

Postgraduate Certificate

Monitoring in Home
Chronic NIMV





Postgraduate Certificate Monitoring in Home Chronic NIMV

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

Website: www.techtute.com/us/medicine/postgraduate-certificate/monitoring-home-chronic-nimv

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01

Introduction

Telemonitoring is an advanced tool that has contributed to optimizing the remote supervision and monitoring of patients. Through its use, it is possible to establish constant monitoring of the health status of patients undergoing Home Chronic Ventilation without them having to visit the clinic, thus contributing to their well-being and comfort. Therefore, understanding its operation is essential for any specialist who does not want to lag behind the latest scientific advances. For this reason, this academic institution has created this certification, which allows the student to delve deeply into the cutting-edge technologies used in telemonitoring and sophisticated techniques for continuous patient evaluation. Additionally, this update can be completed online, without being restricted to predetermined schedules





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This Postgraduate Certificate will allow you to gain an in-depth understanding of the cutting-edge technologies used in the Telemonitoring of patients with Home Chronic Ventilation”

Patients with Home Chronic Ventilation often face difficulties in visiting their medical center. As a result, revolutionary Telemonitoring devices have been developed, which enable remote monitoring of the patient's health status. This way, it is possible to ensure their physical well-being without compromising their quality of life. Given the benefits these monitoring strategies provide for these individuals, a deep understanding of them is essential for the specialist who aims to stay at the forefront of the medical field.

That is why TECH Technological University has designed this Postgraduate Certificate, through which you will receive an excellent update on Monitoring in Home Chronic NIMV. Over 150 hours of study, you will explore the functionality of cutting-edge technologies used in Telemonitoring, as well as the updated advantages and disadvantages of their use in different types of patients. You will also delve into the keys to implementing teleconsultation in Non-Invasive Mechanical Ventilation, identifying the most recent protocols and guidelines for this type of care while addressing its possible limitations.

All this, without the need to make uncomfortable daily commutes to a study center, since this degree is developed through a 100% online modality. Likewise, you will have access to educational materials available in formats such as readings, explanatory videos, or real-case simulations. In this way, medical professionals will have the opportunity to achieve their professional update using the formats that best suit their study needs.

This **Postgraduate Certificate in Monitoring in Home Chronic NIMV** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ◆ The development of case studies presented by experts in Non-Invasive Mechanical Ventilation
- ◆ 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 the self-assessment process can be carried out 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



Study from anywhere in the world and 24 hours a day thanks to the 100% online format that offers TECH

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Through this program, you will learn about the latest scientific recommendations for implementing teleconsultations with patients receiving Non-Invasive Mechanical Ventilation”

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.

Optimize your upgrade process by studying through simulations of real cases or explanatory videos.

Detect, through this program, the updated techniques to evaluate patients with NIMV through Telemonitoring.



02 Objectives

The Postgraduate Certificate in Home Chronic NIMV Monitoring has been designed with the aim of providing specialists with the most useful and up-to-date knowledge in this field. Thanks to this program, you will delve into the latest recommendations for the use of Non-Invasive Mechanical Ventilation in chronic home patients and explore the use of telemonitoring. Moreover, you will do so in just 6 weeks, benefiting from cutting-edge educational methodology.





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Identify the latest advances in Home Chronic NIV Monitoring to avoid falling behind in the medical field's evolution”



General Objectives

- ◆ Gain in-depth knowledge of respiratory control mechanisms and blood pH regulation, as well as ventilatory responses in situations of hypoxia, hypercapnia, and acidosis, and the interaction between the respiratory system and the central nervous system
- ◆ Delve into the forces acting on the lungs during ventilation and the relationship between respiratory mechanics and respiratory muscle effort
- ◆ Explore different lung volumes and capacities, their alterations in respiratory diseases, and the interpretation of spirometric values and their limitations
- ◆ Understand the concept of compliance and resistance of the respiratory system, including measurement and influencing factors, as well as alterations in respiratory diseases
- ◆ Deepen your understanding of ventilation-perfusion relationships, advanced methods for detecting abnormalities in respiratory diseases, and therapeutic strategies to improve these relationships





Specific Objectives

- ◆ Understand recent indications for the use of NIMV in chronic home patients
- ◆ Explore telemonitoring as a tool for monitoring and evaluating patients on NIMV
- ◆ Identify updated strategies for the prevention and management of anxiety and depression in patients on NIMV
- ◆ Explore opportunities and challenges of teleeducation and teletraining in NIMV

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Delve into the updated indications for the use of chronic home ventilation with this certification”

03

Course Management

To preserve the excellent educational quality characteristic of TECH's programs, this Postgraduate Certificate is directed and taught by top specialists in the field of Pulmonology, who possess extensive experience in the management of Non-Invasive Mechanical Ventilation. Since these professionals are responsible for creating the didactic content of this certification, the knowledge they provide to the students will be fully applicable in medical practice.



A close-up photograph of a patient's face, focusing on the nose and mouth area. A clear nasal cannula is inserted into the nostril. Several black monitoring wires are visible, some looping around the patient's face and others extending away. The patient is wearing a light-colored, textured fabric garment. The background is a solid blue color.

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*Stay up-to-date in Home Chronic NIV Monitoring
with active experts in Non-Invasive Mechanical
Ventilation management”*

Management



Dr. Landete Rodríguez, Pedro

- ♦ Head of the Intermediate Respiratory Care Unit at Emergencias Enfermera Isabel Zendal Hospital
- ♦ 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

Dr. Esteban Ronda, Violeta

- ♦ Specialist in Pulmonology
- ♦ Head of the Non-Invasive Mechanical Ventilation Clinic at the Hospital Universitario de Sant Joan
- ♦ Pulmonologist at the Hospital Universitario de Sant Joan
- ♦ Master's Degree in Advances in Diagnosis and Treatment of Sleep Disorders from the Universidad Católica San Antonio de Murcia
- ♦ Master's Degree in Biomedical Research from the University of Valencia
- ♦ Member of: SEPAR, Valencian Society of Pneumology



04

Structure and Content

The syllabus of this Postgraduate Certificate has been developed with the goal of providing the student with the most up-to-date knowledge on Home Chronic NIV Monitoring. All the didactic content in this program is available in various formats, with some notable ones being explanatory videos, interactive summaries, and self-assessment exercises. Consequently, through a 100% online methodology, you will benefit from a study experience tailored to your personal and academic needs.





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TECH's Relearning method offers you a customized update, allowing you to explore the content at your own pace”

Module 1. Monitoring in Home Chronic NIMV

- 1.1. Chronic Home Ventilation
 - 1.1.1. Definition of Chronic Home Ventilation
 - 1.1.2. Indications for Chronic Home Ventilation
 - 1.1.3. Types of Chronic Home Ventilation
 - 1.1.4. Benefits of Chronic Home Ventilation
- 1.2. Monitoring Patients with Chronic Home Ventilation
 - 1.2.1. Parameters to Monitor
 - 1.2.2. Monitoring Methods
 - 1.2.3. Interpretation of Data Obtained During Monitoring
 - 1.2.4. Follow-Up and Evaluation Techniques
- 1.3. Telemonitoring in Patients with Chronic Home Ventilation
 - 1.3.1. Definition
 - 1.3.2. Advantages and Disadvantages
 - 1.3.3. Technologies Used
 - 1.3.4. Ethical and Legal Aspects
- 1.4. Organization of Consultations for Patients with Chronic Home Ventilation
 - 1.4.1. Definition of the Organization of Consultations for Patients with Chronic Home Ventilation
 - 1.4.2. Methods of Organizing Consultations
 - 1.4.3. Assessment of the Effectiveness of Consultation Organization
- 1.5. Nursing Care for Patients with Chronic Home Ventilation
 - 1.5.1. Role of Nursing in Management
 - 1.5.2. Nursing Care
 - 1.5.3. Patient and Caregiver Education
 - 1.5.4. Prevention and Management of Complications
- 1.6. Management of Psychiatric Issues in Patients with Chronic Home Ventilation
 - 1.6.1. Prevalence of Anxiety and Depression
 - 1.6.2. Clinical Manifestations of Anxiety and Depression
 - 1.6.3. Strategies for Managing Anxiety and Depression
 - 1.6.4. Prevention of Anxiety and Depression





- 1.7. Teleconsultation in Non-Invasive Mechanical Ventilation: Benefits and Limitations
 - 1.7.1. Advantages and Limitations of Teleconsultation in NIMV
 - 1.7.2. Use of Information Technologies in NIMV During the Pandemic
 - 1.7.3. Impact of Teleconsultation on the Quality of NIMV Care
 - 1.7.4. Factors Influencing the Effectiveness of Teleconsultation in NIMV
 - 1.7.5. Need for Protocols and Guidelines for Teleconsultation in NIMV
- 1.8. Telehealth in NIMV
 - 1.8.1. Teleeducation and Teletraining: Opportunities and Challenges
 - 1.8.2. Legal and Ethical Aspects
- 1.9. Telemedicine and NIMV in Various Contexts
 - 1.9.1. The COVID-19 Pandemic
 - 1.9.2. Rural and Hard-to-Access Areas: Strategies and Solutions
 - 1.9.3. In Developing Countries: Challenges and Opportunities
- 1.10. Economic and Financial Evaluation of Telemedicine in Non-Invasive Mechanical Ventilation: Cost-Effectiveness and Sustainability
 - 1.10.1. Basic Concepts of Economic Evaluation in Telemedicine
 - 1.10.2. Cost-Effectiveness of Telemedicine in NIMV
 - 1.10.3. Cost Analysis of Teleconsultation in NIMV
 - 1.10.4. Financial Sustainability of Telemedicine in NIMV
 - 1.10.5. Limitations and Challenges in the Economic Evaluation of Telemedicine in NIMV



By enrolling in this Postgraduate Certificate, you will enjoy the most updated didactic contents on Monitoring in Chronic Home NIMV"

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.





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

At TECH we use the Case Method

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

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



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

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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 Monitoring in Home Chronic NIMV guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Monitoring in Home Chronic NIMV** 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 Monitoring in Home Chronic NIMV**

Official N° of Hours: **150 h.**



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



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