Hybrid Professional Master's Degree

Nursing in the Pneumology Department

tech technological university

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Hybrid Professional Master's Degree

Nursing in the Pneumology Department

Course Modality: **Hybrid (Online + Clinical Internship)**
Duration: **12 months**
Certificate: **TECH Technological University**
Teaching Hours: **1,620 h.**
Website: **www.techtitute.com/us/nursing/hybrid-professional-master-degree/hybrid-professional-master-degree-nursing-pneumology-department**

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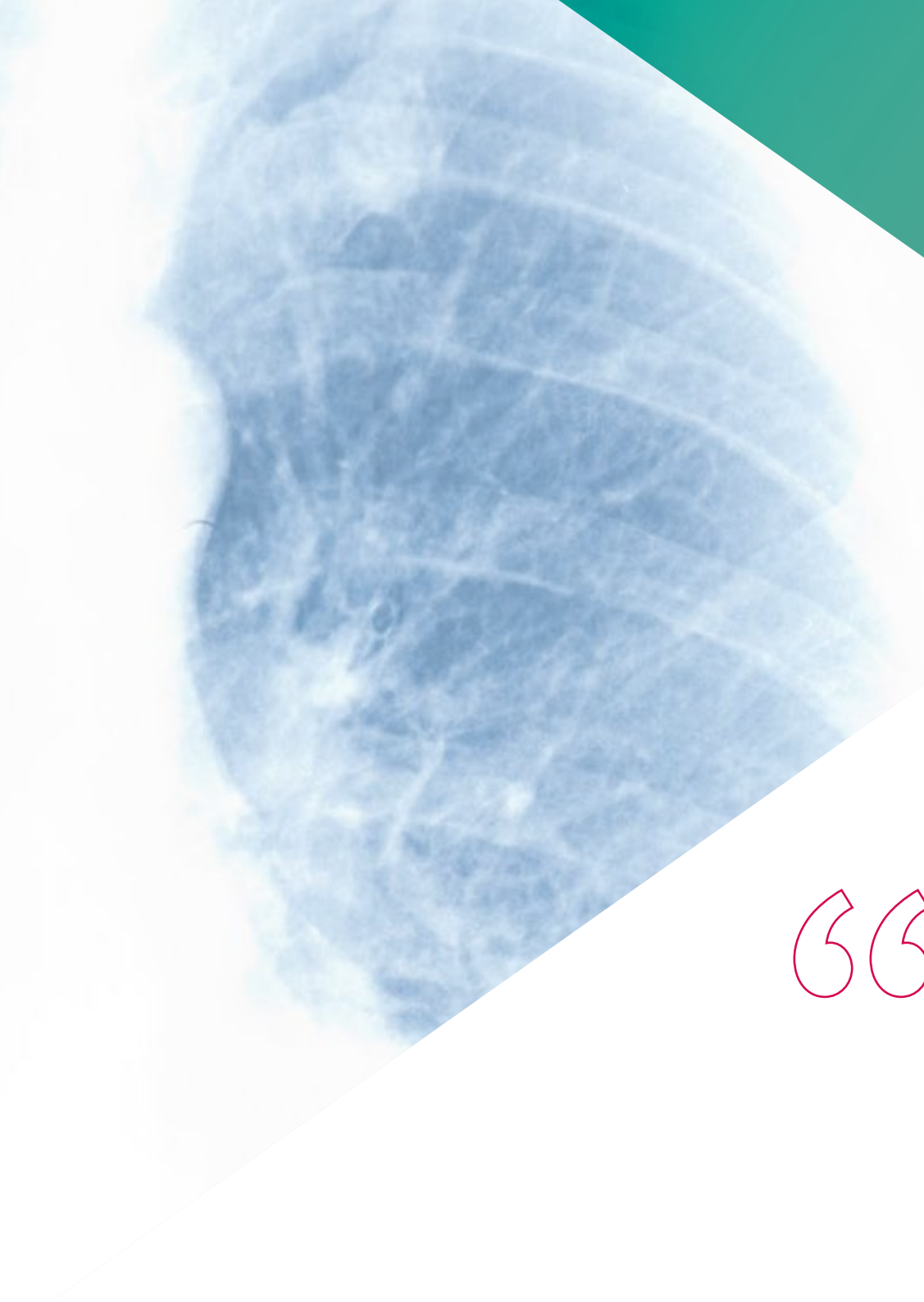
01

Introduction

The pandemic caused by COVID-19 caused a real revolution in health systems around the world. In this sense, the specialty of Pneumology has been one of the most involved in the process of updating procedures and improving diagnostic and therapeutic techniques. In this scenario, nurses play a relevant role in the care of this and other existing pathologies. In order to promote the updating process, TECH has designed this program that perfectly combines a 100% online theoretical framework with a 3-week practical stay in a first level hospital center in this specialty. Undoubtedly, a unique opportunity for an update in only 12 months.



Get a complete update of your competences in clinical assistance in Pneumology areas thanks to this Hybrid Professional Master's Degree"

Currently, the high incidence and prevalence of respiratory pathologies has led healthcare professionals to constantly update their skills in the comprehensive approach to the patient. A scenario that increased with the pandemic caused by COVID-19 and that still has repercussions in the different healthcare systems.

Faced with this reality, the nurse specialized in the area of Pneumology has had to increase his or her assistance capacity, applying much more precise techniques and the most advanced pharmacology. For this reason, TECH has designed this Hybrid Professional Master's Degree that takes the graduate to complete a complete update over 1,500 hours.

This program is distinguished by the perfect combination of a solid theoretical framework, taught 100% online, with a practical stay of 3 weeks in a first class hospital center. In this way, the graduate will have access to an effective update, where they will have access to didactic material prepared by specialists in respiratory diseases and will also be tutored during the practical phase by the best health professionals in this field.

Undoubtedly, an excellent opportunity for updating through an academic option that offers a unique academic experience, marked by TECH's philosophy of excellence and an innovative teaching methodology.

Integrate the latest advances in mechanical ventilation procedures in patients with respiratory pathologies into your healthcare practice"

This **Hybrid Professional Master's Degree in Nursing in the Pneumology Department** 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 expert Nursing professionals in Pneumology
- 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 critically ill patient, the latest protocols for invasive mechanical ventilation and tracheostomization
- Comprehensive plans for respiratory therapies in pediatric patients
- Presentation of practical workshops on procedures, diagnosis, and treatment techniques in critical patients
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- Practical clinical guides on approaching different pathologies
- With a special emphasis on evidence-based medicine and research methodologies in the Nursing Pneumology Department
- 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

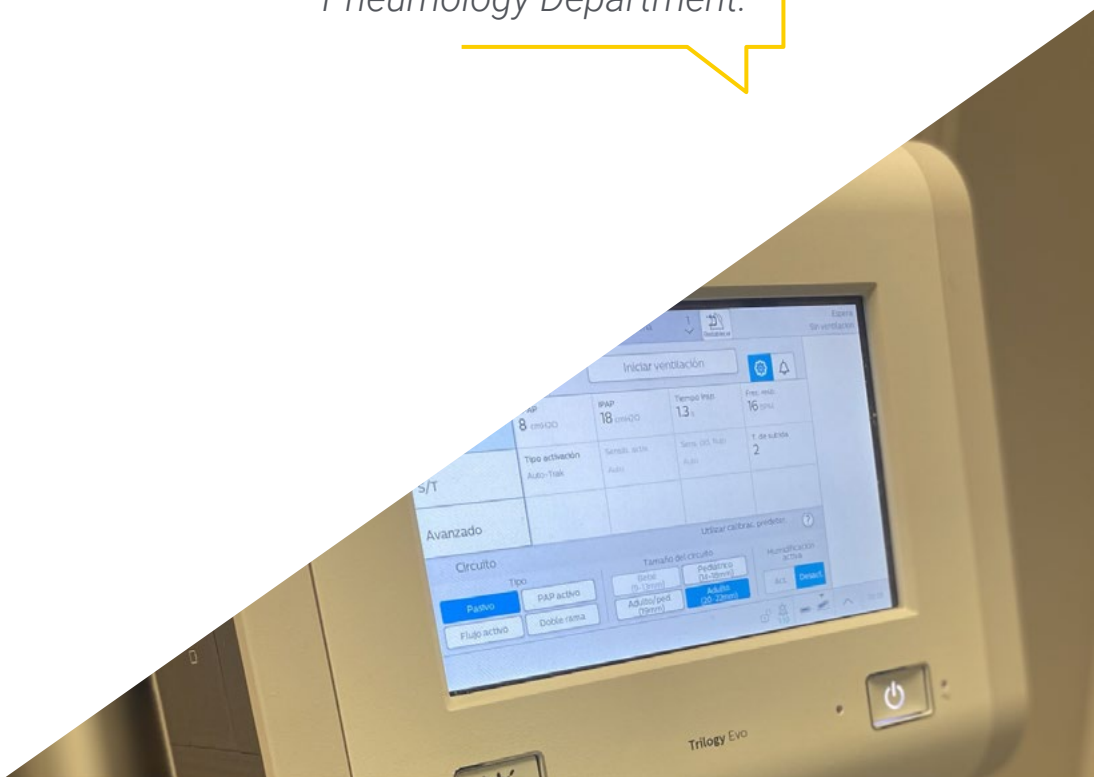
He is attending a 3-week intensive stay in one of the best hospitals, distinguished for its great work in Pneumology"

The case studies provided will allow you to get a much closer look at the care of patients with various respiratory pathologies.

A program that offers you the most useful theoretical-practical approach in Nursing in the Pneumology Department.

In this Hybrid Professional Master's Degree proposal, of a professionalizing nature and blended learning modality, the program is aimed at updating Nursing professionals who develop their functions in intensive care units, and who require a high level of qualification. 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.

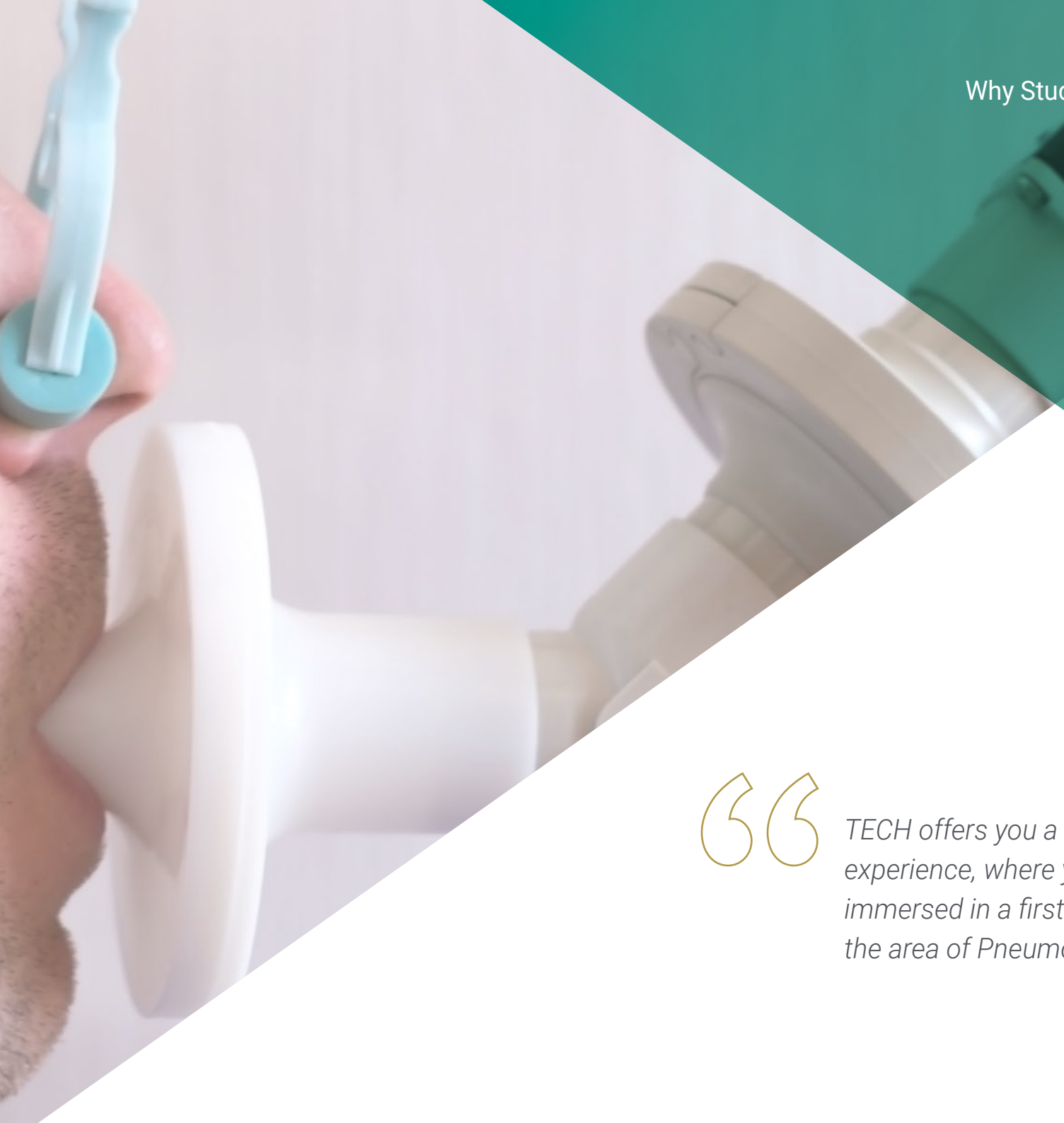
Thanks to their multimedia content developed with the latest educational technology, they will allow the Nursing professional to obtain situated and contextual learning, that is to say, a simulated environment that will provide immersive learning programmed to train in real situations. This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.



02

Why Study this Hybrid Professional Master's Degree?

The high incidence of respiratory pathologies makes it essential to improve both diagnostic and care techniques in pediatric and elderly patients. A broad field of action that requires not only solid knowledge, but also a practical application for care improvement. For this reason, TECH has designed this teaching methodology in blended learning format, which will allow the nurse to be up to date in respiratory therapies, the care of lung transplant patients or the approach to the most common diseases in this field. All this, with a final phase that takes the form of a 3-week practical stay in a leading hospital center in this field.



TECH offers you a unique academic experience, where you will be immersed in a first level hospital in the area of Pneumology"

1. Updating from the latest technology available

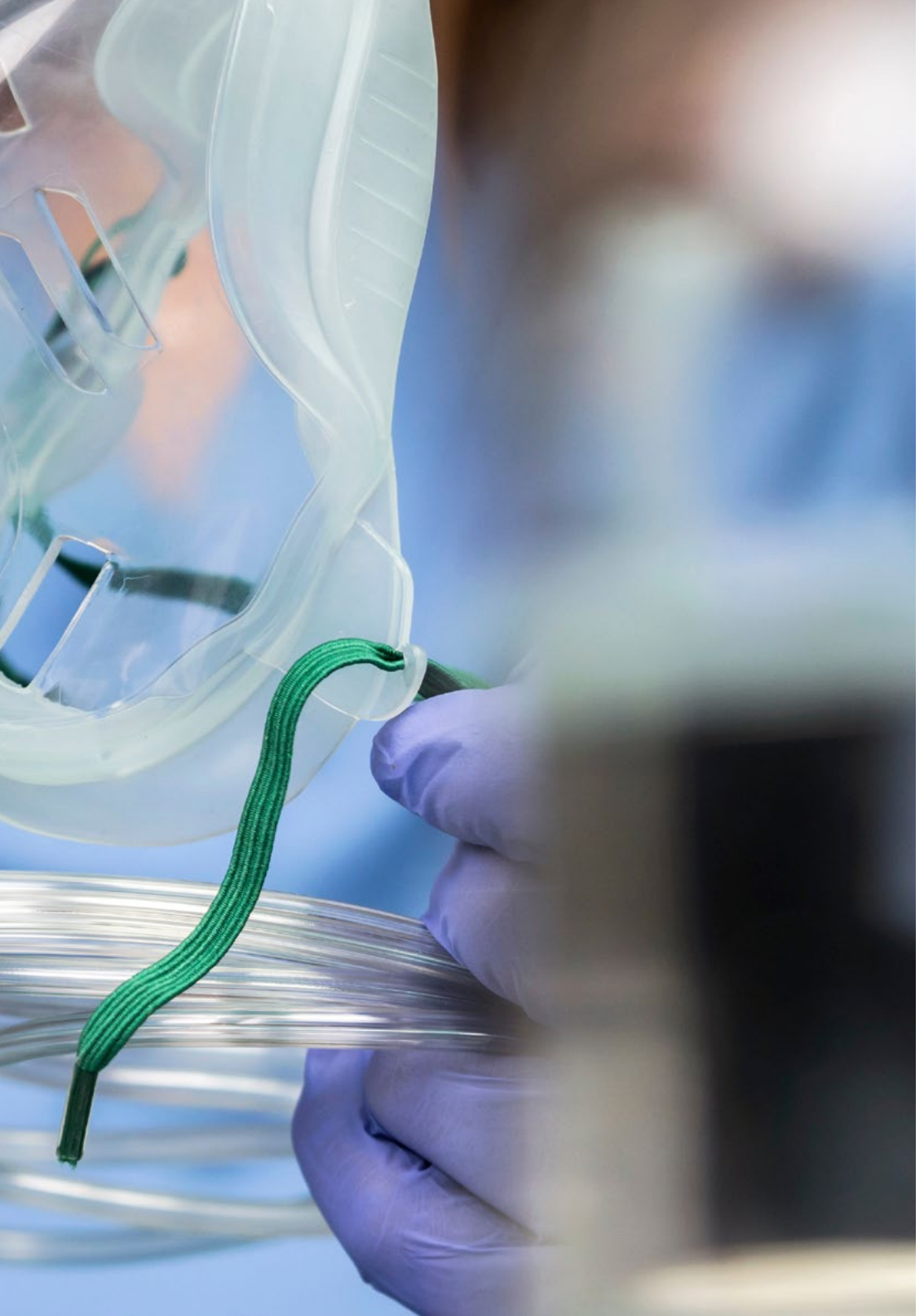
From devices for better patient monitoring, advances in diagnostic techniques such as high-resolution computed tomography to mobile applications for real-time monitoring of out-of-hospital patients are transforming the field of Pneumology. In this sense, the graduate who completes this program will receive the most current and exhaustive information on the latest technology available, used in the best clinical centers.

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

The large team of professionals that will guide the Nursing professional in this process is a guarantee of unprecedented updating. In this sense, the graduate not only has a syllabus prepared by first level health professionals, but will also be tutored during the 120 hours of practical stay, by a professional with accumulated experience in the clinical care of patients with respiratory pathologies.

3. Entering First-Class Clinical Environments

In its maxim to offer the nurse a complete updating process, this academic institution has carried out a thorough process of selection of the hospital centers available for the practical stay. Thus, the graduate will be able to verify in situ the diagnostic methods and therapeutic techniques used in first level clinical environments.



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

One of the elements that distinguishes this program is its pedagogical methodology, which focuses on providing a real response to the needs of Nursing professionals. For this reason, TECH has made a firm commitment to combine the most comprehensive theoretical framework with a 100% face-to-face practice in a unique and prestigious healthcare space. A way to complete a 12-month academic itinerary together with the best health professionals in Pneumology.

5. Expanding the Boundaries of Knowledge

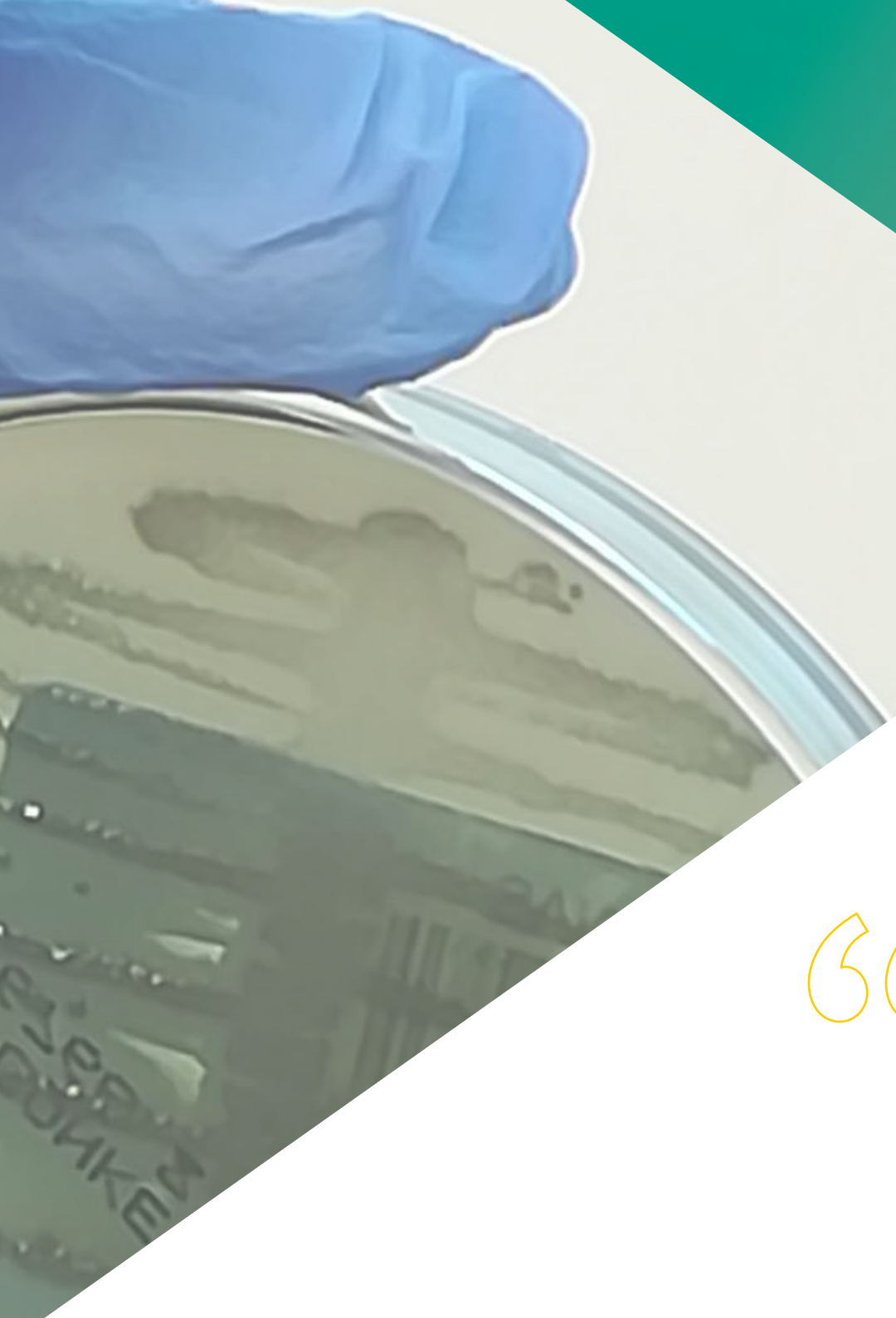
This program will allow the nurse to broaden his or her scope of action within the Pneumology Department. This program has been elaborated and developed by nurses with a wide experience in healthcare areas of the highest national and international category. In this way, the graduate will increase his or her competencies and will be able to further expand his or her professional horizons.

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

03

Objectives

The design of the program of this Hybrid Professional Master's Degree will allow students to acquire the necessary skills to update their knowledge in the profession after deepening their knowledge of the key aspects of the Pneumology Department. To this end, this academic institution provides advanced teaching resources based on video summaries, in-depth videos, specialized readings and case studies. Moreover, you will be able to integrate all this in a reliable way in your practice thanks to the practical stage of this program.

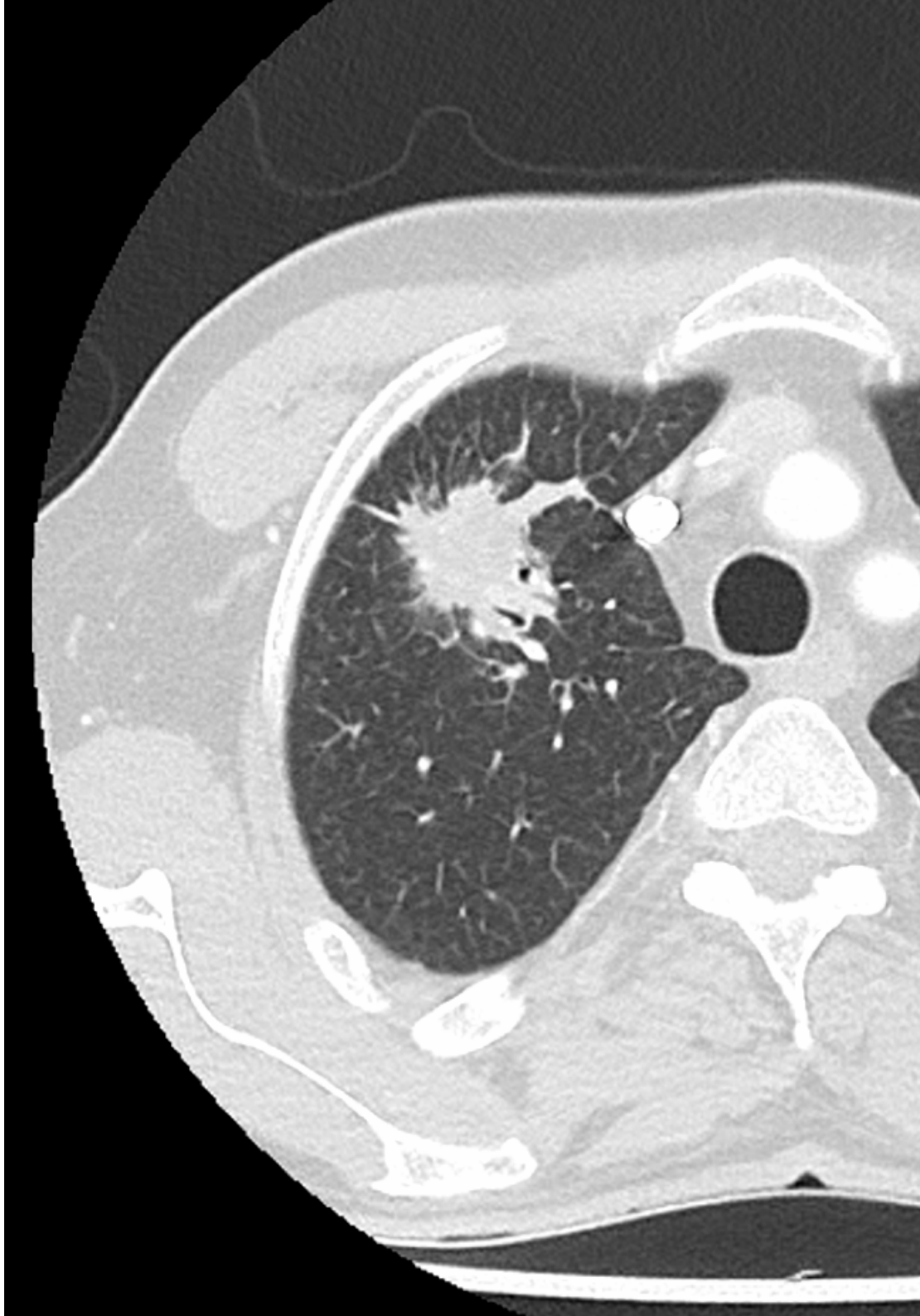


This program provides you with the most rigorous information on the techniques applied to pediatric patients with respiratory problems"

General Objective

- The purpose of this program is to provide the nurse with an update in the Pneumology Department, taking into account the latest scientific evidence in this field. To this end, this proposal facilitates the necessary strategies to provide individualized and quality care to the patient with respiratory pathology, while perfecting the techniques for the application of the most advanced therapies

Thanks to the Relearning method, you will be able to reduce the long hours of study and memorization, consolidating the concepts covered in this program"



Specific Objectives

Module 1. Anatomo-physiology of the respiratory system and assessment of pulmonary function

- Update nursing knowledge of respiratory system anatomy
- Know the physiology of pulmonary ventilation
- Understand how gas diffusion takes place
- Understand how oxygen and carbon dioxide are transported through the blood
- Understand how respiration regulation is carried out
- Analyze the different characteristics of normal breathing to be able to recognize breathing disorders
- Know the different tests to analyze pulmonary function, as well as how to interpret the results
- Learn how to recognize respiratory failure and the nursing care to apply

Module 2. Common Respiratory Pathologies in Adults

- Know the different acute respiratory infections that can occur in adult patients, as well as their main characteristics
- Learn to distinguish the different respiratory pathologies with obstructive origin and the main characteristics of each of them
- Learn to recognize respiratory diseases of restrictive origin and their main characteristics
- Learn the different techniques to perform pleural drainage and other existing treatments for pleural pathologies
- Learn to recognize tumor pathologies and to apply appropriate nursing care for lung cancer cases

Module 3. Aerosol Therapy

- Know the basics of aerosol therapy and when to apply them as treatment
- Learn to apply mechanical ventilation combined with aerosol therapy or oxygen therapy
- Delve deeper into the techniques to apply aerosol therapy, oxygen therapy or mechanical ventilation in tracheostomized patients

Module 4. Oxygen Therapy

- Expand your knowledge about chronic home oxygen therapy
- Know the existing devices used to administer oxygen, both static and portable
- Delve deeper into the different expendable materials currently available for oxygen therapy
- Deepen your understanding of the drugs used in aerosol therapies
- Update on nebulized treatment delivery systems
- Update on inhalation devices
- Learn to apply a nursing care plan for patients undergoing aerosol treatment
- Know the different techniques to determine blood oxygen levels
- Know the complementary materials for oxygen treatment that help improve treatment quality
- Describe the procedures for oxygen administration
- Know the safety and prevention measures necessary to safely administer oxygen without putting the patient at risk
- Know how to apply a nursing care plan to patients undergoing oxygen treatment

Module 5. Sleep Disorders and Mechanical Ventilation

- Explain the sleep and breathing physiology to understand possible disturbances
- Know the different diagnostic methods to detect alterations in sleep patterns
- Gain in-depth knowledge of sleep apnea, their different types and the health risks associated with them
- Know the different treatment alternatives for sleep apnea
- Know the existing techniques to perform CPAP titrations and to adjust the pressure according to patient needs
- Educate sleep apnea patients to improve environmental factors and sleep hygiene to reduce apnea incidence
- Learn to apply a nursing care plan for patients with sleep apnea

Module 6. Non-Invasive Mechanical Ventilation

- Identify physiological ventilation in healthy patients to understand the physiology of non-invasive mechanical ventilation
- Describe the different methods for noninvasive mechanical ventilation
- Gain a deeper understanding of the basic concepts necessary to individualize treatments with non-invasive mechanical ventilation according to patient needs
- Describe the different ventilatory modes to adjust for patient needs
- Update on the different devices used in non-invasive mechanical ventilation
- Recognize the consumables and complementary equipment necessary to provide quality and individualized treatment
- Know the main implementation problems for non-invasive mechanical ventilation and how to apply the best solutions for each case
- Describe a nursing care plan for patients on non-invasive mechanical ventilation

Module 7. Invasive Mechanical Ventilation

- Know the fundamentals of invasive mechanical ventilation, indications, contraindications and possible complications
- Update on invasive mechanical ventilation devices
- Know the different modalities of invasive mechanical ventilation
- Learn the endotracheal intubation technique, as well as the care and maintenance it requires
- Describe the different phases in discontinuing mechanical ventilation
- Know the nursing care plan to be applied in invasive mechanical ventilation
- Describe care tips
- Describe the procedure for installing mechanical ventilation equipment in a patient's home

Module 8. Tracheostomized Patient

- Explain how to carry out correct monitoring of ventilated patients
- Describe tracheostomy procedures, as well as indications, contraindications and complications of tracheostomy
- Know the different types of tracheostomy cannulae, their components and the criteria for selecting the appropriate size for each patient
- Increase your knowledge about required care for tracheotomized patients
- Master the technique for cleaning and changing tracheostomy cannula
- Learn to perform the secretion aspiration technique for tracheostomized patients
- Describe the educational needs of tracheostomized patients
- Describe the procedure for decannulation in tracheostomized patients
- Know the nursing care plan for tracheostomized patients

Module 9. Respiratory Therapies in Pediatric Patients

- Gain in-depth knowledge of the anatomo-physiological characteristics in pediatric patients
- Know the different respiratory pathologies that pediatric patients may present
- Explain the correct method of applying respiratory therapies in pediatric patients
- Know the different supportive therapies that pediatric patients may need in conjunction with other therapies
- Describe the various devices for monitoring vital signs in pediatric patients

Module 10. Lung Transplant Patients

- Explain the characteristics of lung transplant patients and the indications for transplantation
- Master the nursing monitoring to be performed after lung transplantation to maintain lung function and improve tolerance to stress, quality of life and survival
- Know the pulmonary function tests to be performed after lung transplantation
- Describe the nursing assessment methods for lung transplant patients
- Describe nursing care plans for lung transplant patients

Module 11. Health Education in Respiratory Patients

- Update on the knowledge of the different methods to assess respiratory health in patients through nursing procedures
- Analyze the different areas of nursing care for respiratory patients
- Know the existing techniques to ensure correct airway hygiene
- Know the manual and instrumental secretion drainage techniques for the management of hypersecretory patients
- Explain ergonomic techniques to improve quality of life in respiratory patients

Module 12. Research and Innovation in Respiratory Therapy

- Understand the necessary knowledge to develop quality research articles
- Understand the different tips in health education for ventilated patients to achieve better compliance
- Know the techniques to educate patients about their own pathology and improve their self-care
- Understand the importance and effectiveness of treatment adherence programs in patients with respiratory therapies
- Describe the contents of a smoking cessation program for respiratory patients
- Understand the importance of nutrition and diet improvement programs in patients with respiratory pathology
- Know the benefits of physical activity and the different types of exercises to improve symptoms and quality of life in respiratory patients
- Analyze the care required for caregivers of respiratory dependent patients
- Describe the contents to be addressed in programs for the psychosocial approach of tracheostomized patients and/or patients with chronic home oxygen therapy
- Update on telemedicine and its application to monitor patients with respiratory pathologies
- Delve deeper into telemonitoring techniques for the home monitoring of respiratory patients
- Describe innovative gamification methodologies to improve therapeutic adherence in patients with respiratory disease

Module 13. Update on Coronavirus Infections

- Provide education and practical theoretical improvement that will enable a reliable clinical diagnosis supported by the efficient use of diagnostic methods to indicate an effective integral treatment
- Assess and interpret the epidemiological, climatological, social, cultural, and sanitary characteristics and conditions of countries that are conducive to the emergence and development of SARS-CoV-2
- Explain the complex interrelationships between etiological germs and risk factors for the acquisition of these infections
- Address the fundamental role of microbiology, epidemiology, and all healthcare personnel in SARS-CoV-2 infection control
- Explain the pathogenic mechanisms and pathophysiology of SARS-CoV-2 infections
- Describe the clinical, diagnostic and treatment features of SARS-CoV-2 infections
- In-depth and detailed study of latest scientific evidence on the development and expansion of SARS-CoV-2
- Justify the importance of controlling coronavirus diseases to reduce global morbidity and mortality
- Highlight the role of immunity in SARS-CoV-2 infections and their complications
- Highlight the development of vaccines for the prevention of coronavirus infections
- Emphasize the development of future antivirals and other therapeutic modalities for coronavirus infections

You will combine theory and professional practice through a demanding and rewarding educational approach"

04

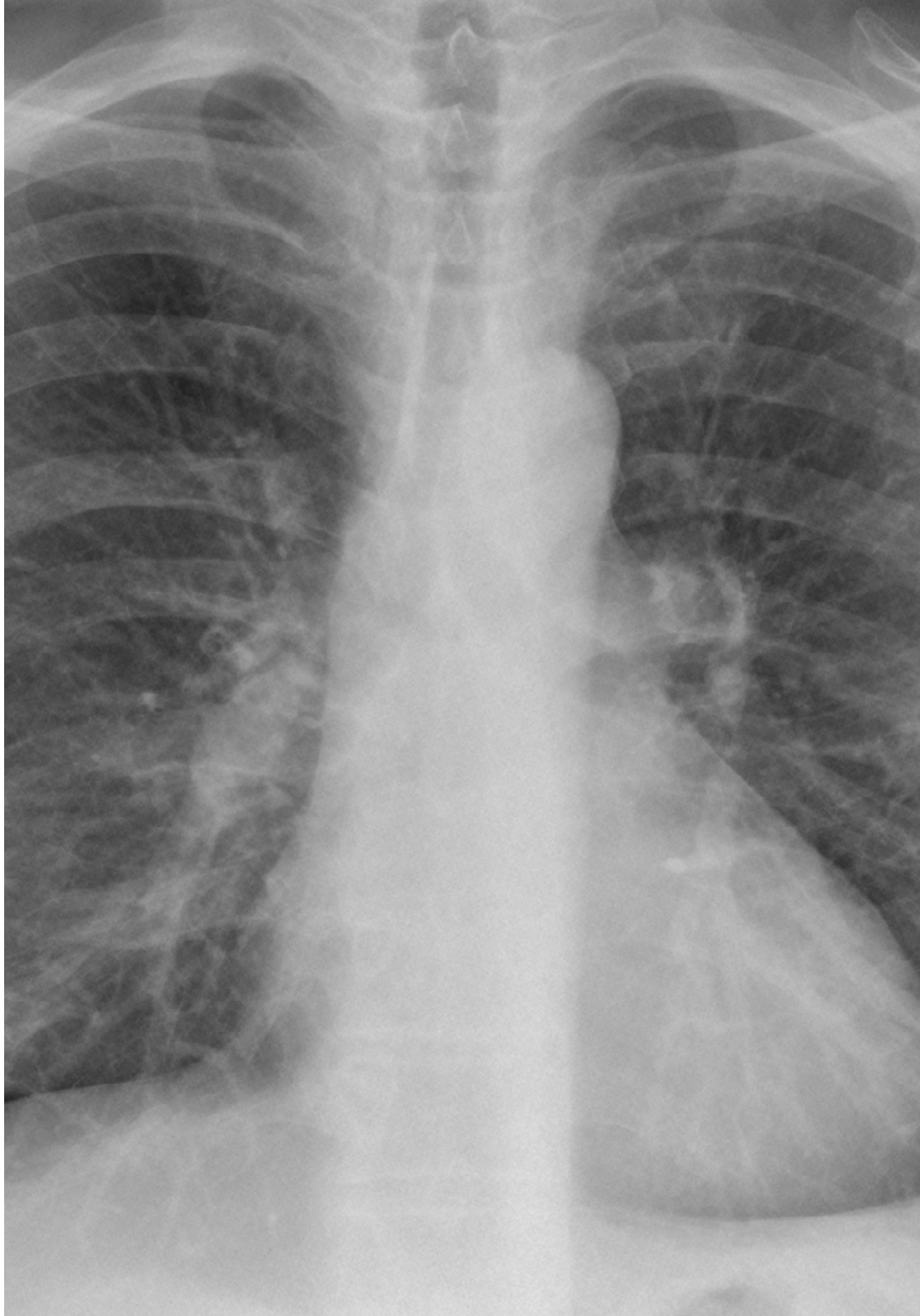
Skills

This program was created with the aim of enhancing the skills of Nursing professionals specialized in the care of respiratory patients in Pneumology Departments. To this end, TECH has designed a program based on the quality of the content and the configuration of a theoretical-practical experience of the highest level and in line with the needs of updating professionals in the sector.

Enroll now and advance in your field of work with a comprehensive program that will allow you to put into practice everything you have learned"

General Skills

- Possess knowledge that provides a basis to be original in the development and/or application of ideas in a research or clinical context
- Know how to apply the acquired knowledge to everyday practice situations or even in new environments related to the area of study
- Know how to communicate their knowledge and conclusions to specialized and non-specialized audiences in a clear and unambiguous way
- Develop techniques which allow the student to obtain and analyze the necessary information, evaluate its relevance and validity and adapt it to the context
- Know and use Information and Communication Technology, applying it to the field of respiratory therapies
- Understand and be able to apply the basic tools of research in the field of respiratory therapies



Specific Skills

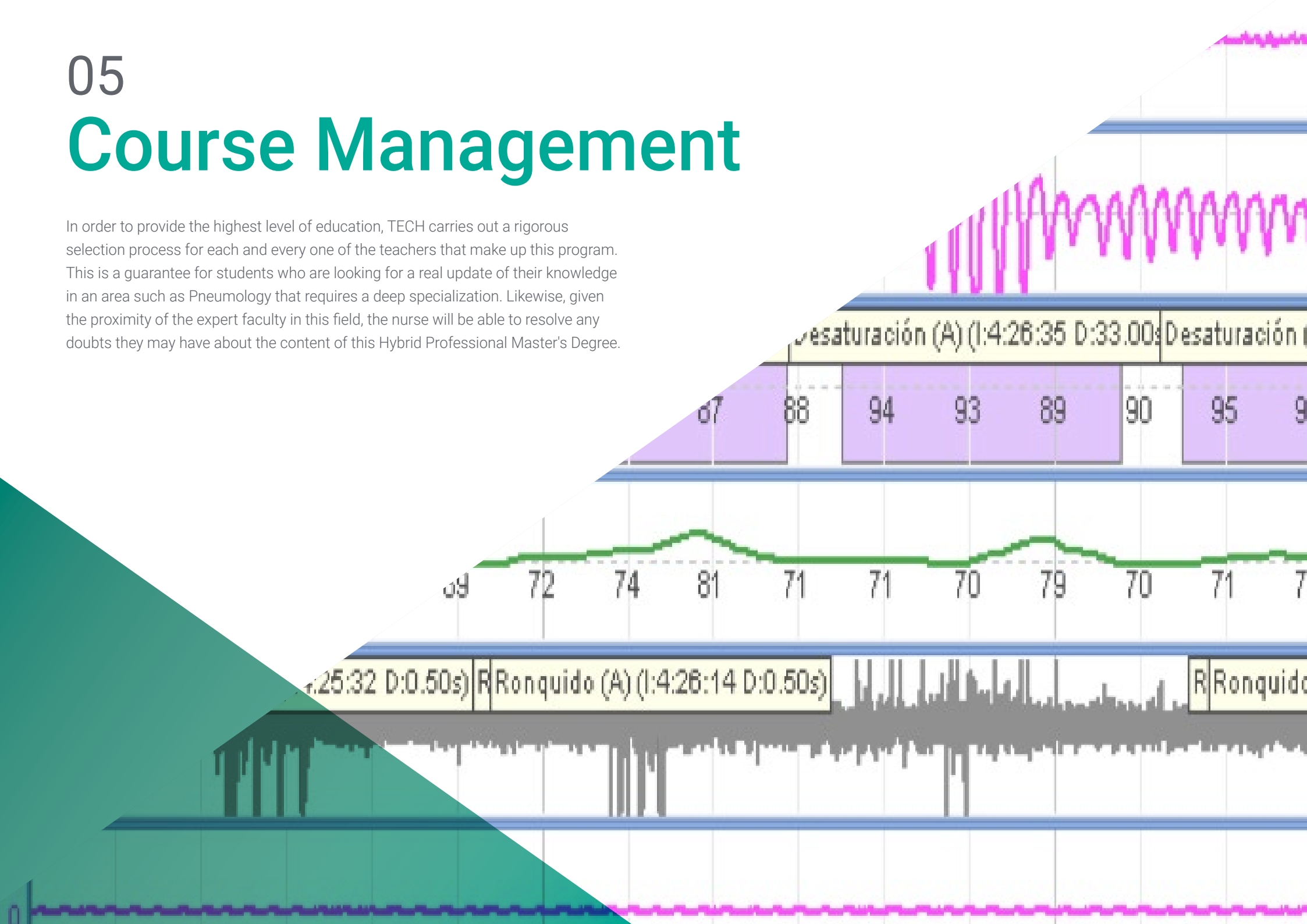
- Detail anatomic and physiologic characteristics of the respiratory apparatus in adult patients
- Describe the most prevalent respiratory pathologies in adults and gain a detailed understanding of their characteristics
- Apply and adapt knowledge in respiratory therapy to routine nursing practice in the treatment of respiratory patients through continuous assessment
- Describe aerosol respiratory therapy techniques in patients with respiratory disease for application in routine practice
- Perfect skills in oxygen therapy treatment and incorporate them into the management of the respiratory patients
- Perform a comprehensive approach to sleep disorders with respiratory involvement that allows for a therapeutic approach with these types of patients
- Describe the different modalities, techniques and equipment used in non-invasive mechanical ventilation and apply them in routine clinical practice
- Learn how to use the different invasive mechanical ventilation devices and their main characteristics in order to incorporate them into routine practice
- Describe the main characteristics of tracheostomized patients in order to individualize treatment
- Recognize the anatomical, physiological and pathological characteristics of pediatric patients and differentiate them from those of adults
- Perform an in-depth approach to nursing care in the lung transplant patient
- Design health education intervention plans for the treatment of patients with respiratory pathologies
- Incorporate new technologies into daily practice knowing their limitations and future potential

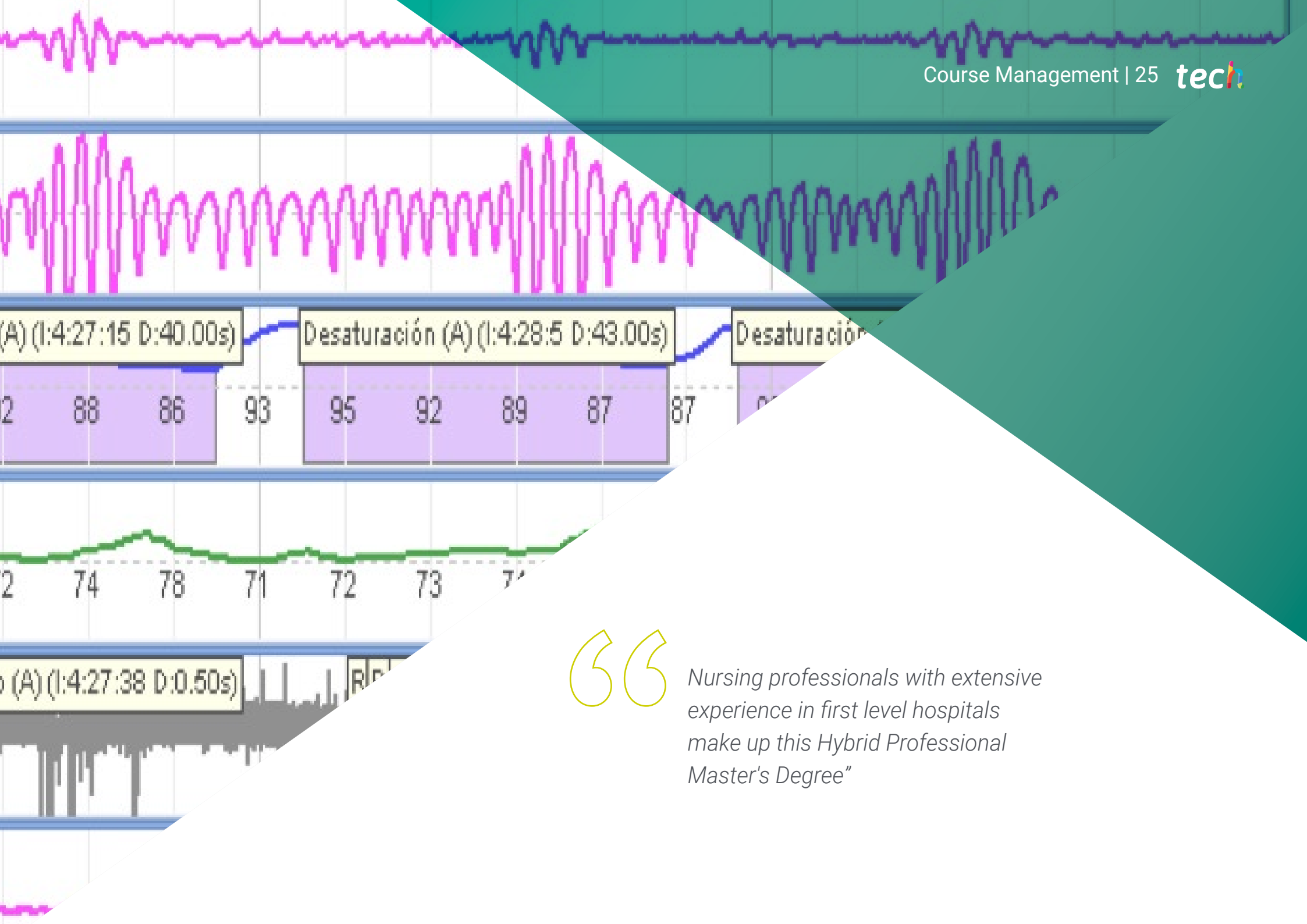
“It delves into the most relevant theory in this field, subsequently applying it in a real work environment”

05

Course Management

In order to provide the highest level of education, TECH carries out a rigorous selection process for each and every one of the teachers that make up this program. This is a guarantee for students who are looking for a real update of their knowledge in an area such as Pneumology that requires a deep specialization. Likewise, given the proximity of the expert faculty in this field, the nurse will be able to resolve any doubts they may have about the content of this Hybrid Professional Master's Degree.





Nursing professionals with extensive experience in first level hospitals make up this Hybrid Professional Master's Degree"

Management

Dr. Amado Canillas, Javier

- Nursing Supervisor at 12 de Octubre Hospital
- Evaluator of La the Technical Secretariat of the Directorate General of Planning, Research and Training of the Community of Madrid
- Doctorate in Nursing from the Complutense University of Madrid
- Master's Degree in Research Care in at the Complutense University of Madrid

Professors

Ms. Castaño Menéndez, Alba

- IRCU (Intermediate Respiratory Care Unit) at the 12 de Octubre University Hospital
- Nurse of the Emergency Department and Internal Medicine at the Hospital Clínico San Carlos
- Nurse at the Delicias Health Center
- Hospital Managed Home Respiratory Therapy Nurse at 12 de Octubre University Hospital
- Degree from Nursing from the Complutense University of Madrid
- Postgraduate Diploma in Respiratory Patient Care by the Graduate School Foundation for the Development of Nursing (FUDEN)

Mr. Amado Durán, Alfredo

- Geriatric Nurse Specialist
- Nurse. Móstoles Hospital in Madrid. Clinical training: Treatment of the cervical spine
- Degree in Nursing at the Universidad Europea
- Diploma in Physiotherapy from the European University
- Traditional Thai Massage Training at Wat Po School of Traditional Medicine Bangkok, Thailand Bangkok, Thailand
- Master's Degree in Osteopathy, Belgian College of Osteopathy, FBO First, Structural
- Consultations in Chembenyoumba, Mayotte
- Consultations in Sainte Suzanne. Reunion Island
- Consultations at Frejus-Saint-Raphael Hospital. Frejus, France

Ms. Santamarina, Ana

- Nurse Practitioner in the Pneumology Department
- Homecare Manager en Esteve Teijin Healthcare
- Nurse at El Bierzo Hospital
- Nurse at Ponferrada II Health Center
- Nurse at Ponferrada Clinic
- Degree in Nursing from the University of León
- Master's Degree in Social and Health Sciences Research in the University of León
- Master's in Nursing Direction and Management at CEU Cardenal Herrera University
- University Expert in Digital Teaching in Nursing by CEU Cardenal Herrera University
- Senior Technician in Health Documentation

Ms. García Vañes, Cristina

- Degree in Nursing from the University of Cantabria, Spain
- Nurse in home respiratory therapies

Ms. Rojo Rojo, Angélica

- Respiratory Nurse Specialist
- Home Respiratory Therapist Nurse
- Graduate in Nursing from the University of Valladolid
- University Expert in Nursing in the Integral Care of the Respiratory Patient

Ms. De Prado de Cima, Silvia

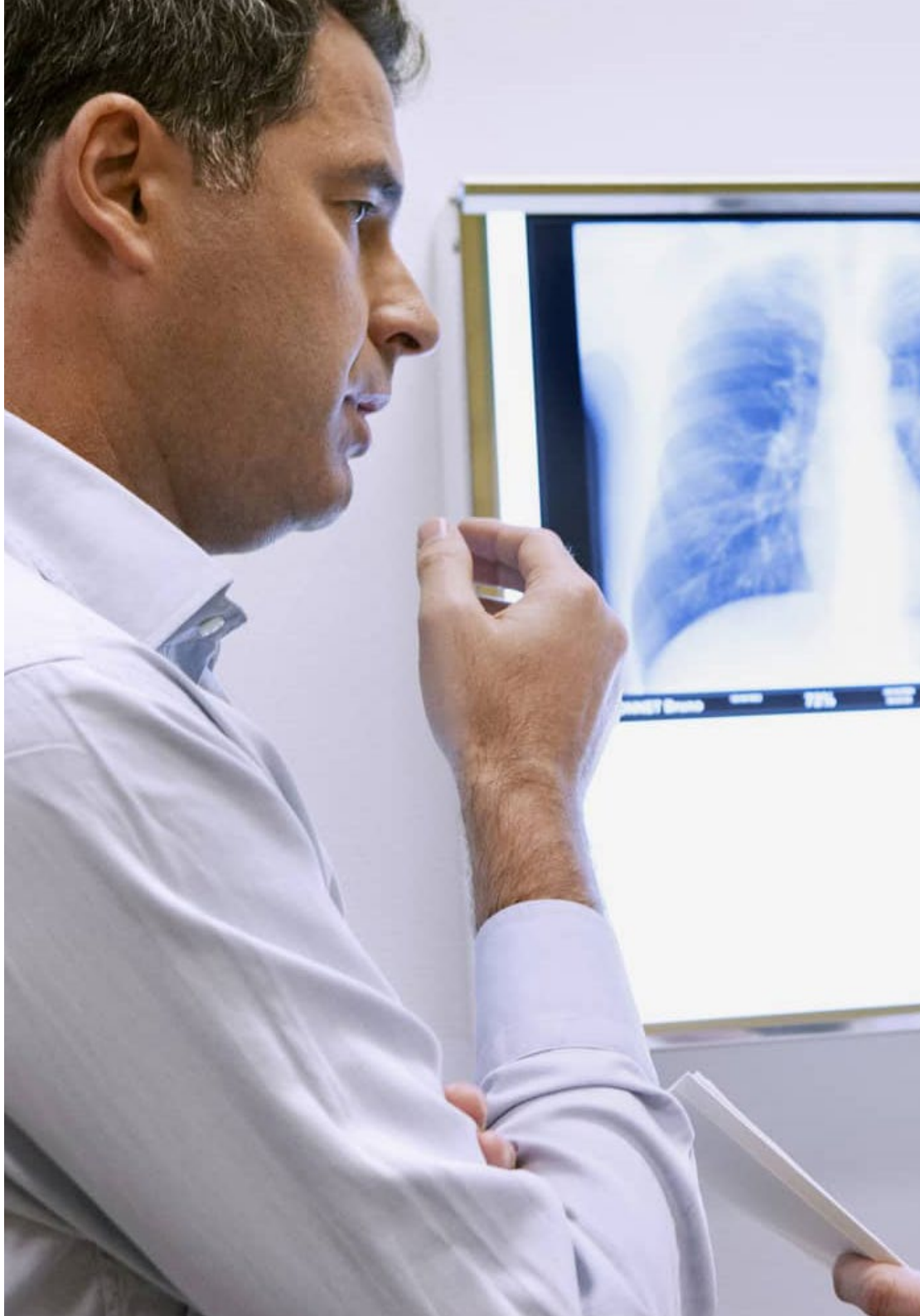
- Nurse Pulmonology, Endocrinology and Rheumatology Service at 12 de Octubre Hospital. Madrid
- Higher Technician in Dietetics and Nutrition. San Roque High School Madrid
- Internal Medicine Department, 12 de Octubre University Hospital, Spain. Madrid
- Emergency Department, 12 de Octubre University Hospital. Madrid
- ICU and Pediatrics Services, 12 de Octubre University Hospital. Madrid
- Collaborator of Nursing, Physiotherapy and Podiatry Faculties for programs in the Health sector
- University Diploma in Nursing at Complutense University of Madrid

Ms. Almeida Calderero, Cristina

- Nurse in Pulmonology, Endocrinology and Rheumatology Service at 12 de Octubre Hospital. Madrid
- Nurse Children's Surgical Unit. Gregorio Marañón Maternity Hospital Madrid
- Primary Care Nurse at Salamanca Health Center
- Nurse Intensive Care Medicine Unit. Clinical University Hospital. Salamanca
- Nurse Surgical Resuscitation Unit. Salamanca University Clinical Hospital
- Collaborator of the Nursing, Physiotherapy and Podiatry Faculty of the Complutense University of Madrid
- University Diploma in Nursing. University of Salamanca
- University Diploma in Occupational Therapy. University of Salamanca

Ms. De Prado de Cima, Silvia

- Physiotherapist in home respiratory therapies
- Physical Therapist in Neurological Pediatrics. Base Center, SORIA
- Primary Care Rehabilitation. La Milagrosa
- Rehabilitation service. Vírgen del Mirón
- Rehabilitation Service, Santa Barbara
- Physiotherapy Osteopathy and clinical physiotherapy René
- Degree in Physiotherapy from the University of Valladolid, Spain
- Master's Degree in Thoracic Physiotherapy by the Gimbernat University School and Tomás Cerdà (Campus Sant Cugat)
- Program of myotensive and manipulative techniques of the spine and pelvis. Buendía Center of the University of Valladolid
- Program IV Health and Sports Day: Sports emergencies. Soria's high performance and sports promotion center and Olympic studies center
- Environmental Health Technician. I.E.S Gregorio Fernández



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

06

Educational Plan

The curriculum of this Hybrid Professional Master's Degree consists of an academic path that will lead the graduate to deepen in the anatomo-physiology of the respiratory system and assessment of lung function, respiratory patient education, therapeutic innovation or the most common respiratory diseases. All this, supported by numerous multimedia didactic material, accessible 24 hours a day, from any digital device with internet connection. The culmination of this itinerary is the practical stay of 3 weeks with nurses specialized in this field.

A comprehensive curriculum will guide you through the latest scientific evidence surrounding the care of the lung transplant patient"

Module 1. Anatomo-Physiology of the Respiratory System and Assessment of Pulmonary Function

1.1. Respiratory Apparatus Anatomy
- 1.1.1. Upper Airway Anatomy
- 1.1.2. Lower Airway Anatomy
- 1.1.3. Lungs and Respiratory Unit
- 1.1.4. Accessory Structures: Pleura and Respiratory Musculature
- 1.1.5. Mediastinum
- 1.1.6. Pulmonary Perfusion

1.2. Pulmonary Ventilation
- 1.2.1. Respiratory Mechanism
- 1.2.2. Airway Resistance
- 1.2.3. Breathing Work
- 1.2.4. Lung Volume and Capacity

1.3. Gas Diffusion
- 1.3.1. Partial Pressure
- 1.3.2. Diffusion Rate
- 1.3.3. Relationship between Ventilation and Perfusion

1.4. Gas Transportation
- 1.4.1. Blood Oxygen Transport
- 1.4.2. Hemoglobin Dissociation Curve
- 1.4.3. Blood Coal Transport

1.5. Breathing Regulation
- 1.5.1. Respiratory Control Centers
- 1.5.2. Chemical Breathing Control
- 1.5.3. Non-Chemical Breathing Control

1.6. Breathing Characteristics
- 1.6.1. Frequency (F)
- 1.6.2. Rhythm
- 1.6.3. Depth
- 1.6.4. Adventitious Sounds
- 1.6.5. Breathing Patterns

1.7. Functional Respiratory Examination. Pulmonary Function Tests
- 1.7.1. Spirometry. Interpretation of Results
- 1.7.2. Bronchial Provocation Tests
- 1.7.3. Static Pulmonary Volumes. Body Plethysmography
- 1.7.4. Pulmonary Resistance Study
- 1.7.5. Pulmonary Elasticity and Distensibility. Compliance
- 1.7.6. Study of Respiratory Muscle Function
- 1.7.7. Pulmonary Diffusion Tests. DLCO
- 1.7.8. Gas Exchange: Arterial Gasometry. Acid-base Equilibrium
- 1.7.9. Stress Tests. 6-Minute Walk and Shuttle Test
- 1.7.10. Pulse Oximetry
- 1.7.11. Bronchoscopy
- 1.7.12. X-Ray Tests

1.8. Respiratory Patient Assessment
- 1.8.1. Quality of Life of the Respiratory Patient: Saint George Questionnaire
- 1.8.2. Nursing Assessment of the Respiratory Patient by Functional Patterns

Module 2. Common Respiratory Pathologies in Adults

2.1. Respiratory Failure
- 2.1.1. Acute Respiratory Failure
- 2.1.2. Chronic Respiratory Insufficiency

2.2. Acute Respiratory Infections in Adults
- 2.2.1. Common Cold
- 2.2.2. Influenza
- 2.2.3. Pharyngitis and Tonsillitis
- 2.2.4. Acute Bronchitis
- 2.2.5. Nursing Process in Respiratory Infections

2.3. Respiratory Diseases of Obstructive Origin
- 2.3.1. Chronic Obstructive Pulmonary Disease
- 2.3.2. Emphysema
- 2.3.3. Asthma in Adults
- 2.3.4. Cystic Fibrosis in Adults
- 2.3.5. Chronic Bronchitis
- 2.3.6. Bronchiectasis

2.4. Respiratory Diseases of Restrictive Origin
- 2.4.1. Restrictive Lung Diseases: Atelectasis, Pulmonary Edema, Pulmonary Fibrosis, Pneumonia, Sarcoidosis, ARDS, Tuberculosis
- 2.4.2. Pleural Restrictive Diseases: Pleural Effusion, Empyema, Hemothorax, Pneumothorax, Chylothorax
- 2.4.3. Thoracic-Skeletal Pathologies: Thoracic Alterations, Obesity, Scoliosis, Kyphosis, Kyphoscoliosis
- 2.4.4. Neuromuscular Disorders: Myasthenia Gravis, Guillain-Barré Syndrome, ALS, Muscular Dystrophies

2.5. Pleural Drainage
- 2.5.1. Pleural Drainage Systems
- 2.5.2. Thoracentesis
- 2.5.3. Pleural Biopsy
- 2.5.4. Pharmacological Treatments in Pleural Pathology: Pleurodesis and Fibrinolytics

2.6. Tumoral Process
- 2.6.1. Lung Cancer
- 2.6.2. Nursing Care of the Patient with Lung Cancer

2.7. Areas of Nursing Care for Respiratory Patients
- 2.7.1. Emergency Care
- 2.7.2. Hospitalization. Nosocomial Pneumonia
- 2.7.3. External Consultation
- 2.7.4. Critical Care Units
- 2.7.5. Sleep Units
- 2.7.6. Home Respiratory Therapies

Module 3. Aerosol Therapy

3.1. Basic Concepts of Aerosol Therapy
- 3.1.1. Definition
- 3.1.2. Indications and Contraindications
- 3.1.3. Drugs Used

3.2. Theoretical Principles of Aerosol Therapy
- 3.2.1. Types of Aerosol
- 3.2.2. Particle Size and Pulmonary Deposition
- 3.2.3. Dispensing Mechanism and Inhalation Technique
- 3.2.4. Geometry and Characteristics of Airway
- 3.2.5. Inspiratory Maneuver
- 3.2.6. Mucociliary Clearance

3.3. Nebulizers: Equipment and Delivery Systems
- 3.3.1. High- and Low-Flow Pneumatic Nebulizers
- 3.3.2. Ultrasonic Nebulizers
- 3.3.3. Net Nebulizers
- 3.3.4. Nebulizer Selection Criteria
- 3.3.5. Masks and Mouthpieces
- 3.3.6. Cleaning and Maintenance
- 3.3.7. Complications
- 3.3.8. Nebulizer Treatment Monitoring

3.4. Inhalation Devices
- 3.4.1. Inhalation Technique Education
- 3.4.2. Pressurized Cartridge Inhalers
- 3.4.3. Inhalation Chambers and Spacers
- 3.4.4. Dry Powder Inhalers
- 3.4.5. Soft Vapor Inhalers
- 3.4.6. Cleaning and Maintenance

3.5. Nursing Care Plan in Aerosol Therapy
- 3.5.1. NANDA Diagnosis
- 3.5.2. Nursing Outcomes and Interventions

Module 4. Oxygen Therapy

4.1. Blood Oxygen Measurement
- 4.1.1. Arterial Blood Gas Analysis Interpretation of Results
- 4.1.2. Venous Blood Gas Analysis. Interpretation of Results
- 4.1.3. Oximetry
- 4.1.4. Capnography

4.2. Chronic Home Oxygen Therapy
- 4.2.1. General Considerations
- 4.2.2. Indications and Contraindications
- 4.2.3. Side Effects and Risks

4.3. Devices for Administering Oxygen
- 4.3.1. Low- and High-Flow Systems
- 4.3.2. Oxygen Bottles
- 4.3.3. Static Concentrators
- 4.3.4. Portable Concentrators
- 4.3.5. Liquid Oxygen

4.4. Oxygen Therapy Consumables
- 4.4.1. Nasal Cannulae
- 4.4.2. Oxygen Masks
- 4.4.3. Reservoirs
- 4.4.4. Conduit Tubes
- 4.4.5. Oxygen Saving Systems

4.5. Supplementary Materials for Administering Oxygen
- 4.5.1. Flowmeters
- 4.5.2. Pressure Reducers
- 4.5.3. Humidifiers

4.6. Procedures for Administering Oxygen
- 4.6.1. Home Installation Instructions
- 4.6.2. Safety and Prevention
- 4.6.3. Patient Education
- 4.6.4. Monitoring Patients with Chronic Domiciliary Oxygen Therapy

4.7. Nursing Care Plan in Oxygen Therapy
- 4.7.1. NANDA Diagnosis
- 4.7.2. Nursing Outcomes and Interventions

Module 5. Sleep Disorders and Mechanical Ventilation

5.1. Sleep and Breathing Physiology
- 5.1.1. Snoring
- 5.1.2. The Respiratory Tract During Sleep
- 5.1.3. Sleep Phases
- 5.1.4. Hormones

5.2. Sleep Disorders Diagnosis
- 5.2.1. Symptomatology
- 5.2.2. Daytime Hypersomnolence Test
- 5.2.3. Hospital and Home Polygraphs
- 5.2.4. Differences between Polygraph and Polysomnography

5.3. Sleep Apnea
- 5.3.1. Definition of Sleep Apnea
- 5.3.2. Definition of Other Basic Concepts
- 5.3.3. Classification: Obstructive, Central and Mixed Apnea
- 5.3.4. Clinical Manifestations
- 5.3.5. Short and Long-Term Risks

5.4. Treatment of Sleep Apnea
- 5.4.1. CPAP as First Treatment Option
- 5.4.2. Alternative Treatments
- 5.4.3. Surgical Management

5.5. Pressure Titration
- 5.5.1. Manual Titration
- 5.5.2. Automatic Titration
- 5.5.3. Titration through Formulas

5.6. Nursing Care Plan in Sleep Apnea Therapy
- 5.6.1. Sleep Apnea Patient Education
- 5.6.2. NANDA Diagnosis
- 5.6.3. Nursing Outcomes and Interventions

Module 6. Non-Invasive Mechanical Ventilation

6.1. Pathophysiology
- 6.1.1. Physiological Ventilation
- 6.1.2. Physiology of Non-invasive Mechanical Ventilation
- 6.1.3. Indications and Contraindications

6.2. Ventilation Methods
- 6.2.1. Negative Pressure Ventilation
- 6.2.2. Positive Pressure Ventilation

6.3. Basic Concepts
- 6.3.1. IPAP
- 6.3.2. EPAP
- 6.3.3. Trigger
- 6.3.4. Cycling
- 6.3.5. PEEP
- 6.3.6. Inspiration/Expiration Ratio
- 6.3.7. Pressure Support
- 6.3.8. Expiratory Pressure Relief
- 6.3.9. Rise Time
- 6.3.10. Ramp
- 6.3.11. Alarms
- 6.3.12. Other Concepts

6.4. Ventilatory Modes
- 6.4.1. Spontaneous Ventilation
- 6.4.2. Synchronized Intermittent Mandatory Ventilation
- 6.4.3. Controlled or Assisted-Controlled Ventilation
- 6.4.4. Pressure-Controlled Ventilation
- 6.4.5. Volume-Controlled Ventilation
- 6.4.6. Alternative Ventilatory Modes

6.5. Physiology of Non-invasive Mechanical Ventilation
- 6.5.1. CPAP
- 6.5.2. BIPAP
- 6.5.3. Conventional Ventilator
- 6.5.4. Servo-Ventilation

6.6. Necessary Material
- 6.6.1. Masks
- 6.6.2. Tubing
- 6.6.3. Filters
- 6.6.4. Humidifiers
- 6.6.5. Other Equipment
- 6.6.6. Cleaning and Maintenance

6.7. Main Adjustment Problems and Possible Solutions
- 6.7.1. Equipment-Related
- 6.7.2. Pressure-Related
- 6.7.3. Mask-Related
- 6.7.4. Tubing-Related
- 6.7.5. Humidifier-Related
- 6.7.6. Other Complications

6.8. Equipment Installation at Patient's Home
- 6.8.1. Patient Preparation
- 6.8.2. Equipment Programming
- 6.8.3. Mask Fitting
- 6.8.4. Pressure Adaptation
- 6.8.5. Patient Education

6.9. Monitoring Patients on Non-Invasive Mechanical Ventilation
- 6.9.1. Home Visits
- 6.9.2. Importance of Therapeutic Compliance
- 6.9.3. Patient Education

6.10. Non-Invasive Mechanical Ventilation Combined with Other Treatments
- 6.10.1. NIMV and Aerosol Therapy
- 6.10.2. NIMV and Oxygen Therapy

6.11. Nursing Care Plan in NIMV Therapy
- 6.11.1. NANDA Diagnosis
- 6.11.2. Nursing Outcomes and Interventions

Module 7. Invasive Mechanical Ventilation

7.1. Fundamentals of Invasive Mechanical Ventilation (IMV)
- 7.1.1. Definition and objectives
- 7.1.2. Indications and Contraindications
- 7.1.3. Complications

7.2. IMV Devices
- 7.2.1. Types of Ventilators
- 7.2.2. IMV Modalities
- 7.2.3. Phases of the Respiratory Cycle
- 7.2.4. Common Parameters
- 7.2.5. Total Breathing Substitution
- 7.2.6. Partial Breathing Substitution

7.3. Endotracheal Intubation
- 7.3.1. Orotracheal Intubation Technique
- 7.3.2. Care and Maintenance of Intubated Patients

7.4. Suspension of Mechanical Ventilation
- 7.4.1. Pulmonary Function Study to Determine Discontinuation
- 7.4.2. Spontaneous Breathing Test
- 7.4.3. Extubation
- 7.4.4. Tracheostomy in Cases of Extubation Failure

7.5. Nursing Care Plan in IMV Therapy
- 7.5.1. Specific Nursing Care in IMV
- 7.5.2. NANDA Diagnosis
- 7.5.3. Nursing Outcomes and Interventions

Module 8. Tracheostomized Patient

8.1. Fundamentals of Tracheostomy
- 8.1.1. Definition
- 8.1.2. Types of Tracheostomies
- 8.1.3. Indications and Contraindications
- 8.1.4. Complications

8.2. Tracheostomy Cannula
- 8.2.1. Types of Cannulas
- 8.2.2. Cannula Components
- 8.2.3. Cannula Caliber Selection Criteria

8.3. Care of Tracheostomized Patients
- 8.3.1. Preoperative Care
- 8.3.2. Stoma Care
- 8.3.3. Cannula Cleaning
- 8.3.4. Changing Cannula
- 8.3.5. Secretion Aspirator
- 8.3.6. Respiratory Therapy

8.4. Tracheostomized Patient Education
- 8.4.1. Inspired Air Humidification Systems
- 8.4.2. Phonation
- 8.4.3. Nutrition and Hydration
- 8.4.4. Prevention of Respiratory Tract Infection

8.5. Aerosol Therapy, Ventilation and Oxygen Therapy in Tracheostomized Patients
- 8.5.1. Aerosol Therapy
- 8.5.2. Oxygen Therapy
- 8.5.3. Mechanical Ventilation

8.6. Decannulation
- 8.6.1. Decannulation Procedure
- 8.6.2. Patient Education

8.7. Nursing Care Plan for Tracheostomized Patients
- 8.7.1. NANDA Diagnosis
- 8.7.2. Nursing Outcomes and Interventions

Module 9. Respiratory Therapies in Pediatric Patients

9.1. Pediatric Patient Anatomophysiology
- 9.1.1. Respiratory Apparatus Anatomy in Pediatrics
- 9.1.2. Respiratory System Physiology in Pediatrics

9.2. Respiratory Pathology in Pediatric Patients
- 9.2.1. Foreign Bodies
- 9.2.2. Pharyngotonsillitis
- 9.2.3. Laryngitis
- 9.2.4. Hyaline Membrane Disease
- 9.2.5. Childhood Asthma
- 9.2.6. Bronchiolitis
- 9.2.7. Cystic fibrosis
- 9.2.8. Acute Laryngotracheobronchitis (Croup)
- 9.2.9. Neurological Disorders: Cerebral Palsy in Children
- 9.2.10. Summary of Main Respiratory Viruses in Childhood

9.3. Respiratory Therapy in Pediatrics
- 9.3.1. Respiratory Therapy in Children
- 9.3.2. Aerosol Therapy
- 9.3.3. Oxygen Therapy
- 9.3.4. Mechanical Ventilation

9.4. Support Therapies
- 9.4.1. Cough Assistance
- 9.4.2. Secretion Aspirator
- 9.4.3. SmartVest
- 9.4.4. Ambú

9.5. Counter Monitoring
- 9.5.1. Apnea Monitor
- 9.5.2. Pulse Oximetry

Module 10. Lung Transplant Patients

10.1. Basic Concepts of Lung Transplantation
- 10.1.1. Definition and Types of Lung Transplants
- 10.1.2. Indications
- 10.1.3. Risk
- 10.1.4. Postoperative Expectations

10.2. Post-Transplant Monitoring
- 10.2.1. Respiratory Therapy in Lung Transplant Patients
- 10.2.2. Control of Immunosuppressive Drug Treatment
- 10.2.3. Pulmonary Function Maintenance
- 10.2.4. Stress Tolerance
- 10.2.5. Quality of Life Improvement and Survival

10.3. Pulmonary Function Tests
- 10.3.1. Exhaled Nitric Oxide
- 10.3.2. Immunological Monitoring
- 10.3.3. Bronchoscopy

10.4. Nursing Care Plan for Transplant Patients
- 10.4.1. Assessment of Transplant Patient: Barthel Index, Modified Dyspnea Scale
- 10.4.2. NANDA Diagnosis
- 10.4.3. Nursing Outcomes and Interventions

Module 11. Health Education in Respiratory Patients

11.1. Education on One's Own Illness
- 11.1.1. Basic Knowledge Concerning Disease
- 11.1.2. Changing Habits
- 11.1.3. Establishing Healthy Habits
- 11.1.4. Self-Care Improvement

11.2. Treatment Adherence Programs
- 11.2.1. Importance of Adherence to Treatment
- 11.2.2. Adherence Problem Detection
- 11.2.3. Problem Solving

11.3. Smoking Cessation Programs
- 11.3.1. Risks of Tobacco Use
- 11.3.2. Respiratory Health Benefits of Smoking Cessation

11.4. Nutritional Education
- 11.4.1. Importance of Adequate Food and Nutrition in Respiratory Patients
- 11.4.2. BMI Calculation and Weight Loss

11.5. Promoting Physical Activity
- 11.5.1. Benefits of Physical Activity in Respiratory Patients
- 11.5.2. Classification of Types of Physical Activity

11.6. Caring for the Caregiver
- 11.6.1. Fatigue in Dependent Patient Caregivers
- 11.6.2. Caregiver Training

11.7. Psychosocial Approach Programs
- 11.7.1. Psychosocial Management of OCD Patients
- 11.7.2. Psychosocial Management of Tracheostomized Patients

Module 12. Research and Innovation in Respiratory Therapy

12.1. Application of Telemedicine in Respiratory Patient Monitoring
- 12.1.1. Pulse Oximetry Telemonitoring
- 12.1.2. Role of Telemonitoring in Acute Respiratory Disorders

12.2. Application of Telemedicine in Respiratory Patient Monitoring
- 12.2.1. Telemonitoring for Continued Patient Monitoring
- 12.2.2. Improving Therapeutic Adherence through Telemonitoring
- 12.2.3. Devices with Built-In Bluetooth

12.3. Gamification Adherence Improvement in Respiratory Patient
- 12.3.1. Gamification Definition
- 12.3.2. Application of Gamification in Health
- 12.3.3. Benefits of Gamification Therapy

12.4. Practical Tips for Conducting Research Searches
- 12.4.1. Online Database Information Search
- 12.4.2. Major Sources of Information
- 12.4.3. APA Guidelines for Article Submissions
- 12.4.4. Bibliographic Reference Styles

Module 13. Update on Coronavirus Infections

13.1. Discovery and Evolution of Coronaviruses
- 13.1.1. Discovery of Coronaviruses
- 13.1.2. Global Trends in Coronavirus Infections

13.2. Main Microbiological Characteristics and Members of the Coronavirus Family
- 13.2.1. General Microbiological Characteristics of Coronaviruses
- 13.2.2. Viral Genome
- 13.2.3. Principal Virulence Factors

13.3. Epidemiological Changes in Coronavirus Infections from its Discovery to the Present
- 13.3.1. Morbidity and Mortality of Coronavirus Infections from their Emergence to the Present

13.4. The Immune System and Coronavirus Infections
- 13.4.1. Immunological Mechanisms Involved in the Immune Response to Coronaviruses
- 13.4.2. Cytokine Storm in Coronavirus Infections and Immunopathology
- 13.4.3. Modulation of the Immune System in Coronavirus Infections

13.5. Pathogenesis and Pathophysiology of Coronavirus Infections
- 13.5.1. Pathophysiological and Pathogenic Alterations in Coronavirus Infections
- 13.5.2. Clinical Implications of the Main Pathophysiological Alterations

13.6. Risk Groups and Transmission Mechanisms of Coronaviruses
- 13.6.1. Main Sociodemographic and Epidemiological Characteristics of Risk Groups Affected by Coronavirus
- 13.6.2. Coronavirus Mechanisms of Transmission

13.7. Natural History of Coronavirus Infections
- 13.7.1. Stages of Coronavirus Infection

13.8. Latest Information on Microbiological Diagnosis of Coronavirus Infections
- 13.8.1. Sample Collection and Shipment
- 13.8.2. PCR and Sequencing
- 13.8.3. Serology Testing
- 13.8.4. Virus Isolation

13.9. Current Biosafety Measures in Microbiology Laboratories for Coronavirus Sample Handling
- 13.9.1. Biosafety Measures for Coronavirus Sample Handling

13.10. Up-to-Date Management of Coronavirus Infections
- 13.10.1. Prevention Measures
- 13.10.2. Symptomatic Treatment
- 13.10.3. Antiviral and Antimicrobial Treatment in Coronavirus Infections
- 13.10.4. Treatment of Severe Clinical Forms

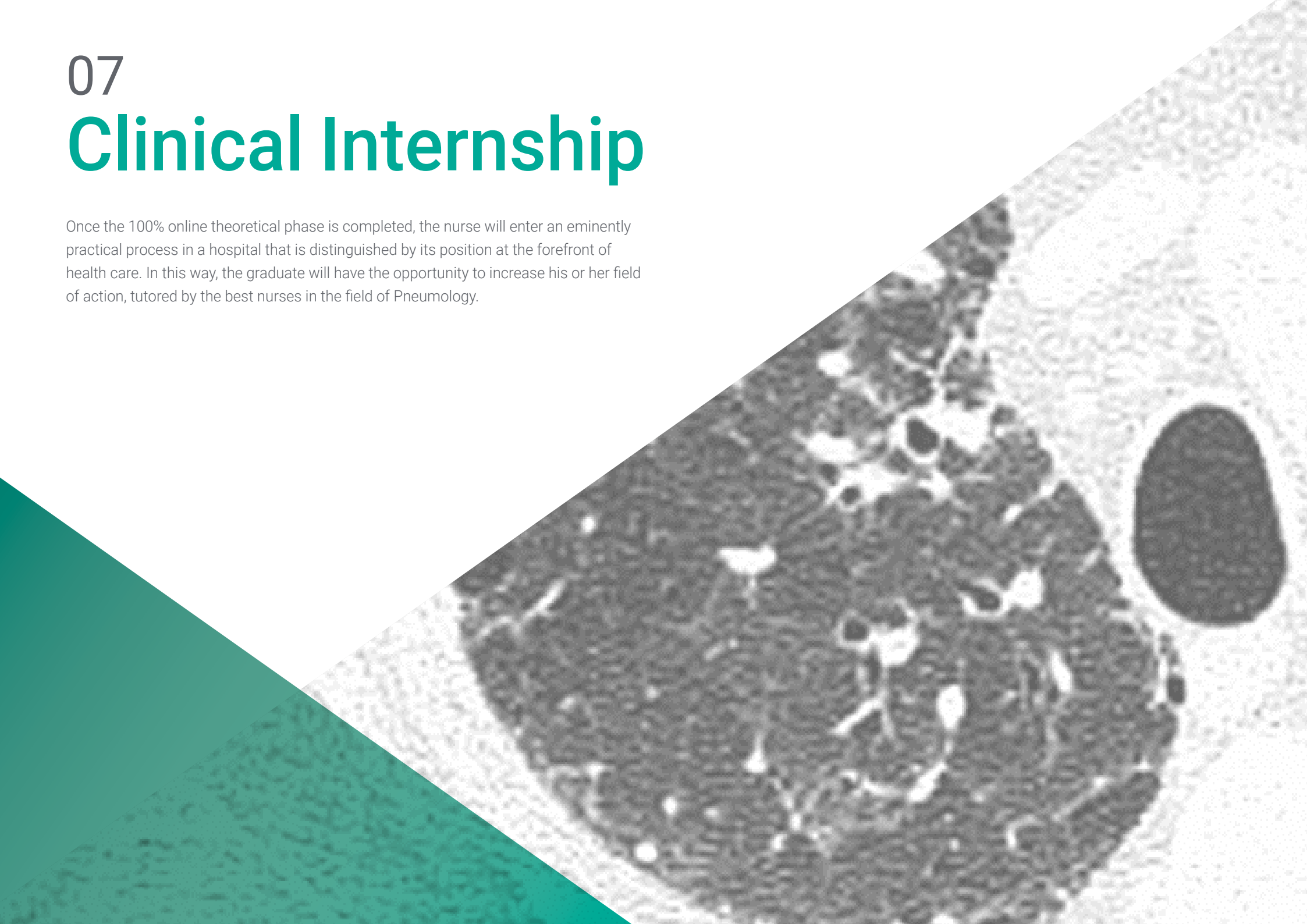
13.11. Future Challenges in the Prevention, Diagnosis, and Treatment of Coronavirus
- 13.11.1. Global Challenges for the Development of Prevention, Diagnostic, and Treatment Strategies for Coronavirus Infections

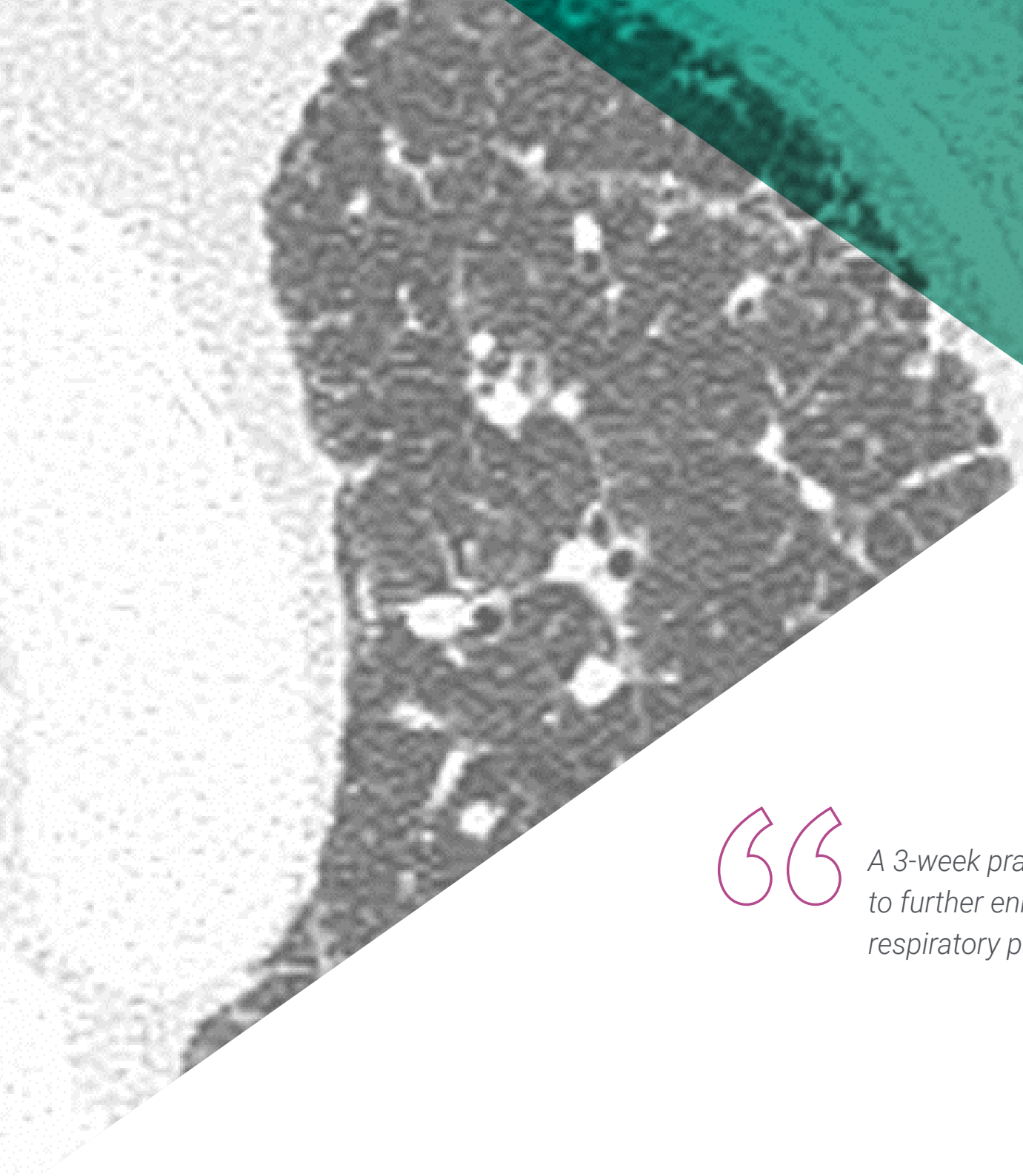
You will be up to date on the diagnostic and therapeutic challenges posed by coronavirus infections worldwide"

07

Clinical Internship

Once the 100% online theoretical phase is completed, the nurse will enter an eminently practical process in a hospital that is distinguished by its position at the forefront of health care. In this way, the graduate will have the opportunity to increase his or her field of action, tutored by the best nurses in the field of Pneumology.





A 3-week practical stay that will allow you to further enhance your ability to care for respiratory patients"

The Internship Program of this Nursing program in the Pneumology Department consists of a clinical internship in a distinguished health care facility. Thus, during 3 weeks, from Monday to Friday, with 8 consecutive hours of work alongside a specialist, the nurse will have the opportunity to test the diagnostic methods and the latest generation of therapeutic planning for each pathology for each pathology.

In this completely practical training proposal, the activities are aimed at perfecting the skills needed to provide health care in areas that require a high level of specialization. All this will allow the nurse to act with greater guarantees of safety in the management of the patient and improve his/her daily performance.

A new way of turning a healthcare environment into the ideal scenario for updating practical knowledge, surrounded at all times by nurses with a consolidated trajectory in the field of Pneumology, who will show you the protocols and procedures used in real clinical cases.

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 fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for clinical nursing practice (learning to be and learning to relate).

The procedures described below will form the basis of the practical part of the training, and their completion 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:

Incorporate the latest advances in Pneumology to your daily clinical practice thanks to this Hybrid Professional Master's Degree”

Module	Practical Activity
Techniques for pediatric respiratory patient care	Assist in the administration of inhalation therapies
	Participate in the monitoring of oxygenation in pediatric patients
	Assist in the performance of respiratory physiotherapy treatments
	Informing family members about the respiratory therapies used
Application of assisted mechanical ventilation	Perform continuous monitoring of vital signs, administration of medications as medically indicated
	Collaborate in the preparation and handling of mechanical ventilation equipment
	Monitor and maintain artificial airways
	Participate in actions aimed at the prevention of ventilation-related infections
Action in respiratory patients	Assist in the evaluation of the respiratory patient
	To administer the most advanced treatments, according to the indications of the specialists
	Work in an integrated way with the patient and the rest of the specialists
	Operate the most advanced respiratory devices and equipment for the care of patients with respiratory pathologies
Health promotion in respiratory patients	Collaborate in the provision of information on healthy habits in patients with respiratory pathologies
	Assist in the demonstration of respiratory techniques to respiratory patients
	To promote psychosocial support to the patient
	Participate in the demonstration of the use of respiratory monitoring and control devices

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 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. In this way, the professional will not have to worry in case he/she has to face 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?

TECH maintains a philosophy based on excellence and under this criterion has carried out the selection process of the centers where the nurse will be able to perform his or her practical stay. To this end, it has hospital centers where the quality of care, top-level professionals in different areas, as well as the incorporation of the most relevant medical techniques and advances in the clinical care and assistance of patients, are paramount.

Achieve the perfection of your healthcare competencies in a unique hospital center"

The student will be able to take the practical part of this Hybrid Professional Master's Degree in the following centers:

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

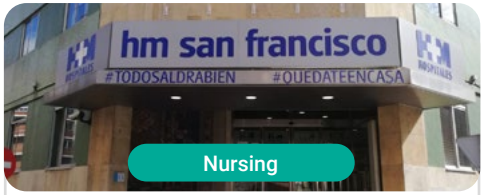
Hospital HM Rosaleda

Country: Spain
City: La Coruña

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

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

Related internship programs:
- Hair Transplantation
- Orthodontics and Dentofacial Orthopedics



Hospital HM San Francisco

Country: Spain
City: León

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

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

Related internship programs:
Update in Anesthesiology and Resuscitation
Trauma Nursing

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

Hospital HM Nou Delfos

Country: Spain
City: Barcelona

Address: Avinguda de Vallcarca, 151, 08023 Barcelona

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

Related internship programs:
- Aesthetic Medicine
- Clinical Nutrition in Medicine

Hospital HM Madrid

Country: Spain
City: Madrid

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

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

Related internship programs:
- Palliative Care
- Anaesthesiology and Resuscitation

Hospital HM Montepríncipe

Country: Spain
City: Madrid

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

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

Related internship programs:
- Palliative Care
- Aesthetic Medicine

Hospital HM Torrelodones

Country: Spain
City: Madrid

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

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

Related internship programs:
- Anaesthesiology and Resuscitation
- Palliative Care

Hospital HM Sanchinarro

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:
- Anaesthesiology and Resuscitation
- Palliative Care

Hospital HM Puerta del Sur

Country: Spain
City: Madrid

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

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

Related internship programs:
- Palliative Care
- Clinical Ophthalmology

Policlínico HM Arapiles

Country: Spain
City: Madrid

Address: C. de Arapiles, 8, 28015, Madrid

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

Related internship programs:
- Anaesthesiology and Resuscitation
Pediatric Dentistry

Nursing

Policlínico HM Cruz Verde

Country: Spain

City: Madrid

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

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

Related internship programs:
- Advanced Clinical Podiatry
- Optical Technologies and Clinical Optometry

Nursing

Policlínico HM Gabinete Velázquez

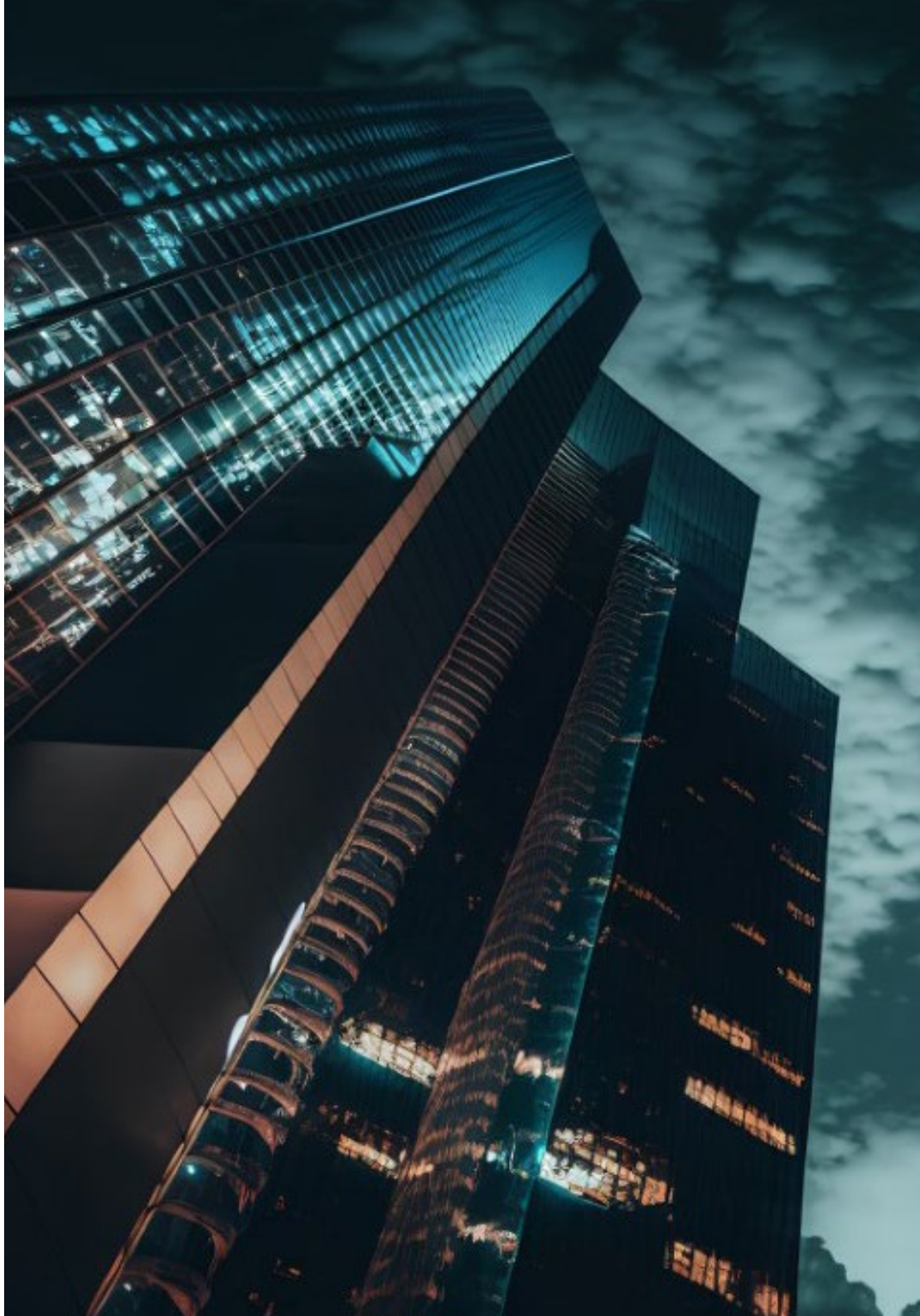
Country: Spain

City: Madrid

Address: C. de Jorge Juan, 19, 1° 28001, 28001, Madrid

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

Related internship programs:
- Clinical Nutrition in Medicine
- Aesthetic Plastic Surgery



Policlínico HM Matogrande

Country
Spain

City
La Coruña

Address: R. Enrique Mariñas Romero, 32G, 2º, 15009, A Coruña

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

Related internship programs:
Sports Physiotherapy
Neurodegenerative Diseases

Policlínico HM Rosaleda Lalín

Country
Spain

City
Pontevedra

Address: Av. Buenos Aires, 102, 36500, Lalín, Pontevedra

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

Related internship programs:
- Advances in Hematology and Hemotherapy
Neurological Physiotherapy

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Methodology

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

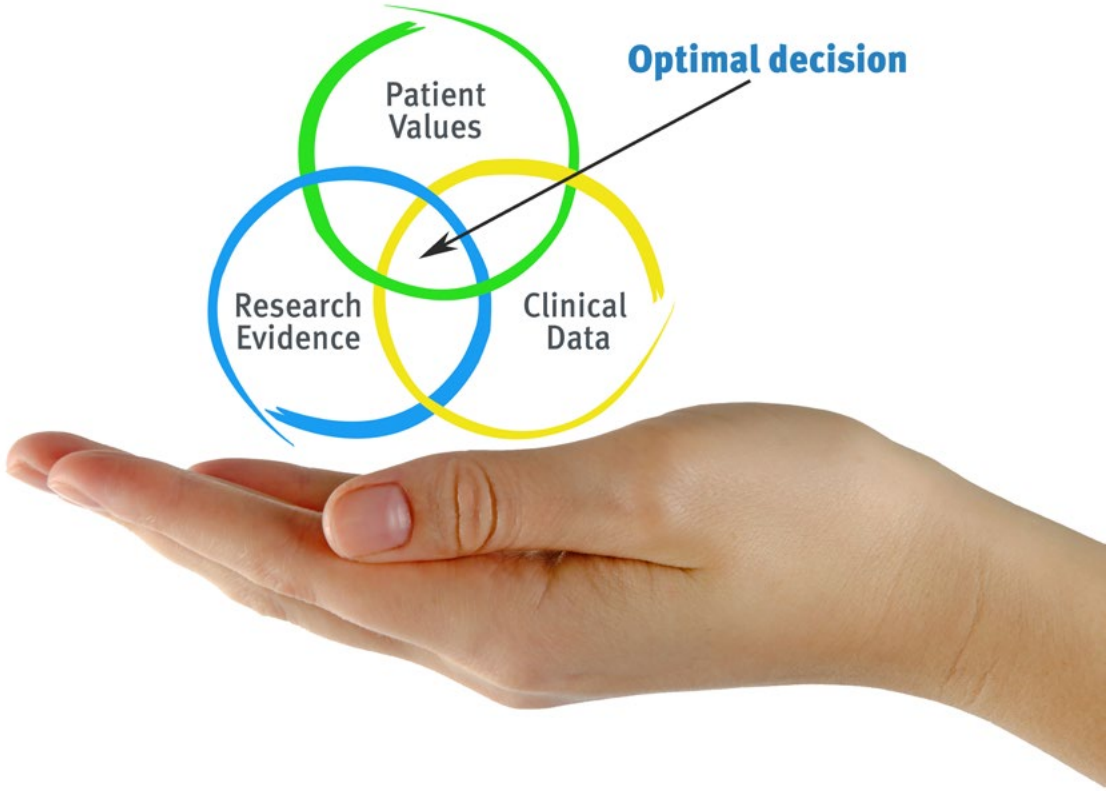
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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 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:

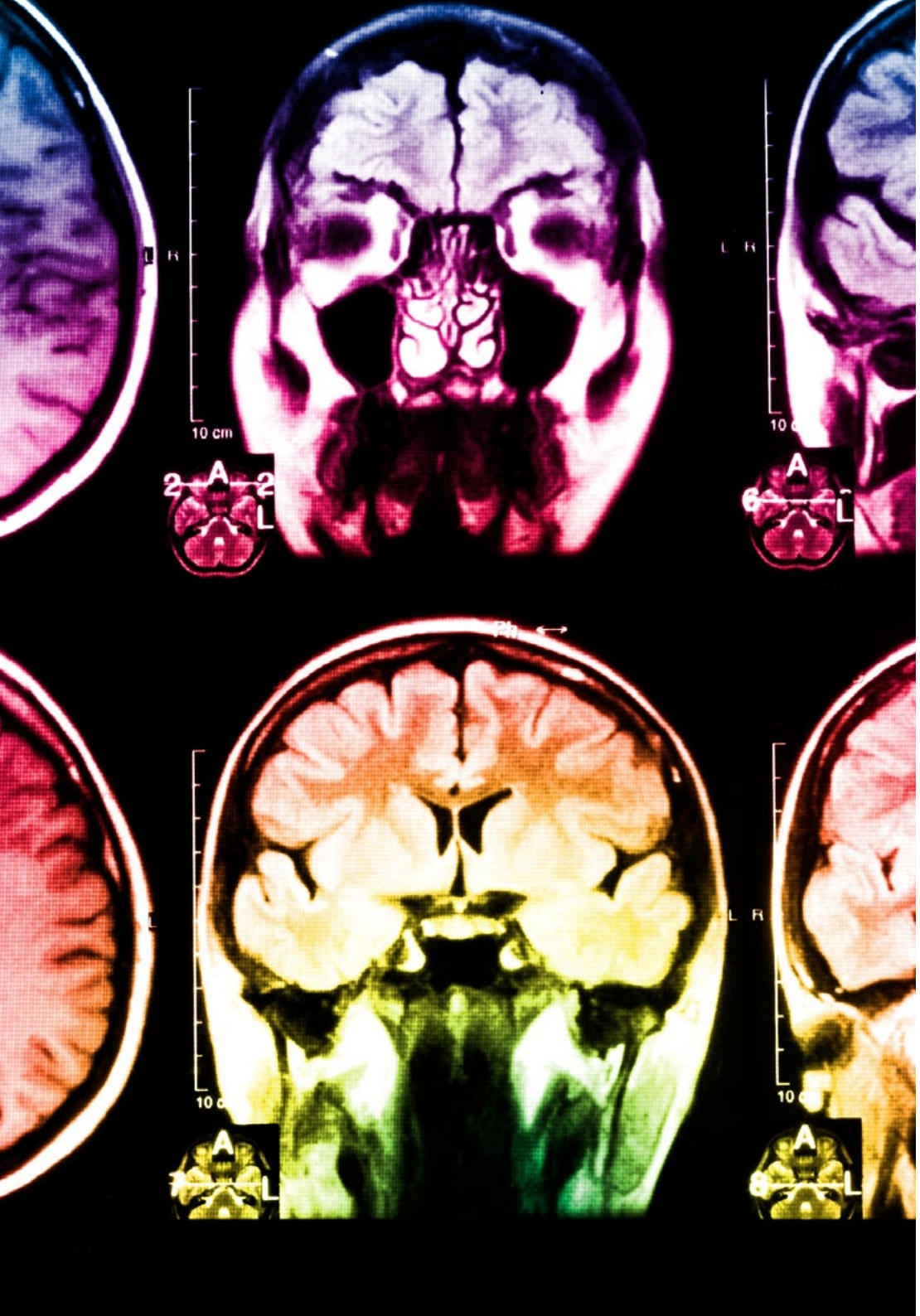
1. Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into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



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.

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.

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.

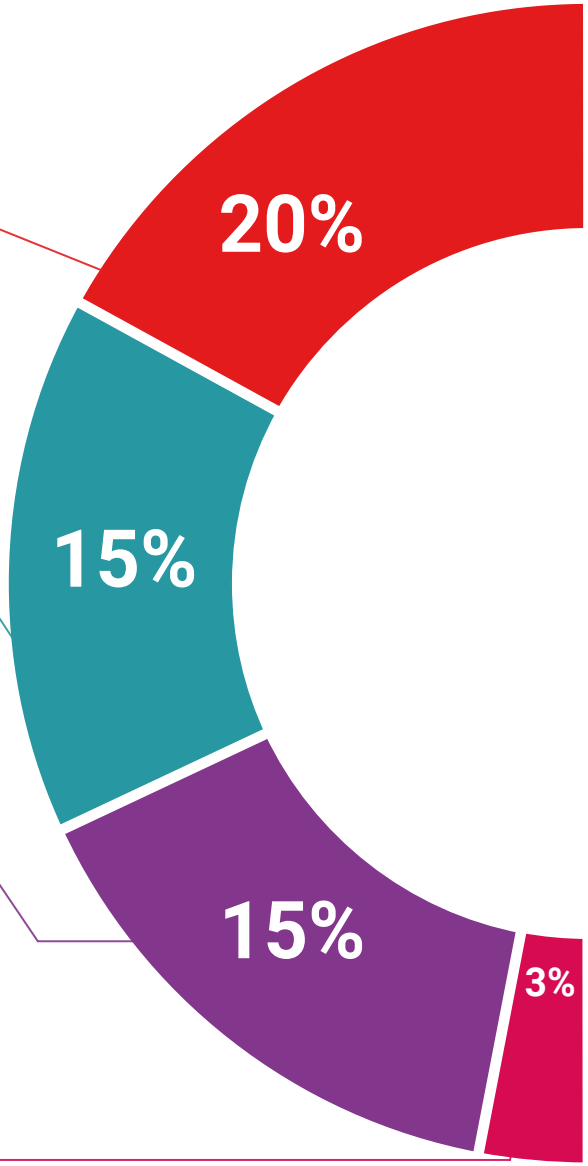
Interactive Summaries

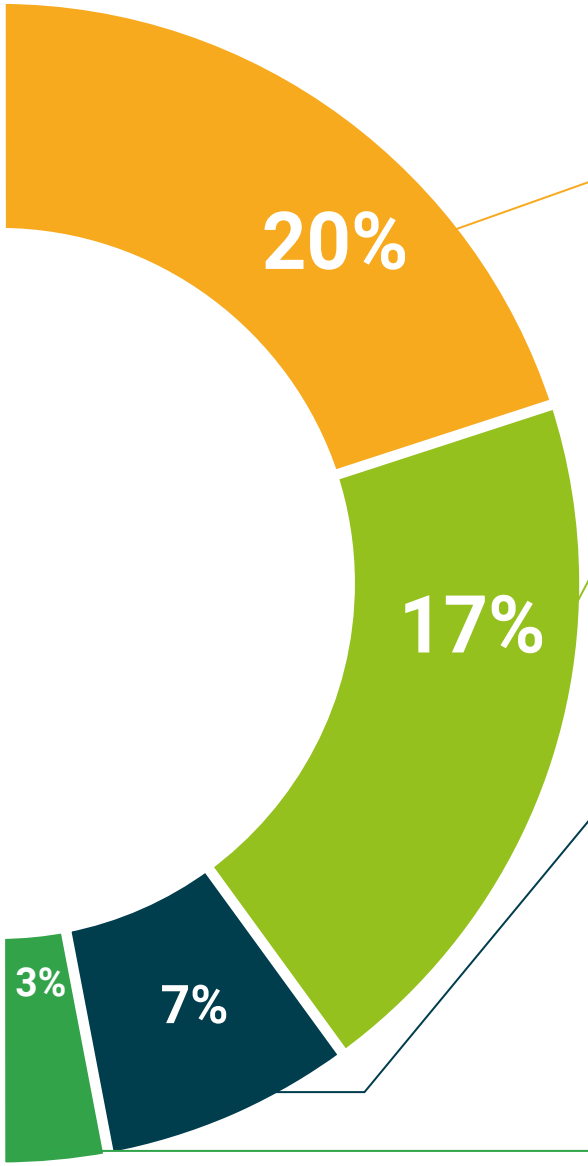
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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.





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 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 Nursing in the Pneumology Department 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 Technological University.

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 Nursing in the Pneumology Department** 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 Nursing in the Pneumology Department**

Course Modality: **Hybrid (Online + Clinical Internship)**

Duration: **12 months**

Certificate: **TECH Technological University**

Teaching Hours: **1,620 h.**

tech technological university

Awards the following

DIPLOMA

to

Mr./Ms. _____, with identification number _____.

For having successfully passed and accredited the following program

HYBRID PROFESSIONAL MASTER'S DEGREE

in

Nursing in the Pneumology Department

This is a qualification awarded by this University, with a duration of 1,620 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

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

Hybrid Professional Master's Degree in Nursing in the Pneumology Department

Subject type	Hours
Compulsory (CO)	1,500
Optional (OP)	0
External Work Placement (WP)	120
Master's Degree Thesis (MDT)	0
	Total 1,620

General Structure of the Syllabus

Year	Subject	Hours	Type
1	Anatomo-physiology of the respiratory system and assessment of pulmonary function	115	CO
1	Common Respiratory Pathologies in Adults	115	CO
1	Aerosol Therapy	115	CO
1	Oxygen Therapy	115	CO
1	Sleep Disorders and Mechanical Ventilation	115	CO
1	Non-Invasive Mechanical Ventilation	115	CO
1	Invasive Mechanical Ventilation	115	CO
1	Tracheostomized Patient	115	CO
1	Respiratory Therapies in Pediatric Patients	115	CO
1	Lung Transplant Patients	115	CO
1	Health Education in Respiratory Patients	115	CO
1	Research and Innovation in Respiratory Therapy	115	CO
	Update on Coronavirus Infections	120	CO

Tere Guevara Navarro
Dean

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*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.

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Hybrid Professional Master's Degree

Nursing in the Pneumology Department

Course Modality: **Hybrid (Online + Clinical Internship)**
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Hybrid Professional Master's Degree

Nursing in the Pneumology Department

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