



# Postgraduate Certificate

HBOT in Physical and Neurological Rehabilitation

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

We bsite: www.techtitute.com/in/sports-science/postgraduate-certificate/hbot-physical-neurological-rehabilitation

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# tech 06 | Introduction

There is currently a resurgence in the use of hyperbaric oxygenation treatment (HBOT) as an adjuvant tool in different medical specialties. The creation of new generation hyperbaric chambers which are easier to use, more affordable and easier to install in public and private health institutions, has led different professionals to incorporate this tool into their daily practice.

This Postgraduate Certificate in HBOT in Physical and Neurological Rehabilitation shows the benefits and evidence of this specialty, not recognized by professional societies that perform treatment at high pressures. However, there is not only published evidence, but also the experience of the teachers of this training on the effects of HBOT in this type of pathologies.

The role of hypoxia in neurodegenerative diseases such as Alzheimer's and Parkinson's is also presented, which raises HBOT as a therapeutic option to achieve some benefits and attenuate some symptoms in these progressive pathologies. Experimental evidence of HBOT in these patients is also presented.

In Sports Medicine, the incorporation of accessible and portable cameras has positioned this treatment as an option to improve sports performance and accelerate the recovery of muscle, ligament, tendon and bone injuries. And the advantages of HBOT in bone edema, oteomyelitis and avascular necrosis are taught.

Thanks to this Postgraduate Certificate, the student will acquire the skills to carry out the indication of this treatment for each case.

This **Postgraduate Certificate in HBOT in Physical and Neurological Rehabilitation** contains the most complete and up-to-date educational program on the market. The most important features of the program include:

- Development of practical cases presented by experts in Hyperbaric Medicine.
- 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.
- Developments in Hyperbaric Medicine.
- Practical exercises where self-assessment can be used to improve learning.
- Special emphasis on innovative methodologies in Hyperbaric 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



Don't miss the opportunity to study at one of the largest private online universities in the world. Take the step and join our team"

### Introduction | 07 tech



This Postgraduate program is the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge HBOT in Physical and Neurological Rehabilitation, you will obtain a certificate from one of the leading online universities in the world, TECH"

It includes in its teaching staff professionals belonging to the field of Hyperbaric Medicine, who pour into this renewal the experience of their work, in addition to recognized specialists from reference 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 training programmed to train in real situations.

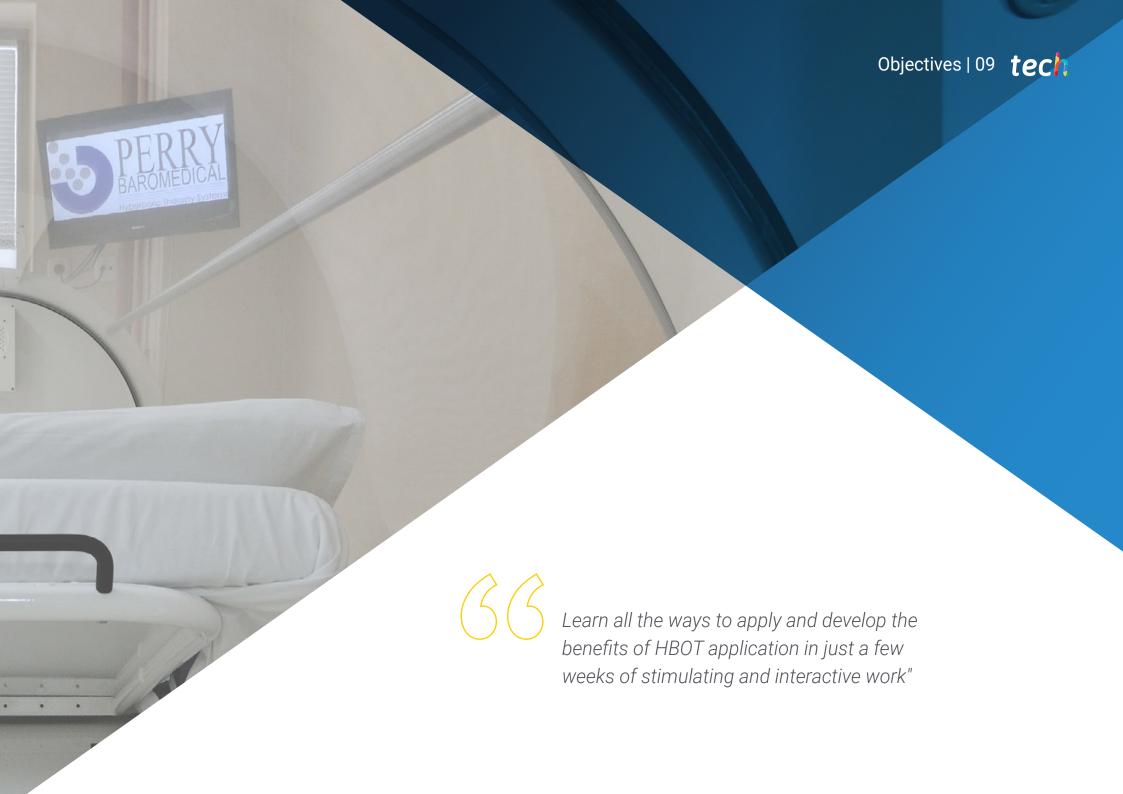
This program is designed around Problem-Based Learning, whereby the specialist must try to solve the different professional practice situations that arise during the academic year. For this, the professional will be assisted by an innovative interactive video system made by recognized experts, with great experience in HBOT in Physical and Neurological Rehabilitation.

This specialization has the best didactic material, which will allow you a contextual study that will facilitate your learning"

This 100% online program will allow you to combine your studies with your professional work while increasing your knowledge in this field"







# tech 10 | Objectives



# **General Objectives**

- Promote the usefulness of hyperbaric oxygenation treatment in different medical specialties
- Train health professionals on the foundations, mechanisms of action, indications, contraindications and applications of hyperbaric oxygen
- Study the degree of evidence published and the recommendations and indications of the different scientific societies related to Hyperbaric Medicine
- Recognize the potential applications of hyperbaric oxigen in different clinical cases and the benefits that can be achieved with the treatment, as well as performing the indication and detection of the contraindications





# Objectives | 11 tech



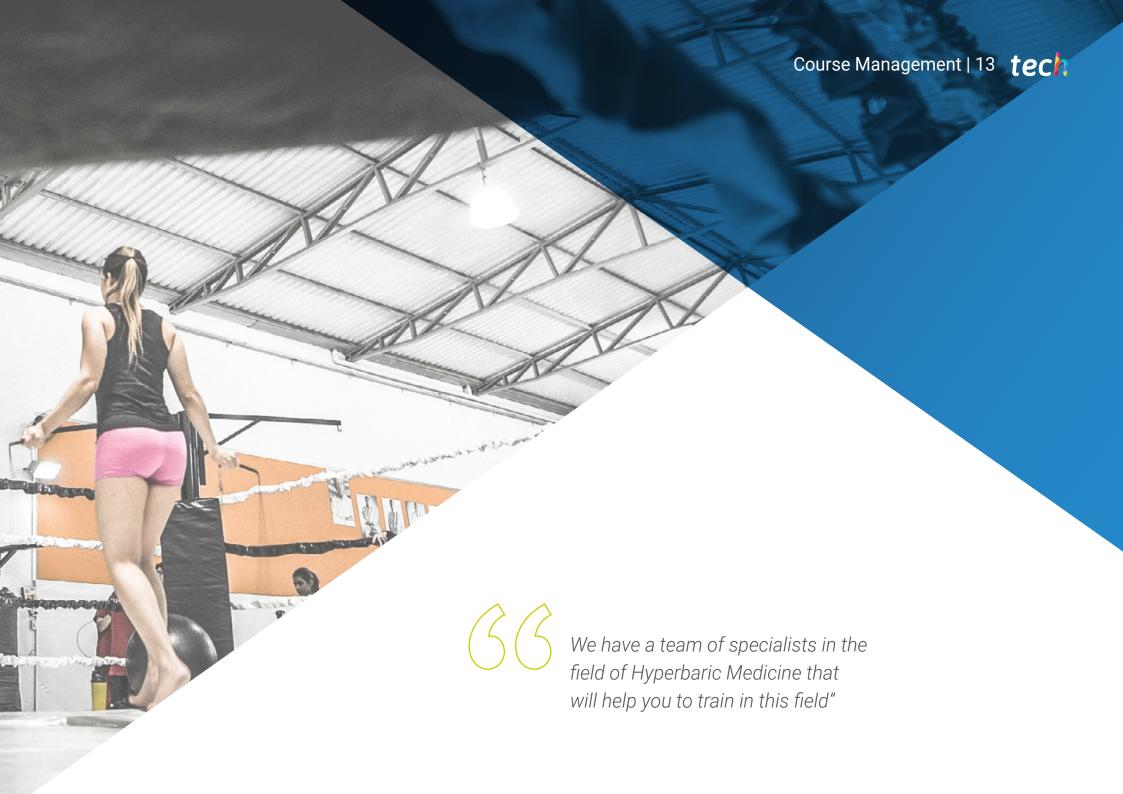
# **Specific Objectives**

- Present the scientific evidence on the neurological indications of HBOT
- Describe the effect of HBOT on physical rehabilitation
- Training on the indications of HBOT in sporting injuries and trauma pathologies.
- Describe the effect of HBOT on recovery and performance in sport
- Discuss the role of hypoxia in the development of neurodegenerative diseases and present the evidence of HBOT on Parkinsons and Alzheimers
- Present the experience of clinical cases treated with HBOT



Update your knowledge through the Postgraduate Certificate in HBOT in Physical and Neurological Rehabilitation"





# tech 14 | Course Management

### Management



### Dr. Cannellotto, Mariana

- Medical Director of the network of Hyperbaric Medicine centers BioBarica Argentina
- Vice President of AAMHEL
- Specialist in Clinical Medicine
- Specialist in Hyperbaric Medicine, School of Medicine



### Dr. Jordá Vargas, Liliana

- Scientific Director of the Argentine-Spanish Association of Hyperbaric Medicine and Research (AAMHEI and AEMHEI).
- Scientific Director-Biobarica Clinical Research, International Network of BioBaric Hyperbaric Medicine Centers
- Degree in Biochemistry. National University of Córdoba, Argentina
- Microbiology Specialist
- · Head of Microbiology, CRAI North, Cucaiba, Argentina



# Course Management | 15 tech

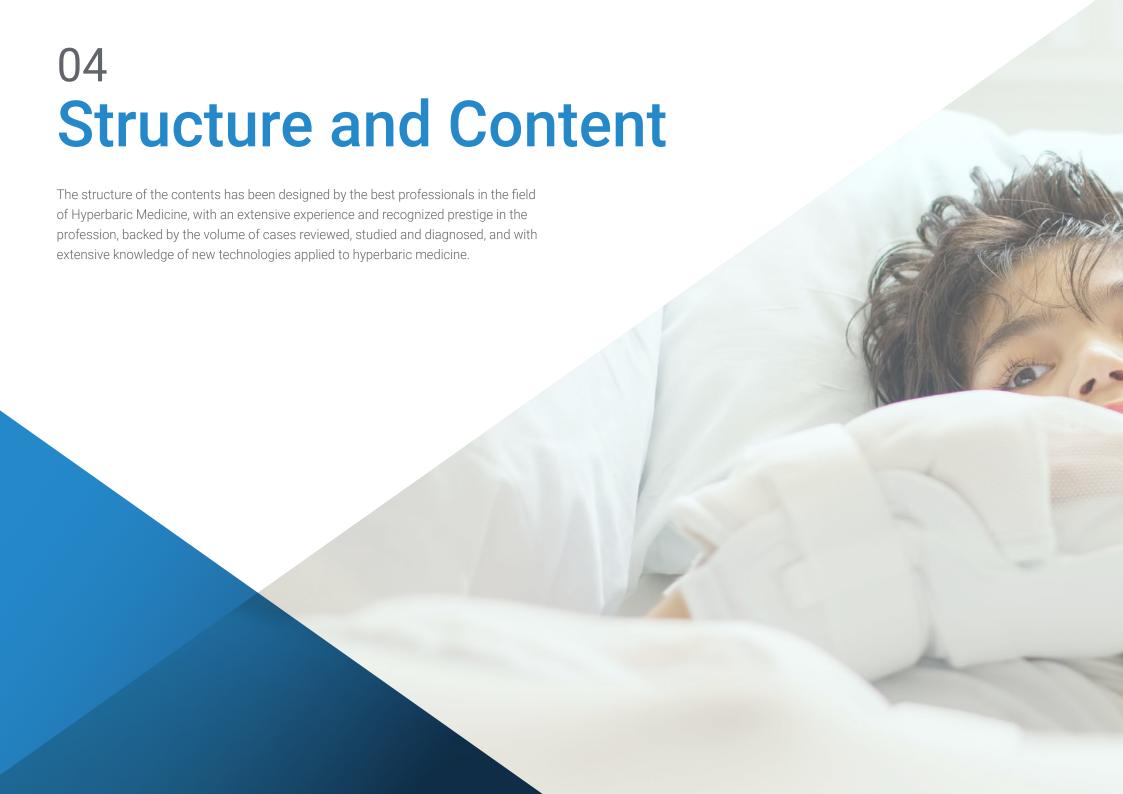
#### **Teachers**

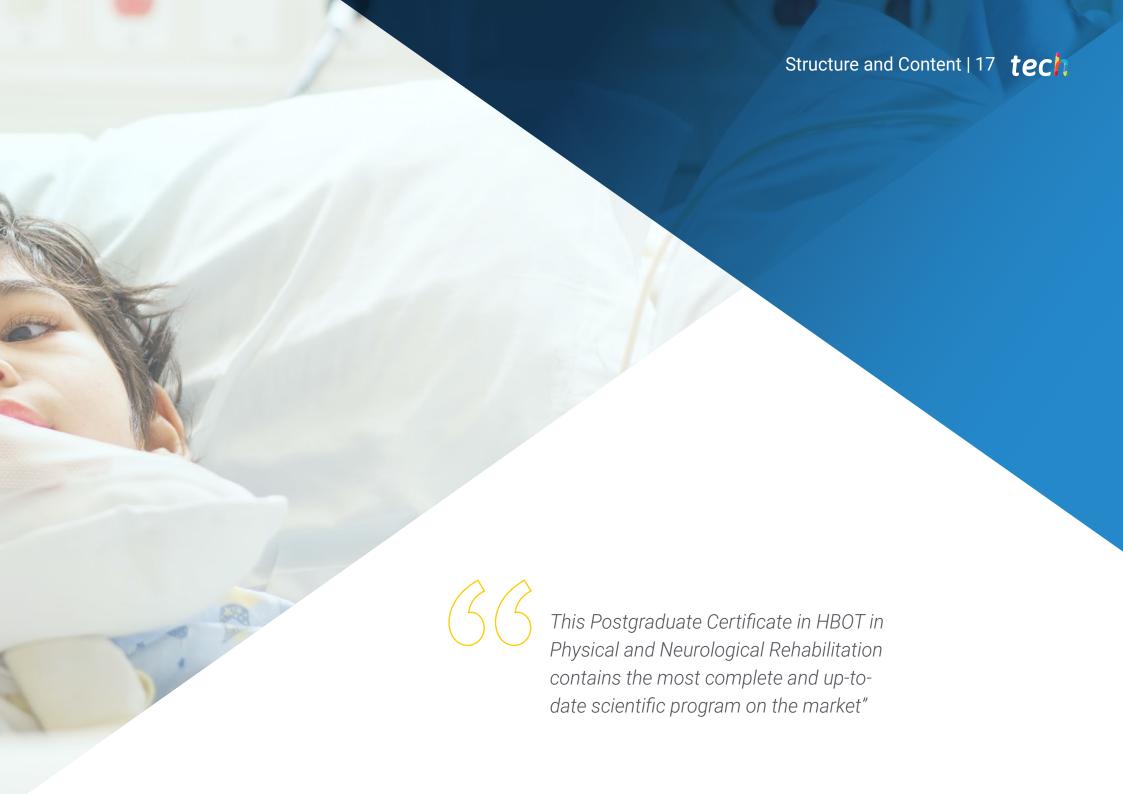
#### Dr. Ramallo, Rubén Leonardo

- Director of the AAMHEI Medical Clinic Commission
- Specialist in Internal Medicine. Residency in Internal Medicine, Córdoba Hospital
- Medical Surgeon Faculty of Medical Sciences. National University of Córdoba. Argentina
- Master's Degree in Psychoimmunoneuroendocrinology. Favaloro University

#### Dr. Verdini, Fabrizio

- Institutional Relations AAMHEI
- Clinical Doctor
- Diploma in Public Health Management
- Master's Degree in Healthcare Management

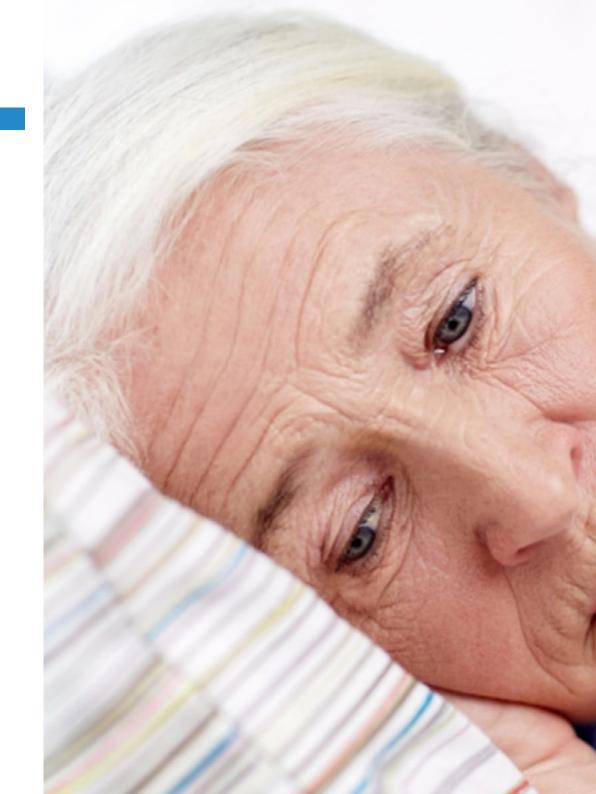




# tech 18 | Structure and Content

### Module 1 HBOT in Physical and Neurological Rehabilitation

- 1.1. HBOT in Recovery and Performance in Sport
- 1.2. Hyperbaric Oxygen and Sporting Injuries
- 1.3. Brain Trauma and Post-Concussion Syndrome
- 1.4. Stroke Recovery and Hyperbaric Oxygen
- 1.5. Brain Paralysis and HBOT
- 1.6. Autism
- 1.7. Ischemic Encephalopathies
- 1.8. HBOT in Parkinson's
- 1.9. HBOT in Alzheimer's
- 1.10. HBOT in Trauma (Avascular Necrosis, Bone Edema, Fractures and Osteomyelitis)







This refresher program will will allow you to comfortable will allow you to comfortably advance in your career"





# tech 22 | Methodology

#### Case Study to contextualize all content

Our program offers a revolutionary approach to developing skills and knowledge. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.



At TECH, you will experience a learning methodology that is shaking the foundations are shaking the foundations. methodology that is shaking the foundations of traditional universities around the world"



You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.



The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

### A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and professional reality is taken into account.



Our program prepares you to face new challenges in uncertain environments and achieve success in your career"

The case method is the most widely used learning system in the best faculties in the world. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.



#### **Relearning Methodology**

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

In 2019, we obtained the best learning results of all online universities in the world.

At TECH, you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our university is the only one in the world authorized to employ this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



### Methodology | 25 tech

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. With this methodology, we have trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, markets, and financial instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

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

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.

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.



#### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **Practising Skills and Abilities**

They will carry out activities to develop specific competencies and skills in each thematic area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



#### **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.





#### **Case Studies**

Students will complete a selection of the best case studies chosen specifically for this situation. Cases that are presented, analyzed, and supervised by the best specialists in the world.



#### **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".

#### **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.







# tech 30 | Certificate

This **Postgraduate Certificate in HBOT in Physical and Neurological Rehabilitation** contains the most complete and up-to-date scientific program on the market.

After the students have passed the assessments, they will receive their corresponding **Postgraduate Certificate** diploma 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 HBOT in Physical and Neurological Rehabilitation
Official N° of Hours: 150 h.

#### **Endorsed by the NBA**





technological university



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