



Postgraduate Diploma

Respiratory Pathology and Care of the Tracheostomized Patient in Nursing

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 19 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/nursing/postgraduate-diploma/postgraduate-diploma-respiratory-pathology-care-tracheostomized-patient-nursing

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The objective of thisPostgraduate Diploma in Respiratory Pathology and Care of the Tracheostomized Patient in Nursing is to update nurses interested in the respiratory therapies that are currently available, so that they can acquire new therapeutic skills and techniques, apply them in their clinical practice, and also contribute to the development of new research.

Patients undergoing respiratory treatment require proper therapeutic compliance, and nursing staff are responsible for empowering these patients and providing them with individualized care; tools that this Postgraduate Diploma provides to achieve excellence in care.

The program includes analysis of clinical cases elaborated by experts in respiratory therapies, explanatory videos for the different therapies, photos of the materials used for the different techniques, as well as the most recent developments and innovations.

As this is a program provided entirely online, students can organize their own time and adapt the pace of learning to their own schedule. The contents of this Postgraduate Diploma can be accessed from any computer or mobile device and be consulted at any time, as long as students have an internet connection or have previously downloaded them onto their computer.

This Postgraduate Diploma in Respiratory Pathology and Care of the Tracheostomized Patient in Nursing contains the most complete and up-to-date scientific program on the market. Its most important features include:

- » Development of clinical cases presented by experts in related, multidisciplinary areas
- » Graphic, schematic, and practical contents created in order to provide scientific and practical information on those disciplines that are essential for professional practice
- » New developments in Respiratory Pathology and Care of the Tracheostomized Patient in Nursing
- » An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- » With special emphasis on evidence-based nursing and research methodologies in Respiratory Pathology and Care of the Tracheostomized Patient in Nursing
- » All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- » Access to contents from any fixed or portable device with an internet connection



Bring your knowledge up to date through the Postgraduate Diploma in Respiratory Pathology and Tracheostomized Patient Care in Nursing"

Introduction | 07 tech



This Postgraduate Diploma is the best investment you can make when selecting an up-to-date program, for two reasons: in addition to updating your knowledge in Pediatric Respiratory and Tracheostomized Patient Care in Nursing, you will obtain a qualification from TECH Global University"

The program's teaching staff includes professionals from sector who contribute to this training program with their work experience, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersion training 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. This will be done with the help of an innovative system of interactive videos made by renowned experts.

This Postgraduate Diploma offers specialization in simulated environments, which provides an immersive learning experience designed to train for real-life situations.

It includes clinical cases that bring program contents closer to the reality of nursing care.







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General Objectives

- » Update on existing respiratory therapies in which nursing staff is involved
- » Promote strategies to provide individualized quality care for respiratory patients and to serve as a basis for achieving excellence in care
- » Provide technical skills in respiratory therapies through audiovisual means and the presentation of quality clinical cases
- » Encourage professional enhancement through specialized continued education and research



Make the most of this opportunity and get up to date on the latest developments in Respiratory Pathology and Tracheostomized Patient Care"





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

Module 2. Common Respiratory Pathologies in Adults

- » Analyze the different characteristics of normal breathing to be able to recognize breathing disorders
- » Become familiar with the different tests used to analyze pulmonary function, as well as how to interpret results
- » Update on the knowledge of different methods used to assess respiratory health in patients, through nursing procedures
- » Learn how to recognize respiratory failure and the type of nursing care to be applied
- » Identify different acute respiratory infections that can occur in adult patients, as well as their main characteristics
- » Learn to distinguish different respiratory pathologies of obstructive origin and their main characteristics
- » Learn to recognize respiratory diseases of restrictive origin and their main characteristics
- » Learn the different techniques employed to perform pleural drainage, and about other existing treatments used in pleural pathologies
- » Learn to recognize tumor pathologies and to apply appropriate nursing care for lung cancer cases
- » Analyze the different areas of nursing care for respiratory patients

Module 3. The Tracheostomized Patient

- » Describe the types of tracheostomy, as well as their indications, contraindications and complications
- » 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 the tracheostomy cannula
- » Learn to perform the secretion aspiration technique for tracheostomized patients
- » Describe the educational needs of tracheostomized patients
- » In-depth study of techniques used to apply aerosol therapy, oxygen therapy or mechanical ventilation with tracheostomized patients
- » Describe the procedure for decannulation in tracheostomized patients
- » Be familiar with the nursing care plan for tracheostomized patients

Module 4. Pulmonary Transplant Patient

- » Explain the characteristics of lung transplant patients and indications for transplantation
- » Master 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 nursing assessment methods for lung transplant patients
- » Describe nursing care plans for lung transplant patients





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Guest Director



Dr. Amado Canillas, Javier

- Nursing Supervisor at 12 de Octubre H. Hospitalization of Pneumology Endocrinology and Rheumatology
- Associate Professor of Health Sciences at the Complutense University of Madrid: Associate Clinician of Medical-Surgical Nursing
- Evaluator of teaching activities for the Technical Secretariat of the Directorate General of Planning, Research and Training of the Community of Madrid
- PhD"Outstanding Cum Laude, Complutense University of Madrid, 2014
- Degree in Nursing and Masters Degree in Research in Care from the Complutense University of Madrid
- Bachelor's Degree in Computer Science IT, Complutense University
- Currently studying a PhD in Audiovisual Communication at Complutense U
- More than 10,000 accredited teaching hours as a professor of specialized care for different organizations, in particular the Nursing College of Madrid and FUDEN

Co-Direction



Ms. Santamarina López, Ana

- · Nurse with extensive experience in home respiratory therapy
- Graduate in Nurses Medicine from the University of Leon, Spain
- Postgraduate Diploma in Digital Teaching in Nursing, CEU Cardenal Herrera University
- Master's Degree in Research in Dental Sciences, (University of León)

Professors

Ms. Castaño Menéndez, Alba

- » UCRI (Intermediate Respiratory Care Unit) at 12 Octubre University Hospital
- » Bachelor's Degree in Nursing, Complutense Univeristy, Madrid
- » Postgraduate Diploma in Respiratory Patient Care of FUDEN Graduate School of Postgraduate Studies
- » Nurse in home respiratory therapies, MMNI, MMI Completing TRD at the 12 de Octubre University Hospital
- » Emergency Department and Internal Medicine at San Carlos Clinical University Hospital

Ms. Almeida Calderero, Cristina

- » Pneumology, Endocrine and Rheumatology Service, 12 de Octubre University Hospital, Madrid
- » University Diploma in Nursing University of Salamanca
- » University Diploma in Occupational Therapy University of Salamanca
- » Collaborator of the Faculty of Nursing, Physiotherapy and Podiatry at the Complutense University of Madrid
- » Pediatric Surgical Unit Gregorio Marañón Maternity Hospital, Madrid
- » Intensive Care Unit. Clinical University Hospital Salamanca
- » Surgical Resuscitation Unit Clinical University Hospital Salamanca
- » Nurse in Primary Care in Health Center in Salamanca

Ms. De Prado de Cima, Silvia

- » Graduate in Physiotherapy from the University of Valladolid, Spain
- » Master's Degree in Thoracic Physiotherapy by Gimbernat and Tomás Cerdà University (Campus Sant Cugat)
- » Physiotherapist in home respiratory therapies

Ms. García Vañes, Cristina

- » Graduate in Nurses Medicine from the University of Cantabria, Spain
- » Nurse in home respiratory therapies

Ms. Rojo Rojo, Angélica

- » Graduate in Nurses Medicine from the University of Valladolid, Spain
- » Postgraduate Diploma in Nursing in the Integral Care of Respiratory Patients
- » Nurse in home respiratory therapies

Mr. Amado Durán, Alfredo

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

Ms. García Pérez, Silvia

- » Pneumology, Endocrine and Rheumatology Service, 12 de Octubre University Hospital, Madrid
- » Senior Technician in Dietetics and Nutrition I.E.S San Roque Madrid
- » Certificate in Nursing from the Complutense University, Madrid
- » Nuclear Medicine Service at the 12 de Octubre University Hospital, Madrid
- » Neurosurgery Department, 12 de Octubre University Hospital, Madrid.
- » UCI and Pediatrics Service, 12 de Octubre University Hospital, Madrid
- » Member of teaching staff at the Faculty of Nursing, Physiotherapy and Podiatry, Complutense University, Madrid, for clinical practice sessions of the Nursing degree





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Module 1. Anatomo-Physiology of the Respiratory System and Assessment of the 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 Rumbling
 - 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
- .8. Assessment of Respiratory Patients
 - 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



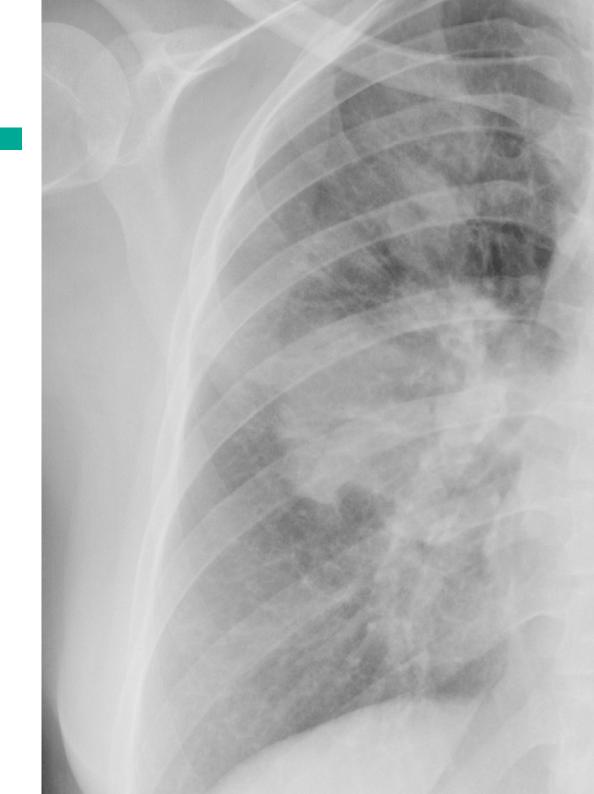
Structure and Content | 19 tech

- 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 Processes
 - 2.6.1. Lung Cancer
 - 2.6.2. Nursing Care of Patients with Lung Cancer
- 2.7. Areas of Nursing Care for Respiratory Patients
 - 2.7.1. Urgencies and 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

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Module 3. Tracheostomized Patient

- 3.1. Fundamentals of Tracheostomy
 - 3.1.1. Definition
 - 3.1.2. Types of Tracheostomy
 - 3.1.3. Indications and Contraindications
 - 3.1.4. Complications
- 3.2. Tracheostomy Cannulae
 - 3.2.1. Types of Cannulae
 - 3.2.2. Cannula Components
 - 3.2.3. Cannula Caliber Selection Criteria
- 3.3. Care of Tracheostomized Patients
 - 3.3.1. Preoperative Care
 - 3.3.2. Stoma Care
 - 3.3.3. Cannula Cleaning
 - 3.3.4. Changing Cannulae
 - 3.3.5. Secretion Aspirator
- 3.4. Tracheostomized Patient Education
 - 3.4.1. Inspired Air Humidification Systems
 - 3.4.2. Phonation
 - 3.4.3. Nutrition and Hydration
 - 3.4.4. Prevention of Respiratory Tract Infection
- 3.5. Aerosol Therapy, Ventilation and Oxygen Therapy in Tracheostomized Patients
 - 3.5.1. Aerosol Therapy
 - 3.5.2. Oxygen Therapy
 - 3.5.3. Mechanical Ventilation
- 3.6. Decannulation
 - 3.6.1. Decannulation Procedure
 - 3.6.2. Patient Education
- 3.7. Nursing Care Plan for Tracheostomized Patients
 - 3.7.1. NANDA Diagnosis
 - 3.7.2. Nursing Outcomes and Interventions





Structure and Content | 21 tech

Module 4. Pulmonary Transplant Patient

- 4.1. Basics of Lung Transplantation
 - 4.1.1. Definition and Types of Pulmonary Transplants
 - 4.1.2. Indications
 - 4.1.3. Risk
 - 4.1.4. Post-Operative Expectations
- 4.2. Post-Transplant Monitoring
 - 4.2.1. Control of Immunosuppressive Drug Treatment
 - Pulmonary Function Maintenance
 - Stress Tolerance
 - 4.2.4. Life Quality Improvement and Survival
- Pulmonary Function Tests
 - 4.3.1. Nitric Oxide Synthase
 - 4.3.2. Immunological Monitoring
 - 4.3.3. Bronchoscopy
- Nursing Care Plan for Transplant Patients
 - 4.4.1. Assessment of Transplant Patient: Barthel Index, Modified Dyspnea Scale
 - 4.4.2. NANDA Diagnosis
 - 4.4.3. Nursing Outcomes and Interventions

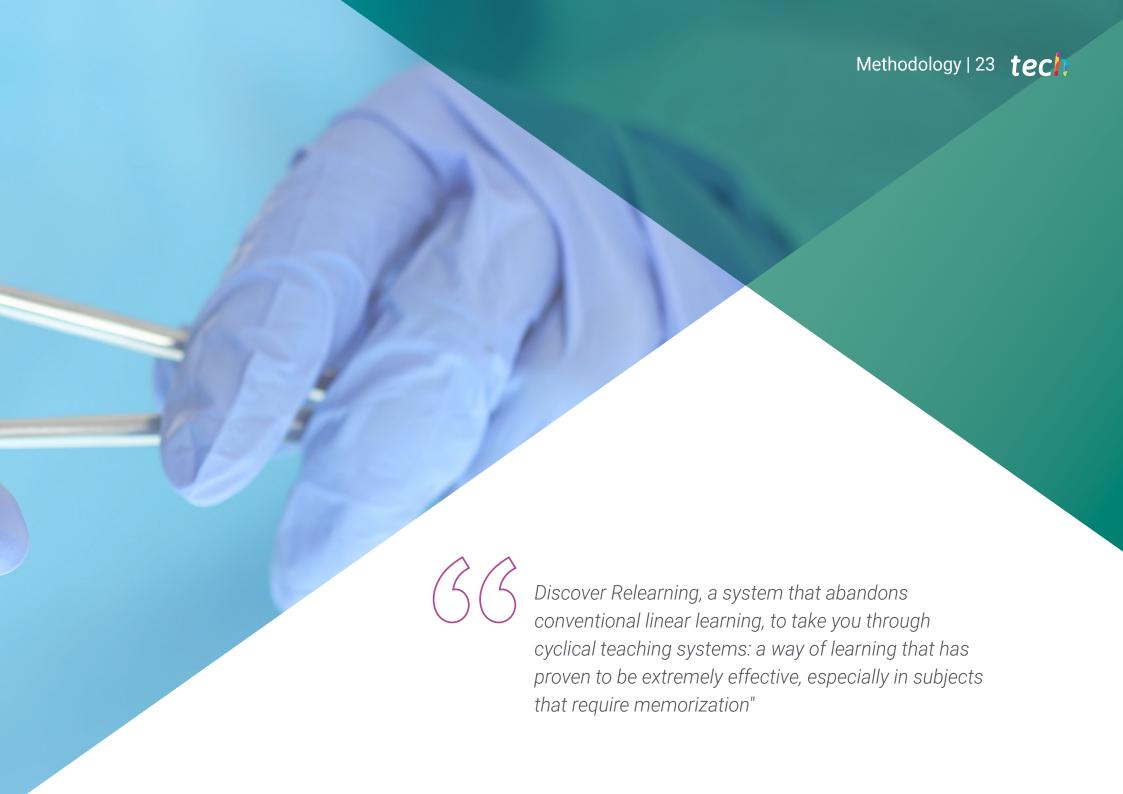


A unique, key, and decisive training experience that will training experience that will boost your professional development"



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.

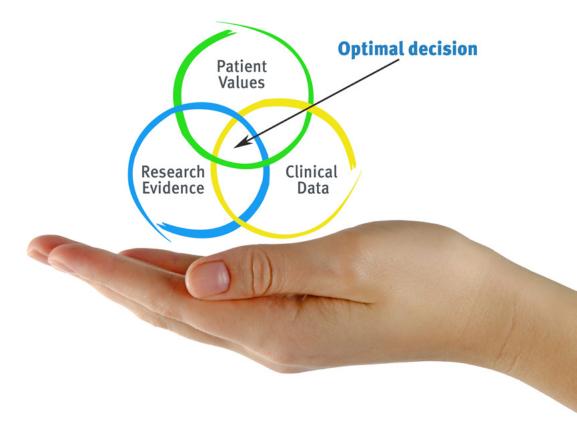


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At TECH Nursing School we use the Case Method

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:

- 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.



Methodology | 27 tech

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

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

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

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

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

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.







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This private qualification will allow you to obtain a **Postgraduate Diploma in Respiratory Pathology** and **Care of the Tracheostomized Patient in Nursing** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Diploma in Respiratory Pathology and Care of the Tracheostomized Patient in Nursing

Modality: online

Duration: 6 months

Accreditation: 19 ECTS



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

Postgraduate Diploma in Respiratory Pathology and Care of the Tracheostomized Patient in Nursing

This is a private qualification of 570 hours of duration equivalent to 19 ECTs, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



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

health

guarantee

technology

technology

university

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