

# Postgraduate Certificate

## Behavioral and Movement Disorders During Sleep in Adults



## Postgraduate Certificate Behavioral and Movement Disorders During Sleep in Adults

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

Website: [www.techtute.com/in/medicine/postgraduate-certificate/behavioral-movement-disorders-during-sleep-adults](http://www.techtute.com/in/medicine/postgraduate-certificate/behavioral-movement-disorders-during-sleep-adults)

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# 01

# Introduction

Behavioral and movement disorders during sleep pose the difficulty and obligation of making a proper differential diagnosis between the different entities, which implies a necessary and accurate working knowledge of them. The student will acquire or update the knowledge and strategies necessary to understand and manage behavioral disorders during NREM sleep, from the most classic to the very emerging disorders of sexual and eating behavior during sleep.





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*The new scenarios in Sleep Medicine push us to propose new update programs that meet the real needs of experienced professionals, so that they can incorporate current advances into their daily practice”*



There is a growing multidisciplinary interest in Sleep Medicine, a discipline in frank expansion, whether it is approached from a global point of view or from the "partial specialization", depending on the original health field or specific area of interest, in all cases, a rigorous and updated generic knowledge in all its fields is vital. This Postgraduate Certificate' more than fulfils this objective from an eminently practical point of view. Its approach sets it apart from many other programs on this very transverse discipline, which are often criticised for being too "descriptive" and "theoretical", and therefore not entirely useful in resolving many situations that arise in clinical management.

The student will become familiar with new developments in the diagnosis and significance of the emerging REM sleep behavior disorder. In a clear and didactic way, you will acquire skills in the novel, yet little known, field of sleep-wake dissociation and its most extreme typology. All of the above with the invaluable support of appropriate graphic and audiovisual material provided by the expert authors of this Postgraduate Certificate.

In the field of movement disorders during sleep, without being exclusive, the program facilitates the student, in a didactic way, the understanding and management of the most burning points of the very frequent, misunderstood and incorrectly treated restless legs syndrome (or Willis-Ekbom disease), one of the most prevalent entities in Sleep Medicine, only behind insomnia and sleep apnea-hypopnea syndrome.

With the clear objective of combining scientific evidence and practical utility, this Diploma in Behavioral and Movement Disorders during Sleep in Adults has a broad, updated and unbeatable program, prepared by a varied team of professional experts (physicians, psychologists, biologists, engineers, etc.) who provide their proven experience in the form of explanations and practical examples, entertaining, clarifying and abundant support, graphic-audiovisual, absolutely essential in the teaching of this thriving discipline.

In addition, this program's degree has the advantage of being developed in a 100% online format, so students will be in charge of deciding when and where to study, distributing their study hours to suit them, so that they can combine their studying with the rest of their daily commitments.

This **Postgraduate Certificate in Behavioral and Movement Disorders During Sleep in Adults** contains the most complete and up-to-date scientific program on the market.

The most important features include:

- ◆ Developing practical cases presented by experts in Sleep Medicine
- ◆ The graphic, schematic, and practical contents provide students with scientific and practical information on the disciplines that are essential for professional practice
- ◆ Updates on Sleep Medicine and safety
- ◆ Practical exercises, where the self-assessment process can be carried out to improve learning
- ◆ Emphasis on innovative methodologies in Sleep Medicine
- ◆ 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



*We offer you a comprehensive Postgraduate Certificate, allowing you to progress in the field of Behavioral and Movement Disorders During Sleep in Adults. Think no more and enrol with us”*

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*This Postgraduate Certificate is the best investment you can make when choosing a refresher program to update your existing knowledge in Behavioral and Movement Disorders During Sleep in Adults”*

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

Its 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 an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

*We offer you an interactive video system which makes it easier for you to study this Postgraduate Certificate.*

*Our 100% online training and our original educational methodology allow you to combine your studies with your other daily commitments.*



# 02 Objectives

The main objective of the program is the development of theoretical and practical learning, so that the doctor is able to master the latest techniques in the field in a practical and rigorous manner.







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*Our main objective is to help our students to achieve academic and professional excellence”*



### General Objective

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- ◆ Master and/or update the necessary skills and knowledge for adequate practice in the field of Sleep Medicine at a global level, from the clinical and instrumental points of view



*Train yourself for success with the help of this Postgraduate Certificate with which you will learn to develop yourself in the field of Behavioral and Movement Disorders During Sleep in Adults"*





## Specific Objectives

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- ◆ Gain an in depth understanding of the field of parasomnias or behavioural disorders and other behavioural situations during NREM sleep and REM sleep, learning strategies for the necessary differential diagnosis between them and other conditions, understanding what their significance is and how they are managed
- ◆ Acquire knowledge in understanding the concept of sleep-wake dissociation and learn to identify, localise and manage the complex and still poorly understood elements integrated in the status dissociatus
- ◆ Acquire skills in the understanding and management of restless leg syndrome
- ◆ Learn about new developments in its production mechanisms and to successfully address the resolution of the most problematic aspects of the disease, especially its correct diagnosis and proper management to avoid complications arising from inadequate treatment, a circumstance that is unfortunately all too frequent
- ◆ Know how to identify other disorders and movement during sleep of a very varied nature, some of which are very frequent, learning about their significance, and how to deal with them



03

# Course Management

The program's teaching staff includes leading experts in marketing management, who bring years of their own work experience to this program. Additionally, other recognized experts participate in its design and preparation, completing the program in an interdisciplinary manner.





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*The leading professionals in the field have come together to offer you the most comprehensive knowledge in this field, so that you can develop with total guarantees of success"*



## International Guest Director

Dr. Craig Canapari is an eminent specialist in **Pediatric Pulmonology and Sleep Medicine**. He has been internationally recognized for his commitment to the study and treatment of sleep disorders in children, as well as his work in the field of **pulmonary diseases**. Throughout his extensive professional career, Dr. Canapari has had an outstanding praxis focused on treating pediatric patients with chronic and life-threatening respiratory diseases.

As director of the **Pediatric Sleep Medicine Program** at Yale-New Haven Children's Hospital, Dr. Canapari has been dedicated to the management of various disorders such as **Sleep Apnea and Obstructive Sleep Apnea**. He also treats those suffering from general pulmonary problems, including cough, shortness of breath and asthma, as well as those suffering from **Muscular Dystrophy**. In this field, he is noted for his interdisciplinary approach, combining **Pneumology, Neurology and Psychiatry** in the research and treatment of these complex disorders.

In addition to his clinical expertise, Dr. Canapari is a celebrated researcher who has collaborated with other **Harvard** professionals to develop innovative tools, such as a smart phone application to assist parents in sleep training. His tireless efforts have also focused on how the use of CPAP machines can help children with **Obstructive Sleep Apnea** improve their quality of life. His in-depth knowledge in this area has led him to publish the book *It's Never Too Late to Sleep Train: The Low-Stress Way to High-Quality Sleep for Babies, Kids, and Parents*.

To this must be added his exceptional work as an Assistant Professor of **Pediatrics**, specializing in **Respiratory Medicine**, at the **Yale School of Medicine**. There he contributes to both clinical care and the training of future **pediatric and pediatric pulmonology professionals**.



## Dr. Canapari, Craig

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- ♦ Director of the Pediatric Sleep Medicine Postgraduate Certificate Program at Yale-New Haven Children's Hospital
- ♦ Attending Physician in Pediatric Pulmonology and Sleep Medicine at Yale-New Haven Children's Hospital
- ♦ Assistant Professor of Pediatrics, Respiratory Medicine, Yale School of Medicine, Yale University School of Medicine
- ♦ Doctor of Medicine, University of Connecticut School of Medicine
- ♦ Specialist in Pediatric Pulmonology and Sleep Medicine

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

## Management



### Dr. Larrosa Gonzalo, Óscar

- ♦ Specialist in Clinical Neurophysiology, San Rafael Hospital
- ♦ Expert in Sleep Medicine (CEAMS accredited, first national exam, 2013)
- ♦ Coordinator and founder of the Sleep Medicine Unit of MIPsalud, Madrid. Specialist and clinical consultant in sleep medicine at the Center of Neurological Diseases in Madrid and at the Multidisciplinary Unit for Sleep Disorders in San Rafael Hospital in Madrid, Spain
- ♦ Member of the Spanish Sleep Society (SES), founding member and former coordinator of its working group on Sleep Behaviour and Behavioural Disorders
- ♦ Member of the Spanish Society of the Neurophysiology Clinic (SENEC), founding member and former coordinator of its working group on sleep disorders
- ♦ Honorary Member, medical advisor and recommended specialist of the Spanish Restless Legs Syndrome Association (AESPI)
- ♦ Director of the Online Course "RESTLESS LEGS SYNDROME (WILLIS-EKBOM DISEASE)", (AESPI/Information without borders) for healthcare professionals, July 2016 - July 2017

## Professors

### Dr. Martínez Martínez, María Ángeles

- ◆ Specialist in Clinical Neurophysiology via MIR, San Carlos Clinical University Hospital, Madrid, Spain. Expert in Sleep Medicine (CEAMS accreditation, 2013)
- ◆ Assistant Specialist Physician in the Pulmonology Department and in the Multidisciplinary Unit of Sleep Disorders and Ventilation at Marqués - de Valdecilla University Hospital. Spain
- ◆ Master's degree in "Sleep: physiology and medicine", University Pablo de Olavide-Colegio de América, 2007
- ◆ Member of the Spanish Sleep Society (SES), founding member and former coordinator of its working group on movement and behavioural disorders during sleep
- ◆ Member of the Spanish Society of Clinical Neurophysiology (SENEC)
- ◆ Member of the Spanish Sleep Network
- ◆ Co-chair of the XXV Annual Meeting of the Spanish Sleep Society, Santander, 2017
- ◆ Associate researcher in 4 research projects in sleep medicine in the last 5 years

### Dr. Fernández Arcos, Ana

- ◆ AdSalutem Sleep Institute Attending Physician
- ◆ Coordinator of the Sleep Study Group of the Spanish Society of Neurology and member of the Spanish Sleep Society
- ◆ MIR specialist in Neurology at the Hospital de la Santa Creu i Sant Pau, Barcelona
- ◆ PhD in Medicine and Translational Research and Master in Sleep Disorders at the University of Barcelona
- ◆ European Expert in Sleep Medicine, accredited by the ESRS (European Sleep Research Society)

### ◆ Dr. Aguilar Andújar, María

- ◆ Area Specialist in the Clinical Neurophysiology Service of the Virgen Macarena University Hospital of Seville. Head of the Sleep Disorder Unit at this hospital
- ◆ Medical Specialist in Clinical Neurophysiology Virgen del Rocío University Hospital, Seville
- ◆ Official Master's Degree in Physiology and Neuroscience from the University of Seville
- ◆ PhD in Medicine from the University of Seville

### Dr. Sánchez Barros, Cristian

- ◆ Specialist in Clinical Neurophysiology and head of the Sleep Unit at the Juaneda Miramar Hospital of the Juaneda Healthcare Network Hospital Group, Palma de Mallorca (Balearic Islands, Spain)
- ◆ Specialist in Clinical Neurophysiology via MIR, Clinical University Hospital San Carlos, Madrid, Spain
- ◆ PhD in Medicine (Doctor) Cum Laude, Complutense University of Madrid
- ◆ Active member of the Spanish Sleep Society (SES), the Colombian Association of Sleep Medicine (ACMES) and the Spanish Society of Clinical Neurophysiology (SENEC)
- ◆ Active member of the SES Working Group on Movement and Behavioral Disorders during Sleep
- ◆ International advisor in a research project on Huntington's disease led by the Caribbean Neurosciences Group of the Simón Bolívar University (Barranquilla-Colombia)

**Dr. Martínez Pérez, Francisco**

- ◆ Quality Services at the Puerta de Hierro Hospital, Majadahonda
- ◆ Advanced neurophysiological studies at Clínica MIP Salud-Medicina Integral Personalized
- ◆ Neurophysiology techniques applied at the Vitruvian Institute of Biomechanics and Surgery
- ◆ Medical Specialist in Clinical Neurophysiology
- ◆ Degree in Medicine and Surgery from the Complutense University of Madrid
- ◆ Master's Degree in Sleep: Physiology and Pathology, Pablo Olavide University
- ◆ Master's Degree in Neurological Electrodiagnosis, University of Barcelona.
- ◆ Researcher, university lecturer, professor of the Master's Degree in Sleep Medicine.
- ◆ Author of several guidelines and consensus for different medical societies (SENFEC, SES, AEP) and the National Commission of the Specialty.
- ◆ XXI Century National Prize in Medicine
- ◆ European Award in Medicine

**Dr. Gutiérrez Muñoz, Carmen**

- ◆ Current activity at the Neurological Specialist Institute (IENSA) and Hospital QuirónSalud, Córdoba, Spain.
- ◆ Specialty in Clinical Neurophysiology via MIR, Virgen Macarena de Sevilla University Hospital
- ◆ European Certification as a Specialist in Sleep Medicine by ESRS
- ◆ Master's Degree in Sleep: Physiology and medicine from the University of Murcia
- ◆ Sleep Medicine courses of the American Sleep Society (AASM), 2016-2018
- ◆ Member of the Spanish Sleep Society (SES), American Sleep Society (AASM), Spanish and Andalusian Societies of Clinical Neurophysiology (SENFEC, SANFC)

**Dr. Urrestarazu Bolumburu, Elena**

- ◆ Consulting Clinical Neurophysiology Service. Monographic consultations on sleep disorders, Navarra University Clinic
- ◆ Full Professor at the University of Navarra
- ◆ MIR Specialist in Neurology, Clínica Universidad de Navarra. Pamplona
- ◆ MIR Specialist in Clinical Neurophysiology, Navarra Clinical University Pamplona
- ◆ Research Fellow in Epilepsy Montreal Neurological Institute (McGill University). Montreal, Canada
- ◆ Expert accreditation in Sleep Medicine by the European Sleep Research Society (ESRS) and expert training in Sleep Medicine by the CEAMS (Spanish Committee for Accreditation in Sleep Medicine)
- ◆ Member of the Spanish Society of Neurology (SEN), Spanish Society of Clinical Neurophysiology (SENFEC), Spanish Sleep Society (SES), European Sleep Research Society (ESRS), American Academy of Sleep Medicine (AASM) and World Sleep Society





# 04

# Structure and Content

The structure of the syllabus has been designed by a team of professionals with knowledge of the implications of medical preparation, who are aware of the relevance of the up-to-date specialization, and are committed to quality teaching using new educational technologies.







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*A comprehensive teaching program, structured in well-developed teaching units, oriented towards efficient and swift learning”*

## Module 1. Behavioural and Movement Disorders During Sleep in Adults

- 1.1. Parasomnias During Adult NREM Sleep
  - 1.1.1. Circadian Rhythm Disorders in Adults
  - 1.1.2. Nocturnal Eating Disorder
  - 1.1.3. Sexomnia
- 1.2. REM Sleep Behaviour Disorder (RBD)
- 1.3. Other Sleep Disorders or Behavioural Situations
  - 1.3.1. Other REM Parasomnias
    - 1.3.1.1. Nightmare Disorder
    - 1.3.1.2. Isolated Sleep Paralysis
  - 1.3.2. Somniloquy
  - 1.3.3. Explosive Head Syndrome
- 1.4. Sleep-Wake Disassociation
  - 1.4.1. The Concept of Sleep-Wake Disassociation
  - 1.4.2. Status Dissociatus
- 1.5. Restless Leg Syndrome (Willis-Ekbom's disease): Initial Considerations and Causal Mechanisms
  - 1.5.1. Definitions and Myths About the Disease: Clarifying Concepts
  - 1.5.2. Epidemiology
  - 1.5.3. Living with the Disease
  - 1.5.4. Pathophysiology
- 1.6. Restless Legs Syndrome: Etiopathogenic Types and Clinical Aspects
  - 1.6.1. "Primary" and "Secondary" Disease: Current Concepts
  - 1.6.2. Clinical Symptoms
  - 1.6.3. Physical, Psychological and Social Consequences
- 1.7. Restless Leg Syndrome: Diagnostic Methods and Differential Diagnosis
  - 1.7.1. Clinical Diagnostic Criteria
  - 1.7.2. Complementary Methods of Diagnostic Support
  - 1.7.3. Differential Diagnosis







- 1.8. Treatment of Restless Leg Syndrome
  - 1.8.1. Non-pharmacological Methods
  - 1.8.2. Iron Treatment Other Deficits to Consider
  - 1.8.3. The Pharmacological Treatment of Symptoms
    - 1.8.3.1. General Considerations
    - 1.8.3.2. Dopaminergic Drugs
    - 1.8.3.3. Non-dopaminergic Drugs
  - 1.8.4. Other Treatments
- 1.9. Other Motor Disorders Related to Sleep: Limb and/or Body Activity
  - 1.9.1. Periodic Limb Movement Syndrome During Sleep
  - 1.9.2. Rhythmic Movements During Sleep
  - 1.9.3. Muscular Cramps in the Legs During Sleep
  - 1.9.4. Hypnogenic Foot Tremor
  - 1.9.5. Alternating Leg Muscle Activation
  - 1.9.6. Hypnagogic Myoclonias
  - 1.9.7. Isolated Myoclonias in the Head and Neck During Sleep
  - 1.9.8. Prospinal Myoclonias
- 1.10. Other Motor Disorders Related to Sleep: Orofacial Phenomena
  - 1.10.1. Bruxism During Sleep
  - 1.10.2. Faciomandibular Myoclonias

“ A unique, key, and decisive training experience to boost your professional development”



05

# Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

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 Re-learning, 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 abundant 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.



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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.



## Re-Learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

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 Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking 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 high socioeconomic profile and an average age of 43.5 years old.

*Re-learning 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 multimedia content presentation training Exclusive system 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 & Re-testing

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 your goals.



#### Classes

There is scientific evidence on the usefulness of learning by observing experts: The system termed Learning from an Expert strengthens knowledge and recall capacity, and generates confidence in the face of difficult decisions in the future.



#### 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 Behavioral and Movement Disorders During Sleep in Adults, in addition to the most rigorous and up-to-date training, 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 Behavioral and Movement Disorders During Sleep in Adults** contains the most complete and up-to-date scientific program 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 certificate 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 Behavioral and Movement Disorders During Sleep in Adults**

Official N° of Hours: **150 h.**



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



**Postgraduate Certificate**  
Behavioral and Movement  
Disorders During Sleep  
in Adults

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

# Postgraduate Certificate

## Behavioral and Movement Disorders During Sleep in Adults

