
 - 3.6.1.2. Pregnancy and Lactation
 - 3.6.1.3. Elderly Woman
 - 3.6.1.4. Men
 - 3.6.1.5. Hidden
 - 3.6.1.6. Inflammatory Carcinoma

- 3.6.2. Genetic Tumor Syndromes
 - 3.6.2.1. BRCA1/2-Associated Hereditary Breast and Ovarian Cancer Syndrome
 - 3.6.2.2. Cowden Syndrome
 - 3.6.2.3. Ataxia-Telangiectasia
 - 3.6.2.4. TP53-Associated Li-Fraumeni Syndrome
 - 3.6.2.5. CHEK2-Associated Li-Fraumeni Syndrome
 - 3.6.2.6. CDH1-Associated Breast Cancer
 - 3.6.2.7. Cancer Associated with PALB2
 - 3.6.2.8. Peutz-Jeghers Syndrome
 - 3.6.2.9. Neurofibromatosis Type I
- 3.7. Non-Tumorous Pathology
 - 3.7.1. Pseudoangiomatous Stromal Hyperplasia
 - 3.7.2. Diabetic Mastopathy
 - 3.7.3. Fibrosis
 - 3.7.4. Mondor Disease
 - 3.7.5. Changes Due to Breastfeeding
 - 3.7.6. Mastitis
 - 3.7.6.1. Mastitis Granulomatosa
 - 3.7.6.2. Mastitis Non-Granulomatosa
- 3.8. Prognosis
 - 3.8.1. Tumor Grade
 - 3.8.2. Pathological Staging
 - 3.8.3. Surgical Border
 - 3.8.4. Sentinel Lymph Node
 - 3.8.4.1. OSNA
 - 3.8.5. Treatment-Oriented Immunohistochemistry Classes
 - 3.8.6. Nomograms
 - 3.8.6.1. Cases
- 3.9. Prediction
 - 3.9.1. Evaluation of Response to Neoadjuvant Treatment
 - 3.9.2. Prediction of the Response to Chemotherapy Treatment
 - 3.9.2.1. Genetic Platforms Oncotype DX, Mamaprint, PAM50

- 3.9.3. Therapeutic Targets
- 3.9.4. NGS
- 3.9.5. Digital and Computational Pathology
 - 3.9.5.1. Cases
- 3.10. Multimodality
 - 3.10.1. Positive, Negative or Uncertain
 - 3.10.2. Interpretation of Data in the Clinical Context
 - 3.10.2.1. Statistics and Probability
 - 3.10.3. Quality Control
 - 3.10.3.1. Protocols
 - 3.10.4. Pathologists in the Breast Unit
 - 3.10.4.1. Difficult Cases: are tumors, occult primary, non-breast OSNA, very long monitoring processes
 - 3.10.5. Conclusions

Module 4. Functional Anatomy

- 4.1. Radiological Anatomy of the Mammary Region
- 4.2. Radiological Anatomy of the Donor Regions in Reconstructive Breast Surgery
- 4.3. Surgical Anatomy in Oncology and Reconstructive Surgery Topography, Anatomic Relations
- 4.4. Muscular Surroundings
- 4.5. Arterial and Venous Vascularization
 - 4.5.1. Key Points of Vascularization in the Conservation of Skin and Areola
 - 4.5.2. Key Points of Vascularization in the Muscular Preservation and Local Flaps
- 4.6. Lymphatic Drainage
- 4.7. Innervation
- 4.8. Axillary Cavity
 - 4.8.1. Limits
 - 4.8.2. Vascular Content
 - 4.8.3. Nerve Content
 - 4.8.4. Ganglionic Content, Berg Levels, Surgical Approaches to the Axilla
- 4.9. Internal Mammary Role in Free Flaps
- 4.10. Supraclavicular Region

Module 5. Embryology, Malformations and Intersexual States

- 5.1. Embryology
- 5.2. Physiology
- 5.3. Mammary malformations
 - 5.3.1. Polymastia
 - 5.3.2. Muscle Abnormalities and Agenesis Poland Syndrome
 - 5.3.3. Tubular Breasts
 - 5.3.4. Alterations of the Nipple-areola Complex
- 5.4. Macromastia and Micromastia
- 5.5. Gynecomastia
- 5.6. Intersexual Syndromes
- 5.7. Breast Cancer in Childhood and Adolescence:
 - 5.7.1. Environmental Causes
 - 5.7.2. Genetic Causes
- 5.8. Inflammatory Disease
 - 5.8.1. Acute Mastitis Abscess
 - 5.8.2. Chronic Mastitis
 - 5.8.3. Mondor Disease
 - 5.8.4. Plasmatic Cell Mastitis
 - 5.8.5. Periductal Mastitis
- 5.9. Systemic
 - 5.9.1. Sarcoidosis
 - 5.9.2. Granulomatosis
- 5.10. Burns in the Mammary Area in Childhood and Adolescence

Module 6. Locoregional Surgical Treatment in Malignant Breast Pathology

- 6.1. Role of Locoregional Treatment within a Patient-Based Multimodal Effort
 - 6.1.1. Pre-Therapeutic Diagnostic Assessment and Strategy
 - 6.1.2. Importance of Neoadjuvant Therapy
 - 6.1.3. Importance of Inflammation: Healing Reaction
 - 6.1.4. R0 Resection, Residual Disease and Therapeutic Consolidation Surgical
 - 6.1.5. Pre and Perioperative Care
 - 6.1.5.1. Antibiotic Prophylaxis
 - 6.1.5.2. Thromboembolic Prophylaxis
 - 6.1.5.3. MRSA Screening
 - 6.1.5.4. Position in the Operating Room
 - 6.1.5.5. Locoregional Analgesia
 - 6.1.5.6. Nursing Care
- 6.2. Types of Surgical Procedure in Breast Cancer Selection Criteria
- 6.2. Conservative Breast Surgery: Fundamentals and Lumpectomy
 - 6.2.1. Indications
 - 6.2.2. Oncologic Principles
 - 6.2.3. Plastic Principles
 - 6.2.4. Guided Surgery
 - 6.2.4.1. Wire
 - 6.2.4.2. Markers
 - 6.2.4.3. Isotopic (ROLL)
 - 6.2.4.4. Seeds
 - 6.2.5. Tumorectomy
 - 6.2.5.1. Lymph Node Involvement
 - 6.2.5.2. Incisions
 - 6.2.5.3. Drainages
- 6.3. Conservative Breast Surgery: Oncoplastic Surgery
 - 6.3.1. Foundations, Pioneers and History
 - 6.3.2. Oncoplastic Procedures Quadrant by Quadrant
 - 6.3.3. Oncoplastic Procedures Divided into Central Breast, Mid Breast; Social Breast and Peripheral Breast
 - 6.3.4. Tubular Breasts and Breast Cancer
- 6.4. Reduction Mamoplasties and Breast Cancer
 - 6.4.1. Indications
 - 6.4.2. Types
- 6.5. Reduction Mammoplasties Quadrant by Quadrant
 - 6.5.4. Contralateral Breast Symmetrization Mammoplasty
- 6.6. Mastectomy
 - 6.6.1. Modified Radical Mastectomy Current Status
 - 6.6.1.1. Description of the Modified Radical Mastectomy in the Current Day: Indications and Alternatives
 - 6.6.1.2. Other Radical Mastectomies

- 6.6.2. Skin and CAP Conservative Mastectomy
- 6.6.3. Skin-Sparing Mastectomy
- 6.6.4. Reconstructive Aspects of Conservative Mastectomies
 - 6.6.4.1. Prosthesis, Meshes and Matrices
 - 6.6.4.2. Autologous Tissues
 - 6.6.4.3. Immediate Reconstruction - Deferred
- 6.7. Stage IV Surgery, Recurrence and Metastases
 - 6.7.1. When and How to Operate on a Metastatic Breast Cancer
 - 6.7.2. Role of Surgery in Locoregional Recurrence, Within a Multidisciplinary Effort
 - 6.7.3. Role of Surgery in Locoregional Palliation Within a Multidisciplinary Effort
 - 6.7.4. Surgery in Locally Advanced Cancer
 - 6.7.5. Electrochemotherapy
- 6.8. Lymphatic Surgery in Breast Cancer Significance and Importance
 - 6.8.1. Importance of Preoperative Axillary Diagnosis and Marking
- 6.9. Selective Sentinel Node Biopsy
- 6.10. Surgical Management of the Axilla Postneoadjuvancy

Module 7. Plastic and Reconstructive Surgery

- 7.1. Augmentation Mammoplasty
 - 7.1.1. In Benign Pathology
 - 7.1.2. In Symmetrization Augmentation Mammoplasty vs. Contralateral Glandectomy and Reconstruction
 - 7.1.3. In Reparation of Sequelae of Conservative Surgery Local Flaps
- 7.2. Reduction Mammoplasty and Mastopexy
- 7.3. Breast Reconstruction: Immediate, Deferred and Immediate-Deferred
 - 7.3.1. Radiological and Surgical Anatomy of the Breast Reconstruction
 - 7.3.2. Preoperative Vascular Map
- 7.4. Prosthetic Reconstruction: Indications, Modes and Techniques
- 7.5. Pedicled Autologous Flaps
 - 7.5.1. Local: Thoracodorsal Flap
 - 7.5.2. Distance Broad Dorsal
 - 7.5.2.1. TRAM flap
- 7.6. Free Autologous Flaps

- 7.6.1. DIEP
- 7.6.2. Gracilis
- 7.6.3. Glute
- 7.6.4. Miscellaneous
- 7.6.5. CAP Reconstruction. Postoperative Management of Reconstructive Surgery
- 7.7. Sequelae Surgery
- 7.8. Sequelae of Conservative Breast Surgery and its Treatment
- 7.9. Scar Management
- 7.10. Lymphedema Surgery
 - 7.10.1. Axillary Reverse Map
 - 7.10.2. Surgical Management of Established Lymphedema

Module 8. Systemic Therapy in Breast Cancer

- 8.1. Cellular Cycle, Oncogenesis and Pharmacogenomics in Breast Cancer
- 8.2. Pharmacokinetics and Tumor Response
- 8.3. Hormone Therapy
 - 8.3.1. Basics of Hormone Therapy
 - 8.3.2. Drugs Used
 - 8.3.2.1. Selective Estrogen Receptor Modulators
 - 8.3.2.2. GnRH Analogs
 - 8.3.2.3. Aromatase Inhibitors
 - 8.3.2.4. Antiestrogens
 - 8.3.2.5. Antiprogestorens
 - 8.3.2.6. Antiandrógenos
 - 8.3.3. Prophylactic
 - 8.3.3.1. Indications
 - 8.3.3.2. Drugs Used
 - 8.3.3.2.1. Tamoxifen
 - 8.3.3.2.2. Raloxifen
 - 8.3.3.2.3. Others
 - 8.3.3.2.3.1. Retinoids
 - 8.3.3.2.3.2. Cyclooxygenase Inhibitors
 - 8.3.3.2.3.3. Phytoestrogens

- 8.3.3.2.3.4. Statins
- 8.3.3.2.3.5. Tibolone
- 8.3.3.2.3.6. LHRH Analogs
- 8.3.3.2.3.7. Bisphosphonates
- 8.3.3.2.3.8. Calcium
- 8.3.3.2.3.9. Selenium
- 8.3.3.2.3.10. Vitamin D and E
- 8.3.3.2.3.11. Lapatinib
- 8.3.3.2.3.12. Metformina
- 8.3.4. Adjuvant
 - 8.3.4.1. Indications
 - 8.3.4.2. Duration
 - 8.3.4.3. Early Disease
 - 8.3.4.3.1. Tamoxifen
 - 8.3.4.3.2. Aromatase Inhibitors
 - 8.3.4.3.3. LHRH Analogs
 - 8.3.4.4. Advanced Disease
 - 8.3.4.4.1. Tamoxifen
 - 8.3.4.4.2. Aromatase Inhibitors
 - 8.3.4.4.3. LHRH Analogs and Surgical Castration
 - 8.3.4.4.4. Cyclin 4-6 Inhibitors
- 8.3.5. Neoadjuvant
 - 8.3.5.1. Indications
 - 8.3.5.2. Schemes
 - 8.3.5.3. Duration
- 8.4. Chemotherapy General Concepts
 - 8.4.1. Basics of Chemotherapy
 - 8.4.1.1. Importance of Dosis
 - 8.4.1.2. Resistance to Chemotherapy
 - 8.4.2. Drugs Used
- 8.5. First Line
 - 8.5.1. Anthracyclines
 - 8.5.2. Taxanes
 - 8.5.3. Paclitaxel
 - 8.5.4. Nab-Paclitaxel
 - 8.5.5. Docetaxel
 - 8.5.6. Others
 - 8.5.6.1. Other Lines
- 8.6. Adjuvant
 - 8.6.1. Early Disease
 - 8.6.1.1. Schemes
 - 8.6.2. Advanced Disease
 - 8.6.2.1. Indications
 - 8.6.2.2. Schemes
 - 8.6.3. Neoadjuvant
 - 8.6.3.1. Indications and Outlines
- 8.7. Target Therapies
 - 8.7.1. Drugs Used
 - 8.7.1.1. Anti Her2
 - 8.7.1.2. Anti Angiogenics
 - 8.7.1.3. mTor Inhibitors
 - 8.7.1.4. Cyclin Inhibitor
 - 8.7.1.5. Tirosin Kinasa Inhibitor
 - 8.7.2. Adjuvant
 - 8.7.2.1. Indications
 - 8.7.2.2. Schemes
 - 8.7.3. Neoadjuvant
 - 8.7.3.1. Indications
 - 8.7.3.2. Schemes

- 8.8. Immunotherapy
- 8.9. Support Therapies
 - 8.9.1. Colony Stimulators
 - 8.9.2. Antiemetics
 - 8.9.3. Heart Protectors
 - 8.9.4. Anti alopecia
- 8.10. Complications
 - 8.10.1. Infection in the Neutropenic Patient
 - 8.10.2. Fungal and Viral Infections in Patients During Chemotherapy
 - 8.10.3. Endocrine and Metabolic Complications in Patients During Chemotherapy
 - 8.10.4. Emergency Oncology

Module 9. Radiotherapy

- 9.1. Basis of Radiotherapy
 - 9.1.1. Radiobiology
 - 9.1.2. Immunotherapy
- 9.2. Indications of Radiotherapy Treatment in the Breast
 - 9.2.1. Radiotherapy after Conservative Treatment
 - 9.2.2. Radiotherapy after Mastectomy
 - 9.2.3. Radiation Therapy After Neoadjuvant Chemotherapy
 - 9.2.4. Radiotherapy on Ganglionic Chains
- 9.3. Fractionation in Breast Cancer
 - 9.3.1. Normofractionation
 - 9.3.2. Hypofractionation
- 9.4. New Techniques
 - 9.4.1. Partial Breast Irradiation: IORT, SBRT, External Beam Radiation Therapy
- 9.5. Radiotherapy in E IV patients: Oligometastatic Disease Palliative Radiotherapy
- 9.6. Reirradiation in Breast Cancer Radioprophylaxis Radiation Induced Breast Neoplasms
- 9.7. Radiotherapy and Quality of Life
 - 9.7.1. Toxicity
 - 9.7.2. Life Habits During Radiotherapy Treatment
- 9.8. Surgery Coordinated with Radiotherapy: Advantages



Module 10. Precision Oncology and Breast Cancer

- 10.1. Genomic Phenomena in the Progression of Breast Cancer
- 10.2. Genome, Transcriptome, Proteinome
- 10.3. Epigenetics
- 10.4. Germinal Line
- 10.5. Somatic Line
- 10.6. Fluid Biopsy
- 10.7. Risk signatures
- 10.8. Poor Responders
- 10.9. Relapse
- 10.10. Future

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TECH relies on solid pedagogical methodologies, such as Relearning, to consolidate the theoretical contents of this syllabus in a fast and flexible way”



07

Clinical Internship

The theoretical period of this Hybrid Professional Master's Degree culminates giving way to a practical stay of high educational rigor. Through it, the physicians will be able to link to a highly recognized clinic in the field of Mastology to complete 3 weeks of intensive in-person preparation.





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The best centers dedicated to Applied Mastology will be within your reach if you trust this program to update your professional skills”

The training process is ideally integrated into the academic programming of this Hybrid Professional Master's Degree. From this educational modality, the doctors will be able to apply the knowledge acquired theoretically in the direct care of real patients. The care of these patients and the correct execution of surgical and non-invasive procedures will be supervised at all times by an assistant guardian. This expert figure will help the oncologist overcome the challenges of this training and quickly and flexibly incorporate dissimilar skills.

In turn, the students will have the opportunity to choose the institution that best suits their geographic location and educational needs. All centers in agreement with TECH for this learning period have the most current technology and manage the most innovative protocols, in accordance with international standards. Once the facility has been chosen, the doctor must complete 3 weeks of in-person, intensive and immersive study, in consecutive 8-hour days, from Monday to Friday.

The practical part 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 and surgery (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
Techniques of embryology and early detection of Breast Cancer	Detect Breast Cancer using computed mammography to identify tumors in their early stages
	Examine high-risk patients through magnetic resonance imaging of the breasts
	Determine the molecular types of breast cancer and the subtypes of triple negative BC through biopsy and cytology examinations.
	Identify lumps using the updated clinical breast examination technique
Surgical treatments against Breast Cancer	Access difficult-to-access breast tumors through the harpoon localization technique for surgery
	Remove adjacent lymph nodes through lymph node biopsy sentinel lymphatic
	Apply radical mastectomy in patients with an advanced stage of tumor
Reconstruction surgery of the Breast affected by Cancer	Indicate breast reconstruction surgery with implants for patients in whom greater conservation of the anatomical area of the breast has been achieved.
	Reconstruct the operated breast using back, abdomen and buttock flap techniques in patients with abundant tissue removal
	Use of tissue expanders for reconstruction of the mastectomized breast
	Reconstruct the areola-nipple complex using a skin graft from of the groin and collateral nipple
Therapeutic alternatives for Breast Cancer	Implement anti-HER2 hormonal treatment to inhibit the growth of tumor cells in the breast
	Start chemotherapy treatment through peripheral insertion catheter and Port-a-Cath
	Use advanced pharmacological therapies based on aromatase inhibitors and tamoxifen
	Select radiopharmaceuticals and radiotherapeutic protocols in general that best fit the patient's Breast Cancer status

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 educational entity undertakes to take out civil liability insurance to cover any eventuality that may arise during the internship 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 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 for Practical Training

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 student 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 includes in its itinerary the development of a first-level practical stay in a hospital institution with a distinguished track record in the study of Applied Mastology. The centers chosen by TECH to host its graduates will have the latest surgical technology and the necessary tools to undertake non-interventional procedures. Furthermore, in this in-person and immersive stay, the oncologist will be able to exercise all his new knowledge from day one, in the direct care of real patients.





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This Hybrid Professional Master's Degree allows you to choose the center that best suits your location and academic interests so that you can complete your training in the most personalized way”



Students will be able to take the practical part of this Hybrid Professional Master's Degree in 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 Regla

Country: Spain City: León

Address: Calle Cardenal Landázuri, 2, 24003, León

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

Related internship programs:

- Update on Psychiatric Treatment in Minor Patients



Medicine

HM CIOCC - Centro Integral Oncológico Clara Campal

Country: Spain City: 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: Spain City: Barcelona

Address: Avenida de Vallcarca, 151, 08023, Barcelona

Network of clinics, hospitals and private specialized centers distributed throughout 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



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

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.





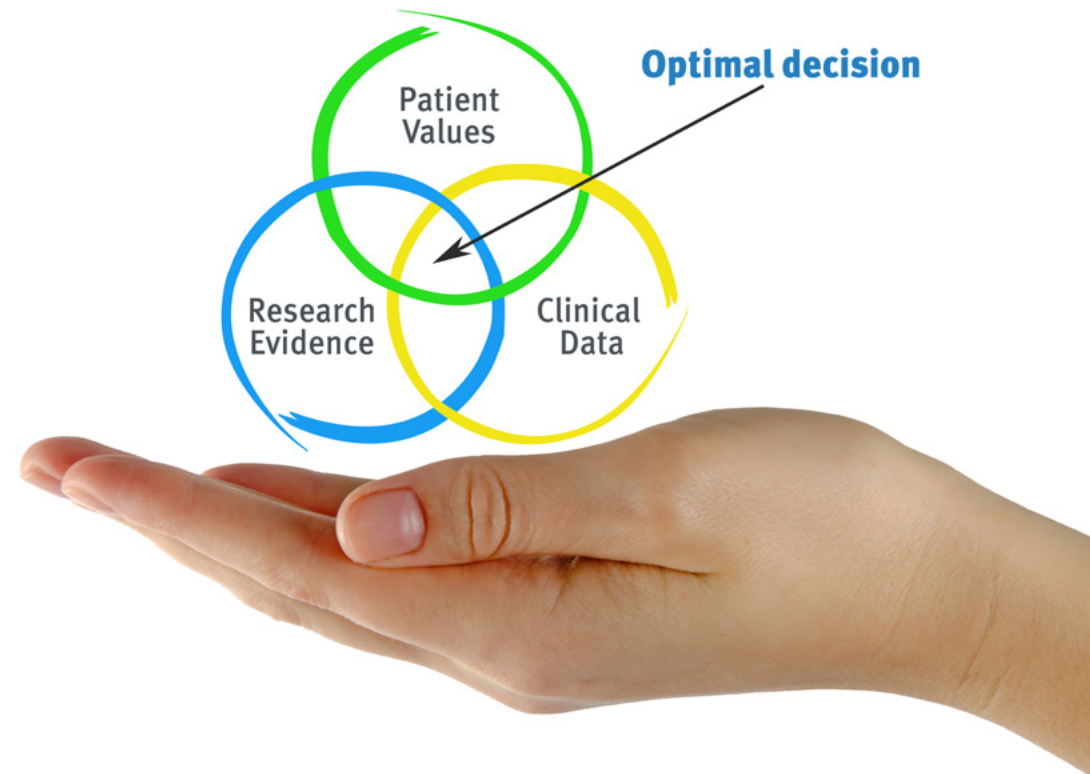
“

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"

At TECH we use the Case Method

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

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



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

“

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

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

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



Relearning Methodology

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

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

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



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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

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

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



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



Study Material

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

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



Surgical Techniques and Procedures on Video

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



Interactive Summaries

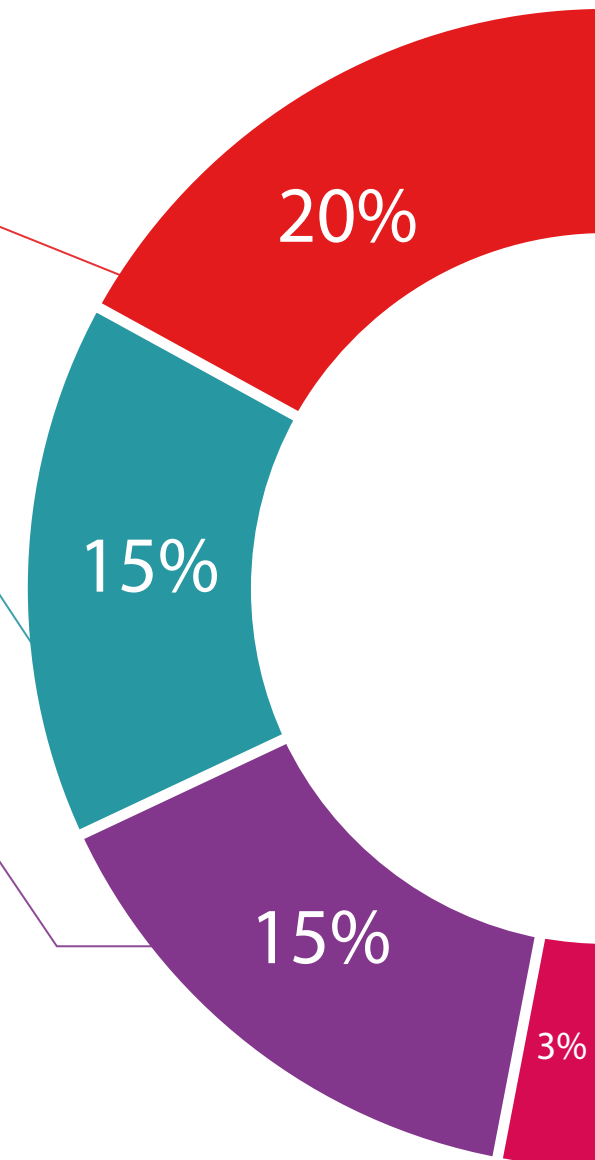
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

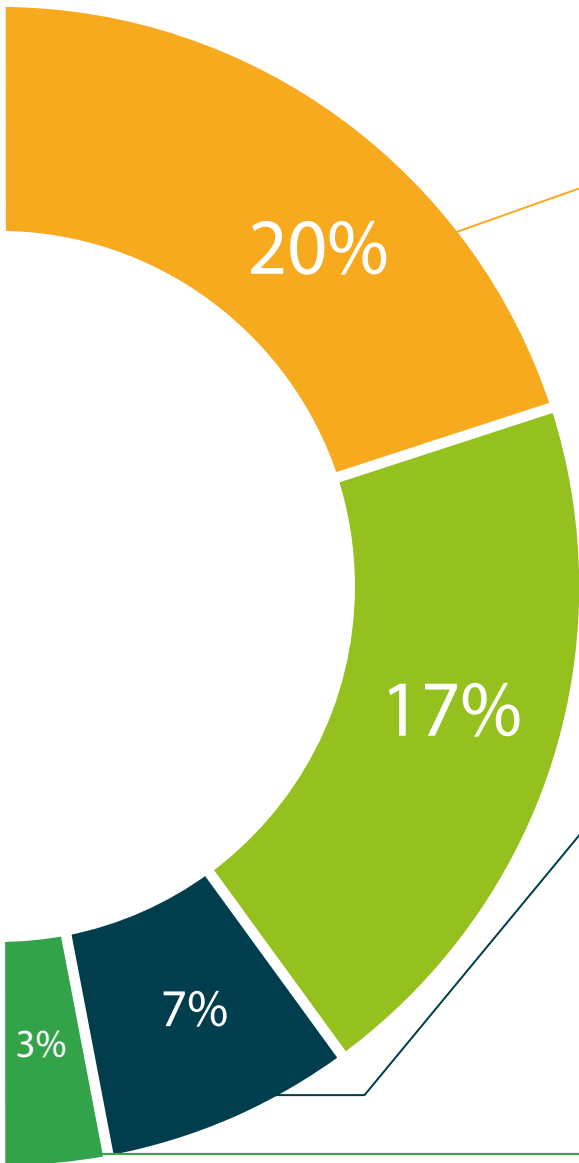
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

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





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Retesting

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



Classes

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



Quick Action Guides

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



10 Certificate

The Hybrid Professional Master's Degree in Applied Mastology and Breast Cancer Treatment guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Professional Master's Degree issued by TECH Technological University.





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

This Hybrid Professional Master’s Degree in Applied Mastology and Breast Cancer Treatment contains the most complete and up-to-date program on the professional and educational field.

After the student has passed the assessments, they will receive their corresponding Hybrid Professional Master’s Degree diploma issued by TECH Technological University via tracked delivery*.

In addition to the diploma, students will be able to obtain an academic transcript, as well as a certificate outlining the contents of the program. In order to do so, students should contact their academic advisor, who will provide them with all the necessary information.

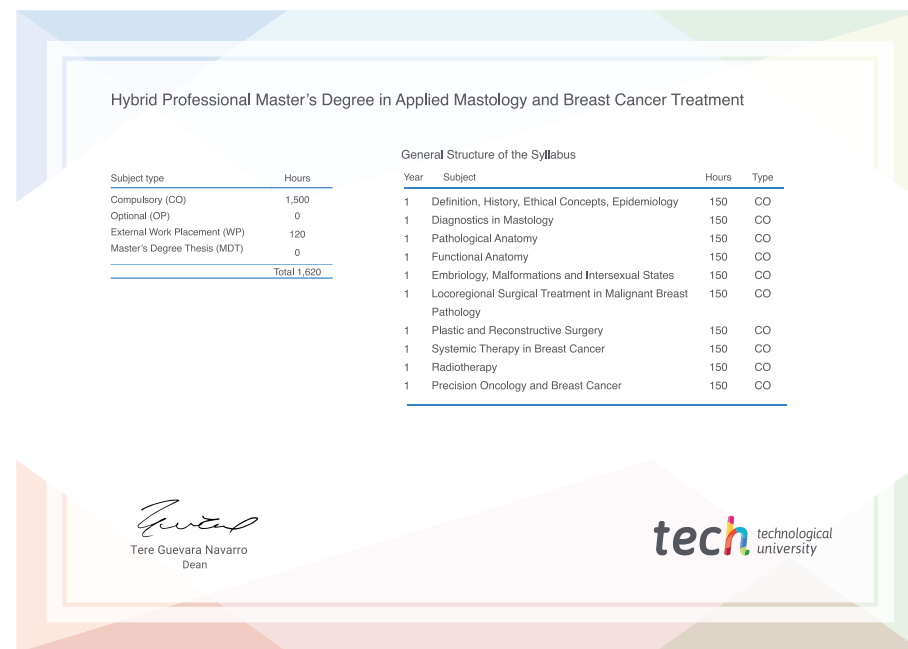
Title: Hybrid Professional Master’s Degree in Applied Mastology and Breast Cancer Treatment

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1,620 h.



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

future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commi
personalized service innovation
knowledge present quality
development languages
virtual classroom



Hybrid Professional Master's Degree

Applied Mastology
and Breast
Cancer Treatment

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

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Hybrid Professional Master's Degree

Applied Mastology and Breast Cancer Treatment

