Postgraduate Certificate
Care in Non-Invasive Mechanical Ventilation

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Postgraduate Certificate

Care in Non-Invasive Mechanical Ventilation

- Modality: **online**
- Duration: **6 weeks**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/us/medicine/postgraduate-certificate/care-non-invasive-mechanical-ventilation**

Index

01

Introduction

The care provided to patients undergoing Non-Invasive Mechanical Ventilation is continually evolving with the aim of improving the quality of life of patients during their hospital stay. Along these lines, through cutting-edge monitoring techniques and management of respiratory complications, their well-being is ensured, and clinical complications are prevented. Consequently, it is imperative for specialists to identify these advancements in patient care to avoid falling behind in the progression of their field. For this reason, TECH has designed this program, which allows medical professionals to delve into sophisticated methods of monitoring oxygenation and ventilation, as well as measures to prevent gastric content aspiration. This can be done through an online methodology that does not confine participants to preset schedules.

Identify the state-of-the-art methods for monitoring vital signs, oxygenation, and ventilation of the patient through this Postgraduate Certificate"

Provide comprehensive care adapted to the needs of people who have undergone non-invasive mechanical ventilation is essential to ensure their well-being. As a result, the care applied to these hospitalized individuals is continually evolving to guarantee their optimal recovery and prevent complications that may affect their physical integrity. This way, staying updated in this essential field is paramount for pulmonologists who wish to be at the forefront of medicine.

Given this context, TECH has chosen to create this certificate, focused on providing students with the most advanced knowledge in Non-Invasive Mechanical Ventilation Care. Over 6 weeks of intensive education, students will delve into advanced techniques for monitoring vital signs, oxygenation, and ventilation of the patient. Likewise, they will become familiar with cutting-edge methods for mobilizing and removing secretions or developing an individualized care plan for individuals undergoing NIMV.

Thanks to the fact that this program is developed through a 100% online methodology, students will be able to develop their own study schedules and update their knowledge without the need to limit themselves to uncomfortable and tight schedules. Additionally, they will have access to educational materials prepared by leading experts in Non-Invasive Mechanical Ventilation Care, who have extensive hospital experience. As a result, the knowledge they impart to students will be highly applicable to daily practice.

This **Postgraduate Certificate in Care in Non-Invasive Mechanical Ventilation** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by specialists in Pulmonology
- 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
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- 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

Throughout this academic period, you will deepen in the updated techniques of assessment and removal of respiratory secretions of the patient"

Get updated in Non-Invasive Mechanical Ventilation Care by physicians and nurses with extensive experience in this field"

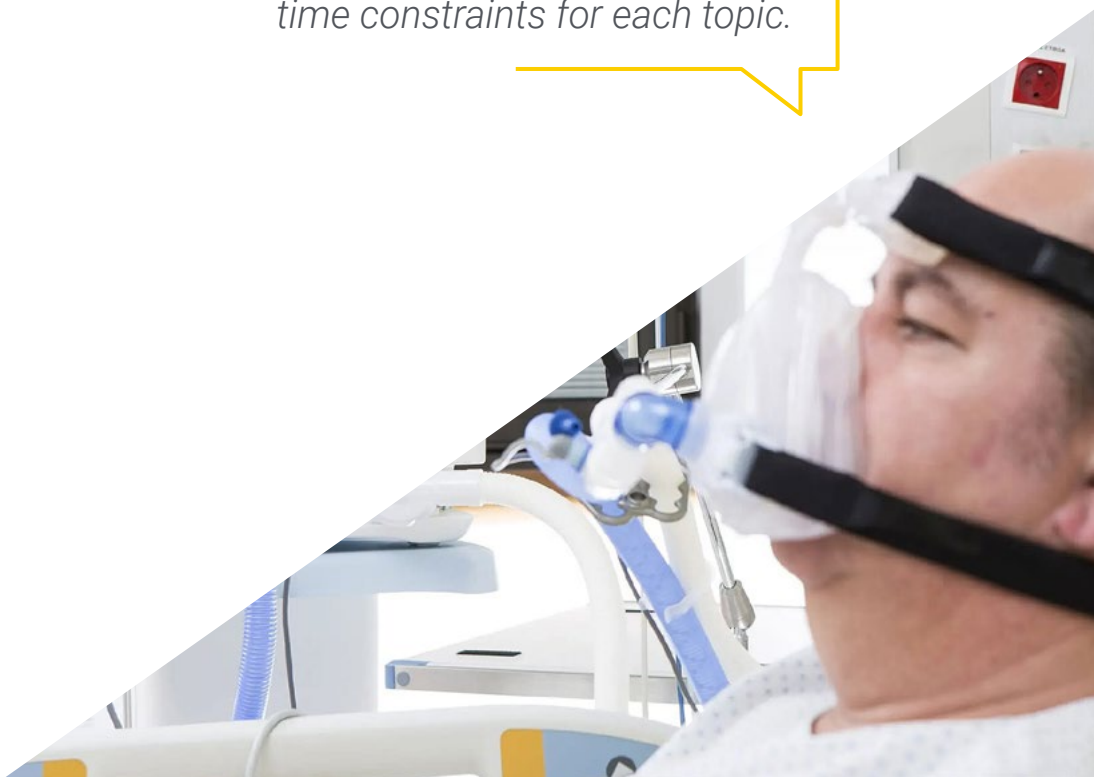
Thanks to this Postgraduate Certificate, you will become familiar with the updated procedures for creating an individualized care plan for patients undergoing NIMV.

TECH's revolutionary Relearning methodology allows you to study at your own pace without time constraints for each topic.

The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, 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 immersive education programmed to learn 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 during the academic year For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.



02

Objectives

The Postgraduate Certificate in Non-Invasive Mechanical Ventilation Care has been created to ensure that neurologists stay updated in this field. Throughout the academic period, you will delve into the latest recommendations for developing an individualized care plan for NIMV patients or measures to prevent infection transmission. Furthermore, you will do so in just 6 weeks and with the guidance of leading experts in the field.

Explore advanced Non-Invasive Mechanical Ventilation Care and position yourself at the forefront of Pulmonology"

General Objectives

- Understand the importance and role of Non-Invasive Mechanical Ventilation in the treatment of acute and chronic respiratory pathologies
- Acquire knowledge of the updated indications and contraindications for the use of Non-Invasive Mechanical Ventilation, as well as the different types of devices and ventilation modes
- Develop skills and competencies in monitoring patients with Non-Invasive Mechanical Ventilation, including data interpretation and the detection and prevention of complications
- Explore cutting-edge technologies used in the telemonitoring of patients with Non-Invasive Mechanical Ventilation and the ethical and legal aspects related to its use
- Delve into the key differences in Non-Invasive Mechanical Ventilation in Pediatrics
- Delve your understanding of the ethical aspects related to the management of patients requiring NIV

Specific Objectives

- Monitor the patient's vital signs and adjust monitoring as needed
- Monitor patient oxygenation and ventilation and adjust mechanical ventilation according to patient needs
- Evaluate and manage respiratory secretions to prevent aspiration
- Develop an individualized care plan for patients on Non-Invasive Mechanical Ventilation

Thanks to this certificate, you will learn the most advanced measures to prevent the transmission of infections in the NIMV patient"

03

Course Management

Thanks to TECH's unwavering commitment to maintaining the high academic standards of its qualifications, this program has a teaching team composed of the best active specialists in Neurology, as well as renowned experts in Respiratory Nursing. These professionals carry out their duties in leading hospitals across Spain. In this way, the knowledge conveyed to the student will be in line with the evolution of Care in Non-Invasive Mechanical Ventilation.

Complete your update on Care in Non-Invasive Mechanical Ventilation alongside professionals with extensive hospital experience"

Management

Dr. Landete Rodríguez, Pedro

- Coordinator of the Basic Ventilation Unit at La Princesa University Hospital
- Pulmonologist at La Princesa University Hospital
- Pulmonologist at Blue Healthcare
- Researcher in various research groups
- Professor in undergraduate and postgraduate university studies
- Author of numerous scientific publications in international journals and contributor to several book chapters
- Speaker at international medical congresses
- Doctor *Cum Laude* from the Autonomous University of Madrid

Professors

Ms. González González, María

- Clinical Nurse
- Clinical Nurse in the Intermediate Respiratory Care Unit at the Hospital de La Princesa
- Clinical tutor in Nursing degree studies
- Master's Degree in Clinical Nutrition from the University of Granada
- Postgraduate Diploma in Nursing Research from the Universidad Católica de Ávila

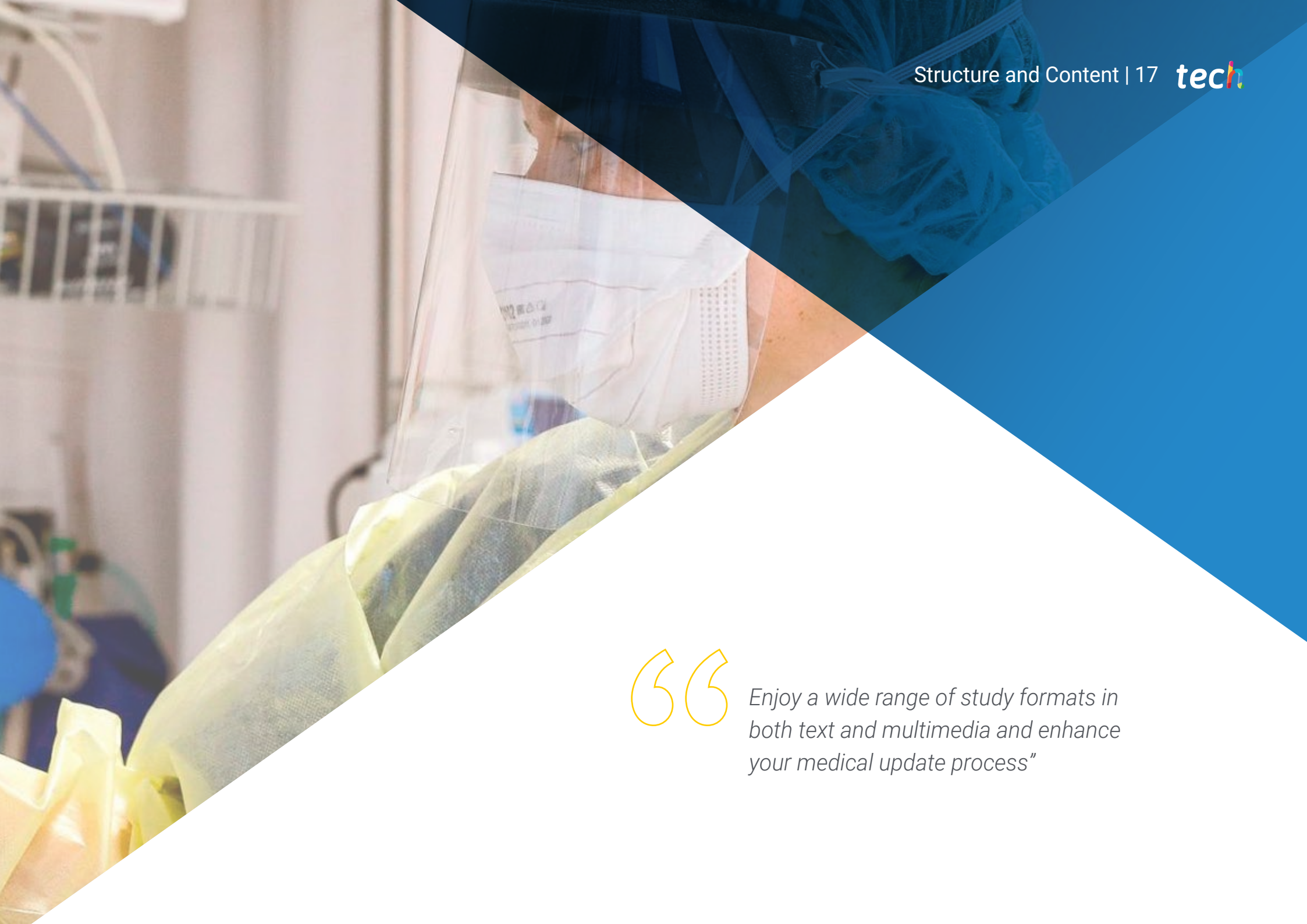
Ms. Nieves Fernández, Laura

- Nurse
- Nurse at the Hospital Universitario de Tomelloso
- Clinical Nursing Teacher in university degree programs
- Collaborating member of the Protocol and Clinical Guidelines Committee at the Hospital Universitario de Tomelloso
- Master's Degree in Specialized Nursing Care in Emergencies
- Graduate in Nursing from the Complutense University of Madrid

04

Structure and Content

The syllabus of this Diploma has been designed to allow the specialist to delve into advanced Non-Invasive Mechanical Ventilation Care, exploring cutting-edge techniques for oxygenation monitoring and managing complex patient situations. Each of its topics offers excellent educational resources available in a wide range of text and multimedia formats, highly diverse from each other. This way, following a 100% online methodology, the physician will benefit from an update tailored to their personal and academic needs.



Enjoy a wide range of study formats in both text and multimedia and enhance your medical update process"

Module 1. Care in Non-Invasive Mechanical Ventilation

1.1. Monitoring of the Patient's Vital Signs
- 1.1.1. Importance of Monitoring Vital Signs
- 1.1.2. Types of Vital Signs to Monitor
- 1.1.3. Analysis and Interpretation of Obtained Values
- 1.1.4. Adjusting Monitoring According to the Patient's Needs

1.2. Monitoring Oxygenation and Ventilation of the Patient
- 1.2.1. Techniques for Monitoring Oxygenation and Ventilation
- 1.2.2. Interpreting Pulse Oximetry and Capnography Values
- 1.2.3. Early Detection of Hypoxia and Hypercapnia
- 1.2.4. Adjusting Mechanical Ventilation According to the Patient's Needs

1.3. Monitoring of Interface and Ventilation Circuit
- 1.3.1. Identification and Prevention of Leaks in the Interface and Circuit
- 1.3.2. Cleaning and Maintenance of the Interface and Circuit
- 1.3.3. Changing and Selecting the Interface According to the Patient's Needs

1.4. Management of Respiratory Secretions
- 1.4.1. Assessment Techniques for Respiratory Secretions
- 1.4.2. Methods for Mobilizing and Removing Secretions
- 1.4.3. Precautions and Measures to Avoid Aspiration of Secretions
- 1.4.4. Selection and Adjustment of Secretion Suction Devices

1.5. Skin Care at the Interface Site
- 1.5.1. Assessment and Prevention of Skin Lesions at the Interface Site
- 1.5.2. Skin Cleaning and Care Techniques at the Interface Site
- 1.5.3. Dressings and Wound Care for Skin Lesions

1.6. Prevention of Gastric Content Aspiration
- 1.6.1. Assessment of Aspiration Risk
- 1.6.2. Prevention Measures for Aspiration in Non-Invasive Mechanical Ventilation Patients
- 1.6.3. Types of Tubes and Devices Used for Patient Nutrition and Feeding

1.7. Patient and Family Education on Non-Invasive Mechanical Ventilation
- 1.7.1. Importance of Patient and Family Education
- 1.7.2. Information to Be Provided to the Patient and Their Family About the Use of Non-Invasive Mechanical Ventilation

1.7.3. Management of Emergencies and Unexpected Situations by the Patient and Their Family
1.7.4. Strategies to Promote Adherence to Non-Invasive Mechanical Ventilation
1.8. Individualized Care Plan for Patients on Non-Invasive Mechanical Ventilation
1.8.1. General Considerations in Developing the Care Plan
1.8.2. Nursing Assessment of Patients on NIMV
1.8.3. NANDA Diagnosis
1.8.4. Nursing Outcomes and Interventions
1.9. Tracheostomy care and treatment
1.9.1. Tracheostomy cleaning and healing techniques
1.9.2. Selection and adjustment of the tracheostomy device
1.9.3. Prevention and treatment of complications associated with tracheostomy
1.10. Infection transmission prevention measures
1.10.1. Standard Precautions
1.10.2. Types of hospital isolation
1.10.3. NIMV patient specifications

Take this program and get the opportunity to update your skills in Non-Invasive Mechanical Ventilation Care online and without time constraints"

05

Methodology

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

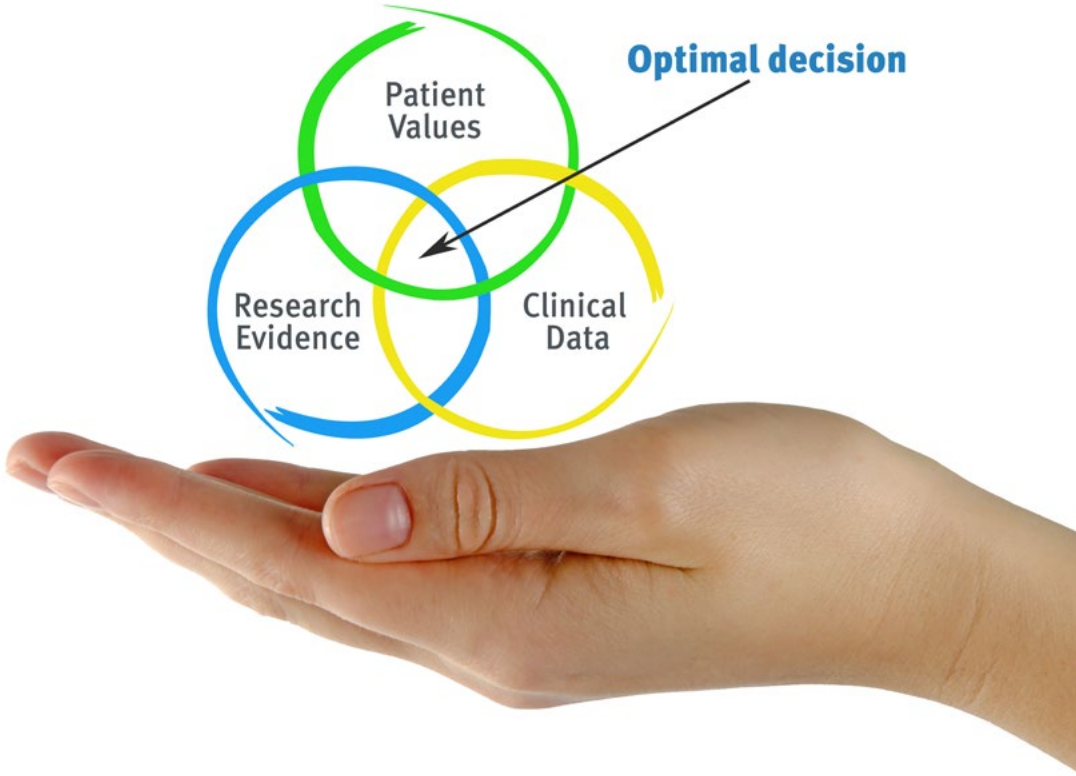
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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

At TECH we use the Case Method

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

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



According to Dr. 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, trying to recreate the real conditions in the physician's professional practice.

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

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

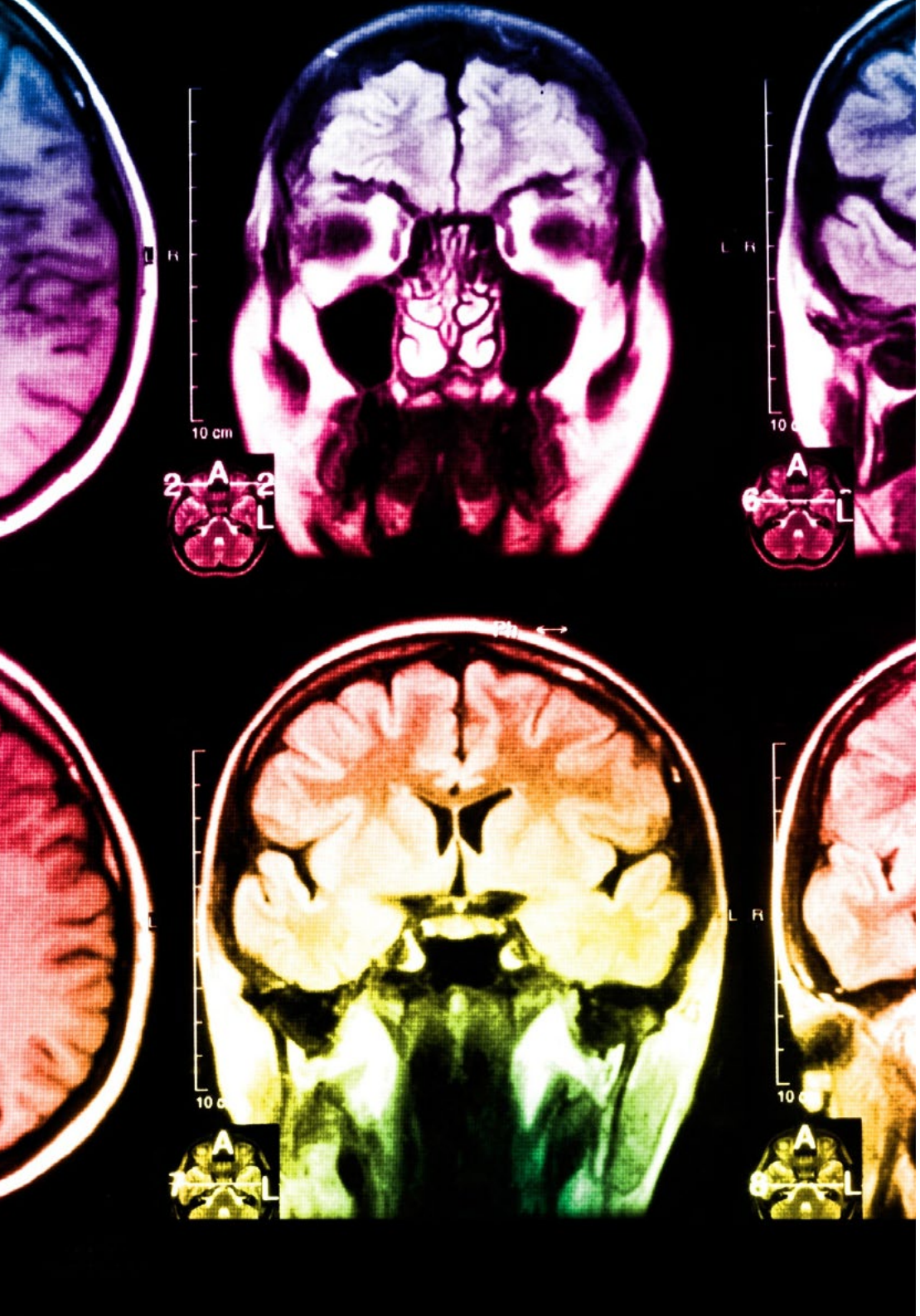
1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better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

Relearning Methodology

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

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

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



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

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

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

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

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

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

Study Material

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

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

Surgical Techniques and Procedures on Video

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

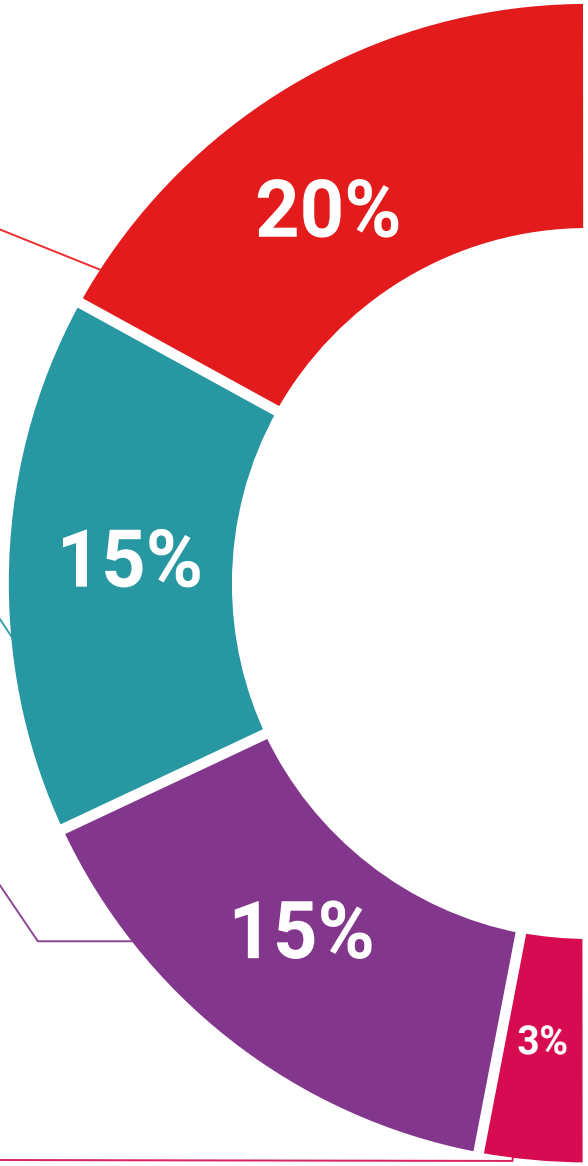
Interactive Summaries

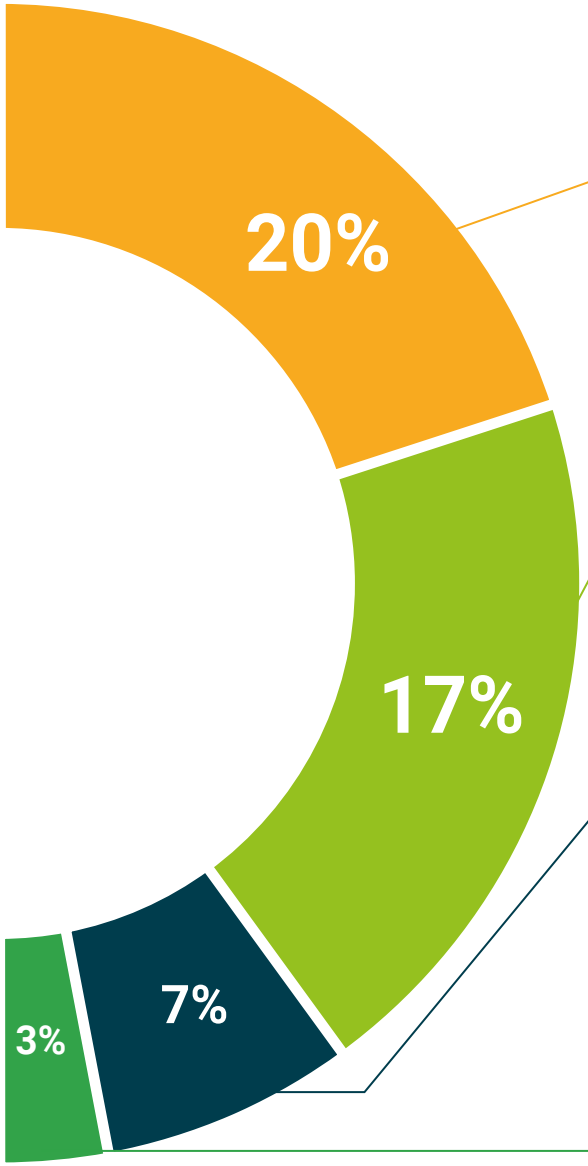
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

Additional Reading

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





Expert-Led Case Studies and Case Analysis

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

Testing & Retesting

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

Classes

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

Quick Action Guides

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

06

Certificate

The Postgraduate Certificate in Care in Non-Invasive Mechanical Ventilation guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

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

This **Postgraduate Certificate in Care in Non-Invasive Mechanical Ventilation** contains the most complete and up-to-date scientific on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in Care in Non-Invasive Mechanical Ventilation**

Official Nº of Hours: **150 h.**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Awards the following

DIPLOMA

to

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

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Care in Non-Invasive Mechanical Ventilation

This is a qualification awarded by this University, equivalent to 150 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

*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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