

# Postgraduate Certificate

Neurological Pathologies and  
Mental Illness in the Complex  
Chronic Patient



## Postgraduate Certificate Neurological Pathologies and Mental Illness in the Complex Chronic Patient

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-certificate/neurological-pathologies-mental-illness-complex-chronic-patient](http://www.techtute.com/us/medicine/postgraduate-certificate/neurological-pathologies-mental-illness-complex-chronic-patient)

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# 01

# Introduction

The prevalence of Parkinson's disease has doubled in the last decade. According to the World Health Organization, there have been more than 329,000 deaths due to this cause. In addition, complex chronic patients suffer from this disorder while coping with other conditions, most notably depression. As a result, they experience considerable symptomatology, including cognitive impairment, changes in attention and hallucinations. In this context, physicians have a responsibility to investigate the particularities of these illnesses and to acquire new skills to apply the most advanced therapeutic techniques. To support them in this task, TECH has developed a pioneering 100% online program, which will provide the keys to improve the quality of life of patients.

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*You will determine the most prevalent chronic pathologies of the nervous system in the best digital university in the world, according to Forbes"*

The care of Complex Chronic Patients with neurological conditions represents a significant challenge in healthcare. In fact, the interaction of medical, social and emotional factors in these cases causes a complex picture that requires a comprehensive approach. It should be noted that these pathologies not only affect brain function, but also have a profound impact on people's ability to carry out their daily activities. As such, models of care must adapt to address the changing needs of individuals over time, recognizing the persistent nature of their conditions.

Given this reality, TECH has designed an advanced program that will delve into the unique characteristics of mental disorders in patients with a complicated chronic condition. In relation to this, the agenda will delve into how to achieve an effective management of these illnesses, through treatments and emotional dynamics that influence the ongoing experience of the affected subjects.

Likewise, the didactic contents will focus on the approach to common pathologies, such as Migraines, Epilepsies or Amyotrophic Lateral Sclerosis. In addition, multidisciplinary management will be promoted, in which there will be an effective collaboration between medical specialties and non-pharmacological therapies.

It should be noted that TECH offers a 100% online educational environment, tailored to the needs of busy professionals seeking to advance their careers. Through the *Relearning*, methodology, based on the repetition of key concepts to fix knowledge and facilitate learning, flexibility is combined with a robust pedagogical approach. The only thing students will need is a Electronics device with Internet access to access the Virtual Campus. There you will be able to view both the syllabus and additional multimedia resources, including interactive summaries.

This **Postgraduate Certificate in Neurological Pathologies and Mental Illness in the Complex Chronic Patient** 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 Neurological Pathologies and Mental Illness in the Complex Chronic Patient
- ♦ 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



*Are you looking to to improve the quality of life of your Epilepsy patients? Achieve it thanks to TECH in only 180 hours"*



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*Develop multidisciplinary strategies for the management of neuropathic pain in complex chronic patients"*

*Delve into an academic experience without schedules or on-site classes that you can access from any device with an Internet connection.*

*A study plan with a Relearning system that will facilitate the renewal of knowledge in the therapeutic approach.*

The program's teaching staff includes professionals from the sector who contribute their work experience to this 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's design focuses on Problem-Based Learning, through which the professional must try to solve the different professional practice situations that arise during the academic program. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.



# 02 Objectives

Upon completion of this 6-week program, students will be able to assess the impact of neurological and mental health conditions on patients' quality of life. They will also gain a multidisciplinary perspective that will address both medical and psychosocial aspects. In this way, they will offer personalized attention according to the particular needs of each user. In turn, students will encourage the active participation of individuals in decision making and will take into account their convictions during the therapeutic process.





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*You will address the influence of psychosocial and emotional factors to understand the situation experienced by chronic patients”*



## General Objectives

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- ♦ Determine the most prevalent chronic pathologies of the nervous system and of Mental Health
- ♦ Explore the complexity of these pathologies in chronic patients, in order to develop comprehensive care strategies that respond to their needs, improve their quality of life and effectively manage these conditions over time



*This program will give you the opportunity to update your knowledge with the maximum scientific rigor of an institution at the technological forefront"*





## Specific Objectives

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- ♦ Examine the various clinical manifestations of neurological and chronic mental illnesses and assess their impact on the functionality and quality of life of patients
- ♦ Analyze the influence of psychosocial and emotional factors on the experience of the chronic patient with neurological and mental pathology
- ♦ Review the medical and therapeutic interventions available for the management of chronic neurological and mental illnesses
- ♦ Approach patient-centered care in the context of chronic neurological and mental pathology, considering the active involvement of the patient in decision making
- ♦ Promote public and professional awareness of neurological and mental pathology in chronic patients, highlighting the importance of continuing education for patients, families and healthcare professionals



# 03

## Course Management

Thanks to TECH's untiring commitment to raise the educational level of all its degrees, this program is characterized by having a teaching team made up of specialists in Neurological Pathologies and Mental Illness in the Complex Chronic Patient. It should be noted that these experts have developed their professional activities in hospitals of prestige, which will ensure that the didactic contents are fully updated and valid in the health sector.



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*You will have the support of a teaching staff specialized in the medical care of Complex Chronic Patients"*



## International Guest Director

Awarded by the American Society of Addiction Medicine for his research in this field, Robert W. Kirchoff is considered a prestigious physician specialized in the approach to Substance Use Disorders. In this sense, he has developed most of his career in health institutions of international reference, such as the Mayo Clinic Hospital in Minnesota or the Saint Joseph Mercy Health System in Michigan.

Among his main achievements, his great contribution to the foundation of the Laboratory of Informatics and Machine Learning stands out. In this way, he has contributed significantly to the improvement of hospital resources through Predictive Analytics. He has also used this technological tool belonging to Artificial Intelligence to identify patients at risk of drug dependence and relapse. As a result, it has enabled numerous users to acquire advanced coping strategies in order to avoid drug use.

It should be noted that he balances this work with his facet as a clinical researcher. In this regard, he has an extensive production on subjects such as the applications of Big Data to the field of medicine, the most innovative pharmacological treatments to combat alcohol addiction, translational informatics applied to individuals with psychological disorders, techniques to prevent drug abuse or cutting-edge methodologies for the treatment of drug addiction.

On the other hand, in his firm commitment to the advancement of medical technology, he regularly participates as a speaker at scientific congresses and symposiums on an international scale. Thanks to this, he has facilitated the health community to have a greater knowledge of drug-assisted therapies for chemical dependency. In turn, he has enabled specialists to acquire the skills to get the most out of Clinical Bioinformatics and to optimize both their diagnostics and disease management considerably.



## Dr. Kirchoff, Robert W.

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- ♦ President for Research at Mayo Clinic Hospital in Minnesota, United States
- ♦ Medical Director at Foundations Detroit
- ♦ President of the American Society for Addiction Medicine
- ♦ Founder of the Laboratory of Informatics and Machine Learning at Mayo Clinic Hospital
- ♦ Attending Physician at Saint Joseph Mercy Health System in Michigan
- ♦ Master of Science in Medical Informatics from The Johns Hopkins University School of Medicine
- ♦ Bachelor of Arts, Biology and Chemistry from Albion College
- ♦ Internal Medicine Resident Physician at Wayne State University School of Medicine
- ♦ General Surgery Residency at Mayo Clinic Hospital
- ♦ Board Certified by the American Board of Internal Medicine
- ♦ Fellow of the American Board of Preventive Medicine



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

## Management



### Dr. Romero Pareja, Rodolfo

- Specialist in Family and Community Medicine
- Medical Director at the Emergency Hospital Nurse Isabel Zendal
- Area Physician, Emergency Department, at the University Hospital of Getafe
- Collaborator of working groups in programs of Medicine; Health Management and Planning for Health Managers; and Emergency and Critical Care
- Doctor of Medicine, University of Oviedo
- Master's Degree in Emergency Medicine from the Complutense La University of Madrid
- Master in Medical Management and Clinical Management by the National School of Health, Instituto Salud Carlos III and Universidad Nacional Educación a Distancia
- Degree in Medicine and Surgery from the Complutense University of Madrid



### Dr. Tejedor López, Luis

- ♦ Specialist in Geriatrics
- ♦ Specialist Physician in Geriatrics, Emergency Hospital Nurse Isabel Zandal
- ♦ Medical Case Manager. HealthMotiv S.L
- ♦ President of the MIR Association Spain
- ♦ Master's Degree in Support Treatment and Palliative Care in Oncology Patients, Isabel I University
- ♦ MBA in Health Management and Administration from the European School of Health Education
- ♦ Medical Specialist in Geriatrics via MIR
- ♦ Degree in Medicine from the University of Navarra

## Professors

### Dr. Anguita Sánchez, Noemí

- ♦ Specialist in Geriatrics
- ♦ Medical Specialist in the Geriatric Area at the Hospital Emergencias Nurse Isabel Zandal
- ♦ Specialist in Geriatrics at the Infanta Sofia University Hospital
- ♦ Expert in Methodology of Noninvasive Mechanical Ventilation by the International School of Noninvasive Mechanical Ventilation
- ♦ Expert in Emergency Management of Infectious Pathology, Francisco de Vitoria University
- ♦ Degree in Medicine from the Universidad Autónoma de Madrid
- ♦ Professor Barea Award by the Signo Foundation (2021)

# 04

## Structure and Content

Through this Postgraduate Certificate, the physician will delve into the distinctive characteristics of neurological pathology in chronic patients. In this line, the syllabus will highlight the need to design and implement integrative care strategies that promote quality of life and the management of neurological conditions over time. In this way, the didactic materials will delve into pathologies such as Alzheimer's disease, polyneuropathies or chronic headaches. With an eminently practical approach, the students will design plans to promote the autonomy of those affected and to support them emotionally to ensure their well-being.





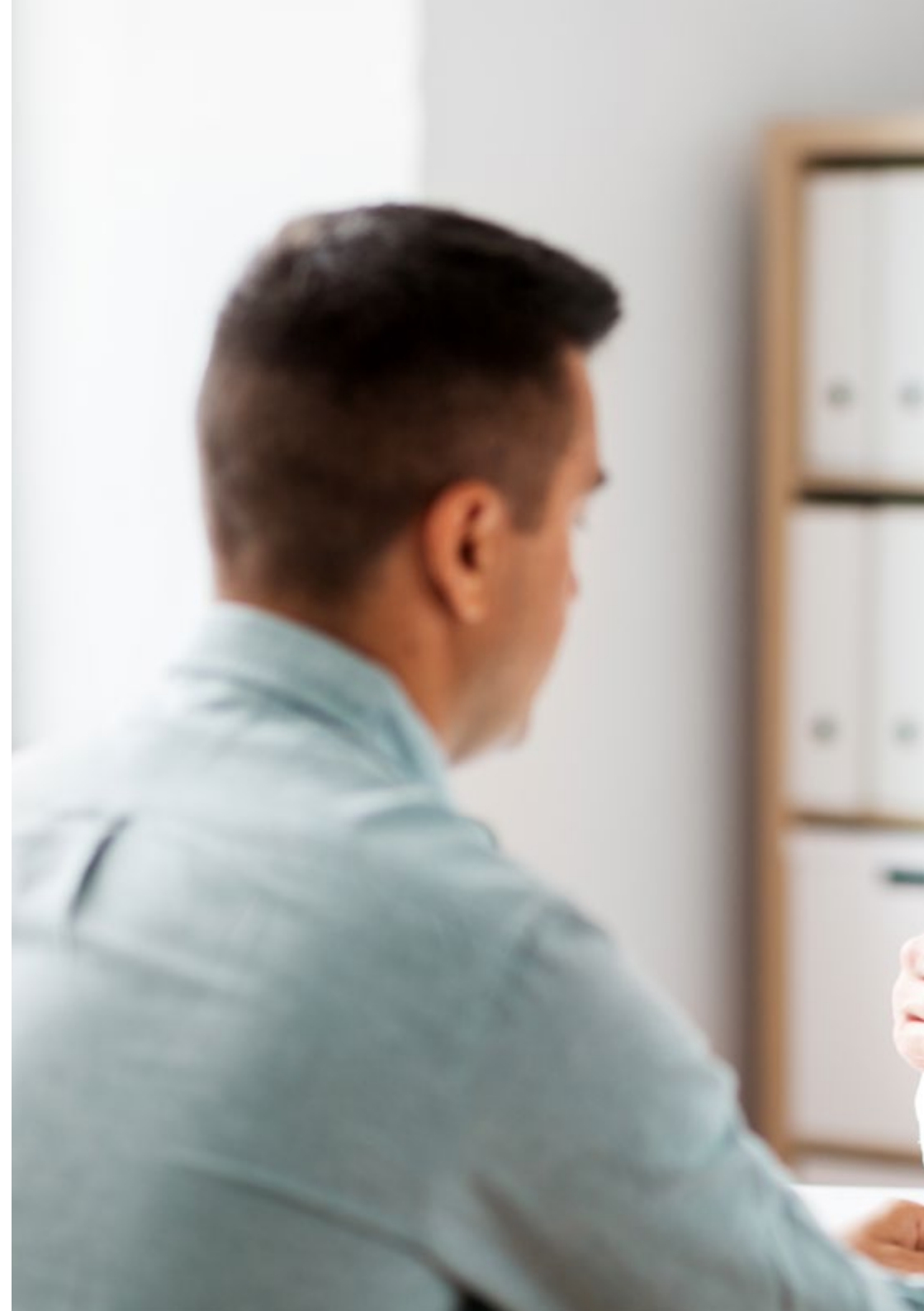


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*You will carry out approaches against chronic neurological and mental pathologies, implementing personalized treatments based on clinical excellence”*

## Module 1. Neurological and Cognitive Pathologies and Mental Illness in the Complex Chronic Patient

- 1.1. Intracranial Vascular Pathology in the Complex Chronic Patient. Ischemia and Hemorrhage
  - 1.1.1. Management of Cerebral Vascular Diseases in the Complex Chronic Patient
  - 1.1.2. Clinical Manifestations and Risk Factors. Prevention and Treatment Strategies
  - 1.1.3. Multidisciplinary Approach: Prevention, Treatment and Rehabilitation
  - 1.1.4. Psychosocial Aspects in Patient Recovery
- 1.2. Dementia in the Complex Chronic Patient
  - 1.2.1. Management of Alzheimer's Disease and other Primary Degenerative Dementias in these Patients
  - 1.2.2. Vascular and Other Secondary Dementias in the Complex Chronic Patient
  - 1.2.3. Comprehensive Management and Long-Term Care of the Patient
  - 1.2.4. Role of the Family and Caregivers in the Care of the Chronic Patient with Dementia
  - 1.2.5. Impact of Dementia on Society
- 1.3. Disorders of Movement in the Complex Chronic Patient
  - 1.3.1. Management of Parkinson's Disease and Other Parkinsonian Disorders in the Complex Chronic Patient
  - 1.3.2. Management of Chorea, Dystonia and Other Movement Disorders in the Complex Chronic Patient
  - 1.3.3. Collaboration between Medical Specialties and Non-Pharmacological Therapies
  - 1.3.4. Psychosocial Aspects in Patient Quality of Life
- 1.4. Amyotrophic Lateral Sclerosis as a Complex Disease
  - 1.4.1. Management of ALS as a Complex Disease. Multidisciplinary Care
  - 1.4.2. Multidisciplinary Approach to the ALS Patient
  - 1.4.3. Emotional Support and Palliative Care in the Chronic ALS Patient
  - 1.4.4. Role of Social Services in Comprehensive Care
  - 1.4.5. Palliative Care and Quality of Life
- 1.5. Epilepsy in the Complex Chronic Patient
  - 1.5.1. Management of Epilepsy in Complex Chronic Patients
  - 1.5.2. Management of the Cognitive, Behavioral and Emotional Effects of Epilepsy in the Complex Chronic Patient
  - 1.5.3. Stigma and Quality of Life in Chronic Patients with Epilepsy





- 1.6. Headaches and Migraine in the Complex Chronic Patient
  - 1.6.1. Management of Chronic Headaches in Complex Chronic Patients
  - 1.6.2. Biopsychosocial Impact of Chronic Headaches
  - 1.6.3. Comprehensive Approach: Therapies and Strategies for Quality of Life Improvement in Headache Patients
- 1.7. Polyneuropathies in the Complex Chronic Patient
  - 1.7.1. Management of Polyneuropathies in Complex Chronic Patients
  - 1.7.2. Multidisciplinary Assessment and Team Approach in the Treatment of Polyneuropathies in the Complex Chronic Patient
  - 1.7.3. Physical and Psychosocial Rehabilitation in the Patient with Chronic Polyneuropathy
- 1.8. Neuropathic Pain in the Complex Chronic Patient
  - 1.8.1. Pain Management as a Chronic Pathology
  - 1.8.2. Multidisciplinary Strategies for Pain Management in the Complex Chronic Patient
  - 1.8.3. Biopsychosocial Approach
- 1.9. Multiple Sclerosis in the Complex Chronic Patient
  - 1.9.1. Comprehensive Approach in Complex Chronic Multiple Sclerosis Patients: Coordination of Care Between Neurology, Physical Therapy and Mental Health
  - 1.9.2. Rehabilitation and Long-Term Care of Chronic Patients with Multiple Sclerosis
  - 1.9.3. Ongoing Support and Community Services for the Patient and Family
- 1.10. Mental Illness in the Complex Chronic Patient
  - 1.10.1. Management of Mental Illness in the Complex Chronic Patient
  - 1.10.2. Multidisciplinary Therapeutic Approach in the Complex Chronic Patient: Coordination of Care
  - 1.10.3. Ethics in the Treatment of Chronic Mental Illnesses in the Patient
  - 1.10.4. Stigma Associated with Mental Illness. Impact on the Patient's Quality of Life

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 Neurological Pathologies and Mental Illness in the Complex Chronic Patient guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.





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

This program will allow you to obtain your **Postgraduate Certificate in Neurological Pathologies and Mental Illness in the Complex Chronic Patient** 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.

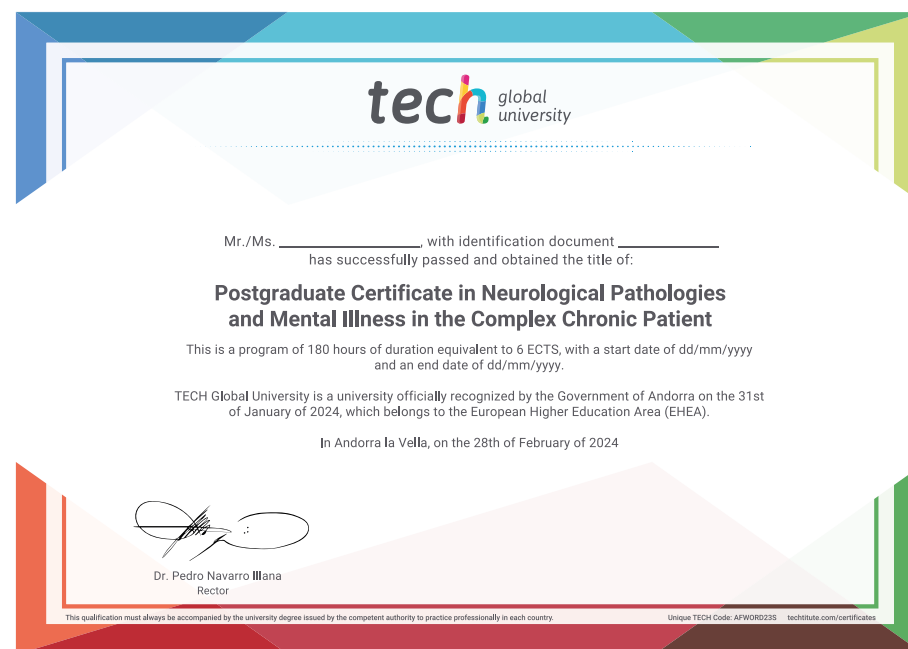
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Neurological Pathologies and Mental Illness in the Complex Chronic Patient**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



\*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.

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



**Postgraduate Certificate**  
Neurological Pathologies  
and Mental Illness in the  
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