# Postgraduate Diploma

Osteoarticular and Neurodegenerative Pathology in the Complex Chronic Patient



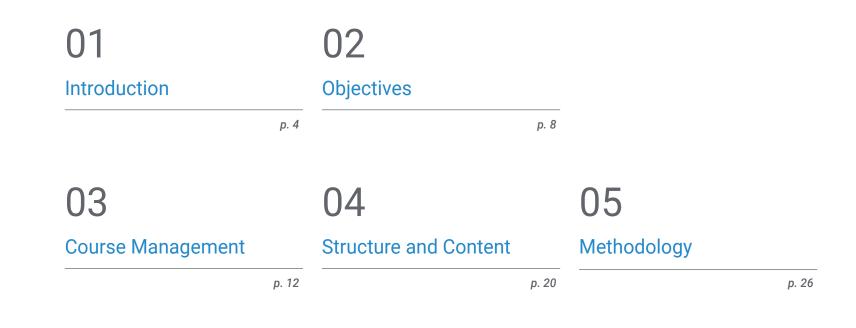


**Postgraduate Diploma** Osteoarticular and Neurodegenerative Pathology in the Complex Chronic Patient

- » Modality: online
- » Duration: 6 months.
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-osteoarticular-neurodegenerative-pathology-complex-chronic-patient

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# 01 Introduction

In modern medicine, Osteoarticular and Locomotor Pathology has become a focus of interest for experts. These diseases affect bones, muscles, tendons, ligaments and joints. In fact, they can be caused by various factors, such as aging. Given this, Complex Chronic Patients present multiple medical conditions that make their treatment more difficult. For this reason, physicians need to constantly develop new skills for the treatment of these conditions. This need is further increased by the rise of healthcare technology, which involves the execution of new clinical procedures. To support this important work, TECH has developed a 100% online program for professionals to provide the most personalized care.

# Introduction | 05 tech

You will enhance ethical principles, such as empathy and altruism, to provide the best clinical care to the chronically ill elderly, all thanks to TECH"

## tech 06 | Introduction

Amyotrophic Lateral Sclerosis (ALS) affects a large segment of the world's population, especially from the age of 45 onwards. Its symptoms range from muscle weakness to difficulty in speaking and breathing. It is thus a complex disease that requires multidisciplinary specialist care.

In this context, the most prestigious healthcare institutions usually demand the incorporation of health specialists capable of performing approaches that include emotional support and palliative care. These physicians are also expected to take into account comorbidities such as depression, anxiety or swallowing problems.

In order to achieve specialization in this field, TECH has implemented a program that will delve into the comprehensive management of this difficult disease. Therefore, the syllabus will delve into the prevention, treatment and rehabilitation of the most common osteoarticular and neurodegenerative pathologies.

The didactic materials will also emphasize the psychosocial aspects to be taken into account during the recovery of the users, such as their coping skills. In turn, the curriculum will enable students to analyze chronic patients within a biopsychosocial model that will guide them towards more timely action. The program will also encourage them to contribute to research in this field, to help improve the understanding of these diseases.

On the other hand, the university degree has a 100% online methodology so that alumni can complete the program comfortably. For the analysis of its contents, they will only need an electronic device with Internet access, since the schedules and evaluation chronograms can be planned individually. In addition, the syllabus will be based on the innovative Relearning teaching system that relies on repetition to guarantee the mastery of its different aspects.

This **Postgraduate Diploma in Complex Chronic Patient Care** 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 Osteoarticular and Neurodegenerative Pathology in Complex Chronic Patients
- 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

Do you want to take the most advanced biopsychosocial approach to Neuropathic Pain? Apply the most innovative multidisciplinary strategies thanks to this program"

### Introduction | 07 tech

You will develop management and prevention strategies of specific geriatric syndromes, such as recurrent falls or acute confusion" You will manage lower limb amputations and apply the most effective rehabilitative treatments.

This course includes real clinical cases, so that graduates are aware of the reality of medical care.

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**

This program will provide students with a thorough understanding of the clinical manifestations of Neurological, Osteoarticular and Mental diseases in order to address them effectively. In this way, they will acquire a holistic perspective of patients in order to provide them with comprehensive care. In addition, they will handle the most modern tools to perform optimal geriatric assessments and thus ensure the improvement of users. Specialists will also implement preventive and therapeutic strategies to ensure the appropriate use of resources. In addition, they will promote public awareness aimed at the family members of those affected, given the importance of their support during treatment.

You will perform Comprehensive Geriatric Assessments (CGA) so that chronically ill patients can make informed decisions about their well-being"

# tech 10 | Objectives



# **General Objectives**

- Examine the medical problems common to most chronic and complex patients
- Present complementary therapies to the pharmacological approach
- Delve into the legal basis and bioethical aspects of the care of patients with chronic illnesses
- Provide a rationale for the Comprehensive Geriatric Assessment (CGA) as a set of tools that allow a diagnostic approach to the complex chronic patient
- Analyze the main Geriatric Syndromes and their clinical and social importance
- Assess the incidence and prevalence of nephro-urological diseases in chronic patients
- Analyze gastrointestinal diseases in patients with chronic medical conditions
- Investigate, analyze and propose comprehensive strategies for understanding and improving the management of infectious diseases in patients with complex chronic pathology
- Adequately define endocrinological pathology in chronic and complex patients
- Seek strategies that improve the patient's quality of life, minimizing the limitations imposed by the disease and its treatments
- Develop comprehensive care strategies that respond to patients' needs and improve their quality of life
- Delve into different models of health care for complex chronic patients



# Objectives | 11 tech





### Specific Objectives

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

- 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 illness, focusing on multidisciplinary approaches that address both medical and psychosocial issues

# Module 2. Osteoarticular and Locomotor System Pathology in the Complex Chronic Patient

- Link these conditions with the patient's systemic pathologies
- Establish a holistic point of view of the patient, so that you can provide them with holistic care
- Transfer what you have learned to your daily clinical practice and improve your skills

# Module 3. Complex Chronic Elderly Patient Comprehensive Geriatric Assessment (CGA) and Geriatric Syndromes

- Compile the main tools that make up the CGA and their correct use
- Analyze the complex chronic patient within a bio-psycho-social model that guides us towards a more timely action
- Establish strategies for preventive/therapeutic action and ensure appropriate use of resources

# 03 Course Management

For this Postgraduate Diploma, TECH has the support of a teaching staff of international prestige. These specialists have extensive professional experience and are currently active professionals in highly renowned hospitals. In addition, they are defined by their extensive knowledge of Osteoarticular and Neurodegenerative Pathologies. This has allowed them to master the most advanced technological resources in the health field, thus ensuring the maximum welfare of patients. In this way, students will have the guarantees they require to update their knowledge and acquire new skills to enrich their clinical practice.

An experienced teaching group will guide you throughout the learning process and will resolve any doubts that may arise"

### tech 14 | Course Management

#### **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.

- 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"

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#### 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

### Course Management | 17 tech



#### Dr. Tejedor López, Luis

- Specialist in Geriatrics
- Specialist Physician in Geriatrics, Emergency Hospital Nurse Isabel Zendal
- Medical Case Manager. HealthMotiv S.I
- 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

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#### Professors

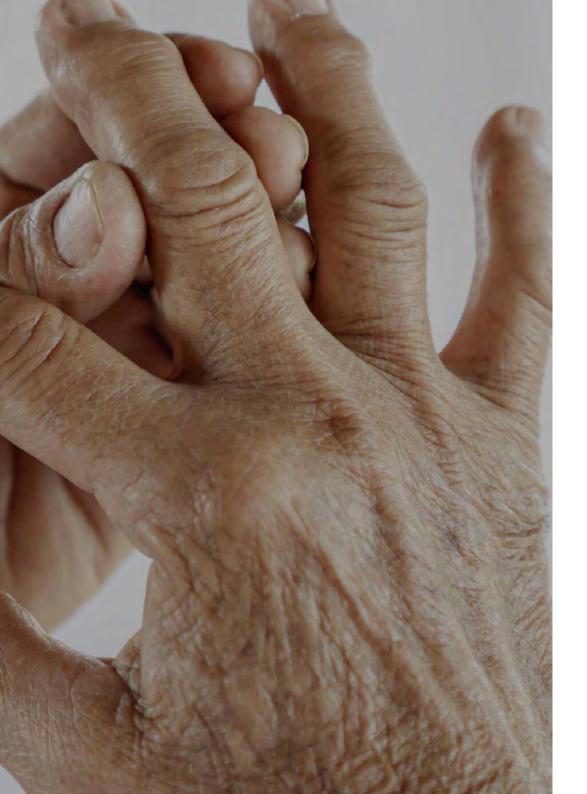
#### Dr. Anguita Sánchez, Noemí

- Specialist in Geriatrics
- Medical Specialist in the Geriatric Area at the Hospital Emergencias Nurse Isabel Zendal
- 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)

#### Dr. Quiñónez Barreiro, Fabio Augusto

- Specialist in Geriatrics and Gerontology
- Specialist Geriatrics Physician at the Virgen del Valle Hospital
- On-call Geriatrician at the Emergency Hospital Nurse Isabel Zendal
- Geriatrician at Quirón Salud, Tres Culturas Hospital
- On-call Physician in the Emergency Department at Hospital Virgen de la Salud
- Master's Degree in Psychogeriatrics from the Autonomous University of Barcelona
- Degree in Medicine from the Latin American School of Medicine (ELAM)





### Course Management | 19 tech



# 04 Structure and Content

This program will address the complexity of Osteoarticular and Neurodegenerative conditions, in order to treat them effectively. In this way, the program will offer a series of strategies, oriented both to the prevention and treatment of Cerebral Vascular Diseases. Likewise, it will delve into the therapeutic approach to Mental Pathologies, bearing in mind the stigma associated with them. The didactic materials will also address Osteoporosis through the most effective therapies, including the use of the latest generation of drugs. On the other hand, it will provide the keys to develop comprehensive plans to ensure the care of elderly patients.

You will acquire a comprehensive understanding of Osteoarticular and Neurodegenerative diseases to develop new lines of research"

# tech 22 | Structure and Content

# **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



### Structure and Content | 23 tech

- 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

# tech 24 | Structure and Content

# **Module 2.** Osteoarticular and Locomotor System Pathology in the Complex Chronic Patient

- 2.1. Approach to Chronic Pain of Osteoarticular Etiology in Complex Patients
  - 2.1.1. Pathophysiology of Osteoarticular Pain in the Complex Chronic Patient. Assessment and Diagnosis
  - 2.1.2. Medical Treatment
  - 2.1.3. Interventional Procedures. Non-Pharmacological Approach
- 2.2. Spinal Pathology in the Complex Chronic Patient
  - 2.2.1. Management of Degenerative Pathologies of the Spine in the Complex Chronic Patient
  - 2.2.2. Management of Inflammatory and Autoimmune Pathologies of the Spine
  - 2.2.3. Multidisciplinary Approach in Non-Traumatic Spine Pathology Prevention and Rehabilitation in the Complex Chronic Patient
- 2.3. Rachis Fractures in the Complex Chronic Patient
  - 2.3.1. Management of Rachis Fractures in the Complex Chronic Patient. Frequent Locations and Diagnosis
  - 2.3.2. Conservative Treatment
  - 2.3.3. Surgical Management
- 2.4. Upper Limb Pathology in the Complex Chronic Patient
  - 2.4.1. Management of Non-Traumatic Osteoarticular Pathology of the Shoulder in Complex Chronic Patients
  - 2.4.2. Management of Shoulder Fractures in the Complex Chronic Patient. Conservative Treatment Surgical Management
  - 2.4.3. Management of Elbow, Wrist and Hand Pathology in the Complex Chronic Patient
- 2.5. Hip Pathology in the Complex Chronic Patient
  - 2.5.1. Management of Coxarthrosis in Complex Chronic Patients. Hip Soft Tissue Pathology
  - 2.5.2. Management of Hip Fractures in the Complex Chronic Patient
  - 2.5.3. Management of the Sacroiliac Joint Pathologies in the Complex Chronic Patient. Pelvis Fractures
- 2.6. Knee, Ankle and Foot Pathology in the Complex Chronic Patient
  - 2.6.1. Management of Knees Osteoarthritis in the Complex Chronic Patient. Hip Soft Tissue Pathology
  - 2.6.2. Management of Knees Arthroplasty in the Complex Chronic Patient. Knee Telerehabilitation
  - 2.6.3. Management of Ankle and Foot Pathology in the Complex Chronic Patient



### Structure and Content | 25 tech

- 2.7. Lower Limb Amputations
  - 2.7.1. Management of Lower Limb Amputation in the Complex Chronic Patient. Levels of Amputation
  - 2.7.2. Rehabilitative Treatment
  - 2.7.3. Prosthetization in the Complex Chronic Patient Patient Follow-Up
- 2.8. Rheumatic Diseases in the Complex Chronic Patient
  - 2.8.1. Management of Rheumatoid Arthritis in Complex Chronic Patients
  - 2.8.2. Management of Osteoarthritis in Complex Chronic Patients
  - 2.8.3. Management of Other Rheumatic Diseases in the Complex Chronic Patient
- 2.9. Assessment and Treatment of Osteoporosis
  - 2.9.1. Assessment and Treatment of Osteoporosis in Complex Chronic Patients
  - 2.9.2. Medical Treatment
  - 2.9.3. Comprehensive Management of the Complex Chronic Patient
- 2.10. Osteoarticular Pathology in the Complex Chronic Patient
  - 2.10.1. Management of Systemic Diseases and Their Impact on Osteoarticular Pathology and Vice-versa in the Complex Chronic Patient
  - 2.10.2. Therapeutic Approach in the Complex Chronic Patient. Comprehensive Management Multidisciplinary Approach Education and Self-Care. Prevention strategies
  - 2.10.3. Future Perspectives in Osteoarticular Pathology. Treatment and Technological Advances. Regenerative Therapies. Research

# **Module 3.** Complex Chronic Elderly Patient Comprehensive Geriatric Assessment (CGA) and Geriatric Syndromes

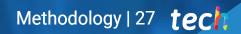
- 3.1. Comprehensive Geriatric Assessment (CGA) in the Complex Chronic Patient
  - 3.1.1. Comprehensive Geriatric Assessment of the Complex Chronic Patient
  - 3.1.2. Components of the Comprehensive Geriatric Variation. Data Science
  - 3.1.3. Decision Making
- 3.2. Functional Assessment and Frailty in the Elderly as a Complex Chronic Patient
  - 3.2.1. Functional Assessment in the Complex Chronic Elderly Patient
  - 3.2.2. Scales and Tools for Functional Measurement
  - 3.2.3. Strategies to Improve Functional Function and Prevent Complications
- 3.3. Cognitive/affective Assessment in the Elderly as a Complex Chronic Patient
  - 3.3.1. Cognitive/affective Assessment in the Complex Chronic Elderly Patient
  - 3.3.2. Cognitive Changes
  - 3.3.3. Cognitive/affective Assessment Scales: Use and Interpretation

- 3.4. Nutritional Assessment in the Complex Chronic Elderly Patient
  - 3.4.1. Nutritional Assessment in the Complex Chronic Elderly Patient
  - 3.4.2. Eating Behavior Patterns
  - 3.4.3. Measurement Tools: Physical and Biochemical Parameters of Nutrition
  - 3.4.4. Importance of a Correct Nutritional Assessment
  - 3.4.5. Nutritional Intervention according to Individual Needs in the Malnourished Complex Chronic Elderly Patient
- 3.5. Chronic Diseases and Comorbidities. Evaluation and Management
  - 3.5.1. Impact of Chronic Diseases in Complex Elderly Patients
  - 3.5.2. Addressing Comorbidities
  - 3.5.3. Evaluation and Integrated Management
- 3.6. Polypharmacy and Treatment Optimization
  - 3.6.1. Polypharmacy: Definition and Implications
  - 3.6.2. Strategies to Optimize Medication
  - 3.6.3. Strategies to Minimize Adverse Effects
- 3.7. Prevention and Management of Falls in the Complex Chronic Elderly Patient
  - 3.7.1. Identification of Risk Factors
  - 3.7.2. Prevention strategies
  - 3.7.3. Evaluation and Orientation towards Post-fall Rehabilitative Therapy
- 3.8. Management of Geriatric Syndromes Specific for Complex Chronic Patients
  - 3.8.1. Geriatric Syndromes in Clinical Practice
  - 3.8.2. Tools for Assessment
  - 3.8.3. Management and Prevention Strategies
- 3.9. Social Assessment in the Complex Chronic Elderly Patient
  - 3.9.1. Social Assessment in the Chronic Elderly Patient
  - 3.9.2. Role of the Family in Caregiving and Identification of Support Networks
  - 3.9.3. Multidisciplinary Coordination for the Development of a Comprehensive Care Plan
  - 3.9.4. Discharge Planning and Continuity of Care in the Chronic Elderly Patient
- 3.10. Ethics in the Care of the Complex Chronic Elderly Patient
  - 3.10.1. Ethical Principles in the Care of the Complex Chronic Elderly Patient
  - 3.10.2. Ethical Challenges in Care Decisions
  - 3.10.3. Importance of Autonomy and Respect in Geriatric Care

# 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"

## tech 28 | Methodology

#### 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:

 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.
- 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.



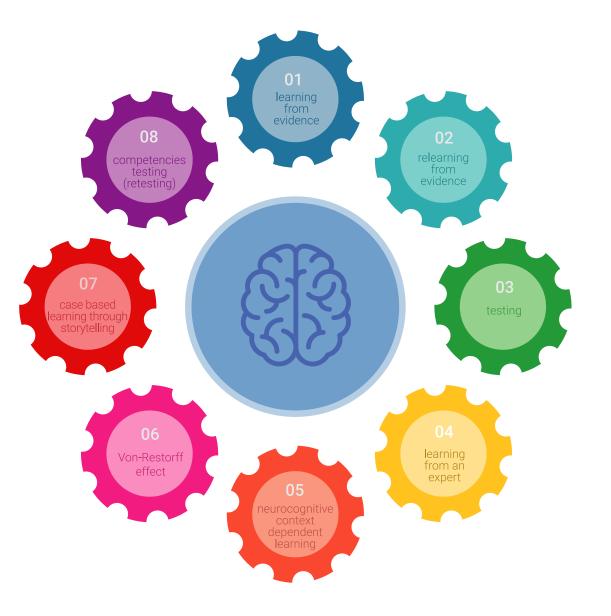
# tech 30 | Methodology

#### **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.



### Methodology | 31 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, 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.



## tech 32 | Methodology

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.

20%

15%

3%

15%

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.

## Methodology | 33 tech



#### **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.

20%

7%

3%

17%



#### **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 Diploma in Osteoarticular and Neurodegenerative Pathology in the Complex Chronic Patient guarantees students, in addition to the most rigorous and up-todate education, access to a Postgraduate Diploma issued by TECH Technological University.



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

## tech 36 | Certificate

This Postgraduate Diploma in Osteoarticular and Neurodegenerative Pathology in the Complex Chronic Patient 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 Diploma** issued by **TECH Technological University** via tracked delivery\*.

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

Title: Postgraduate Diploma in Osteoarticular and Neurodegenerative Pathology in the Complex Chronic Patient

Official Nº of Hours: 450 h.



technological university Postgraduate Diploma Osteoarticular and Neurodegenerative Pathology in the Complex Chronic Patient » Modality: online » Duration: 6 months » Certificate: TECH Technological University » Schedule: at your own pace » Exams: online

# Postgraduate Diploma

Osteoarticular and Neurodegenerative Pathology in the Complex Chronic Patient

