

# Hybrid Master's Degree Therapeutic Personal Training

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**tech** global  
university



## Hybrid Master's Degree Therapeutic Personal Training

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 ECTS Credits

Website: [www.techtute.com/us/sports-science/hybrid-master-degree/hybrid-master-degree-therapeutic-personal-training](http://www.techtute.com/us/sports-science/hybrid-master-degree/hybrid-master-degree-therapeutic-personal-training)

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# 01

# Introduction

The area of Therapeutic Personal Training has experienced significant growth in recent years due to society's increased awareness of the importance of physical activity and its relationship to health and wellness. In addition, scientific and technological advances have led to the emergence of new tools and approaches in the approach to diseases and conditions through physical exercise, which represents a challenge for professionals in the sector. In this context, this TECH program, which combines 100% online learning with a 3-week intensive internship in a prestigious center, is essential to update the knowledge and skills of professionals, providing them with the most advanced competencies.







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*Advance your career as a Therapeutic Personal Training professional and acquire cutting-edge knowledge in the field thanks to this Hybrid Master's Degree"*

In recent years, the area of Therapeutic Personal Training has experienced a great advance due to new scientific findings in the approach to diseases and conditions through physical exercise. In addition, the growing demand for personalized programs tailored to the specific needs of each patient has generated the need for professionals in the sector to update their knowledge in order to be able to offer quality services.

For this reason, TECH presents its Hybrid Master's Degree in Therapeutic Personal Training, with the objective of providing professionals with the opportunity to acquire up-to-date knowledge and practical tools to offer quality services in this constantly evolving field.

This educational program is justified based on the current context, in which cutting-edge technology plays a fundamental role in the effectiveness of Therapeutic Personal Training. Through a combination of 100% online methodology and intensive internships, participants will acquire specialized knowledge in the application of cutting-edge technology, enabling them to take their professional practice to the next level.

One of the great advantages of this program is its hybrid format, which allows participants to complete a large part of the program virtually. In addition, intensive internships in specialized centers, which are part of the program, allow participants to put into practice what they have learned and gain experience in real working environments. In conclusion, TECH's Hybrid Master's Degree in Therapeutic Personal Training is a unique opportunity for professionals in the sector to update themselves and be at the forefront of the latest developments and technologies in this constantly evolving field.

This **Hybrid Master's Degree in Therapeutic Personal Training** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ♦ Development of more than 100 clinical cases presented by Sports Science professionals working in the field of Therapeutic Personal Training
- ♦ 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
- ♦ Comprehensive training plans for physical exercise for special populations
- ♦ Algorithm-based interactive learning system for the implementation of the best training plans
- ♦ Sports practice guides on the approach to different pathologies from the perspective of Therapeutic Personal Training
- ♦ All of this will be complemented by 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
- ♦ In addition, you will be able to do an internship in one of the best centers in the country



*Develops in a practical way the necessary skills to design customized training plans adapted to the specific needs of each patient"*

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*Stay up-to-date on the latest research and advances in the field of Therapeutic Personal Training with this Hybrid Master's Degree, which will allow you to do an intensive 3-week internship"*

In this Hybrid Master's Degree proposal, of a professionalizing nature and hybrid learning modality, the program is aimed at updating Sports Science professionals. The content is based on the latest scientific evidence and organized in a didactic way to integrate theoretical knowledge into Therapeutic Personal Training.

Thanks to its multimedia content developed with the latest educational technology, they will allow the professional to learn in a contextual and situated learning environment, i.e., a simulated environment that will provide immersive learning programmed to train in real situations. The design of this program is focused on Problem-Based Learning, through which the student will have to try to solve the different professional practice situations that will arise throughout the program. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Upgrade your knowledge in Therapeutic Personal Training and expand your career opportunities in the industry.*

*Master the most advanced techniques for the monitoring and evaluation of patient physical performance, including the use of specialized software.*



# 02

## Why Study this Hybrid Master's Degree?

Take this Hybrid Master's Degree in Therapeutic Personal Training is a unique opportunity to update in one of the most demanded areas in the field of health and sport. This educational program offers a comprehensive and up-to-date approach to the challenges and advances in therapeutic personal training, which will allow the professionals to expand their knowledge and skills. In addition, the possibility of carrying out the theoretical stage online and the intensive in person practices, together with experts in the sector, ensure a quality training adapted to the needs of each student. In short, this Hybrid Master's Degree is an investment in the student's professional career that will provide added value in the field of health and sport.







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*Specialize in Therapeutic Personal Training and put into practice the skills acquired through the intensive internships offered by TECH”*



### 1. Updating from the Latest Technology Available

In recent years, technology has revolutionized the field of Therapeutic Personal Training, improving the way diseases and conditions are addressed through physical exercise. TECH, aware of this reality, has designed a hybrid learning program that will allow the professionals a total immersion in an innovative and cutting-edge environment, where they will have access to state-of-the-art technology in this area.

### 2. Gaining In-depth Knowledge from the Experience of Top Specialists

The large team of experts that will accompany the professional throughout the entire practical period is a first-rate guarantee and an unprecedented guarantee of updating. With a specifically designated tutor, students will be able to see real users in a state-of-the-art environment, which will allow them to incorporate the most effective procedures and training methods into their daily practice.

### 3. Entering First-Class Clinical Environments

TECH carefully selects all available centers for Internship Programs. Thanks to this, the specialist will have guaranteed access to a prestigious professional environment in the area of Therapeutic Personal Training. In this way, you will be able to see the day-to-day work of a demanding, rigorous and exhaustive sector, always applying the latest theses and scientific postulates in its work methodology.





#### 4. Combining the Best Theory with State-of-the-Art Practice

The academic market is plagued by teaching programs that are poorly adapted to the daily work of the specialist and that require long teaching hours, often not very compatible with personal and professional life. TECH offers a new learning model, 100% practical, that allows you to get to grips with of state-of-the-art procedures in the field of Therapeutic Personal Training and, best of all, put it into professional practice in just 3 weeks.

#### 5. Expanding the Boundaries of Knowledge

TECH provides the opportunity to carry out specialized internships in Therapeutic Personal Training not only in prestigious national centers, but also internationally. Thanks to this, the professionals will have the opportunity to broaden their horizons and acquire knowledge from the best experts in first-level clinics located in different continents. This is an unparalleled opportunity that only TECH, the world's leading digital university, can provide.

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*You will have full practical immersion at the center of your choice"*

# 03 Objectives

The design of this Hybrid Master's Degree program will allow students to acquire the necessary skills to update their knowledge in the profession of Therapeutic Personal Training after studying in depth the key aspects of this discipline. The knowledge acquired in the development of the points of the syllabus will drive the professional from a global perspective, with full capacity to achieve the proposed goals.







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*Update your knowledge on the anatomy and physiology of the human body, applied to Therapeutic Personal Training, through this TECH hybrid professional program"*



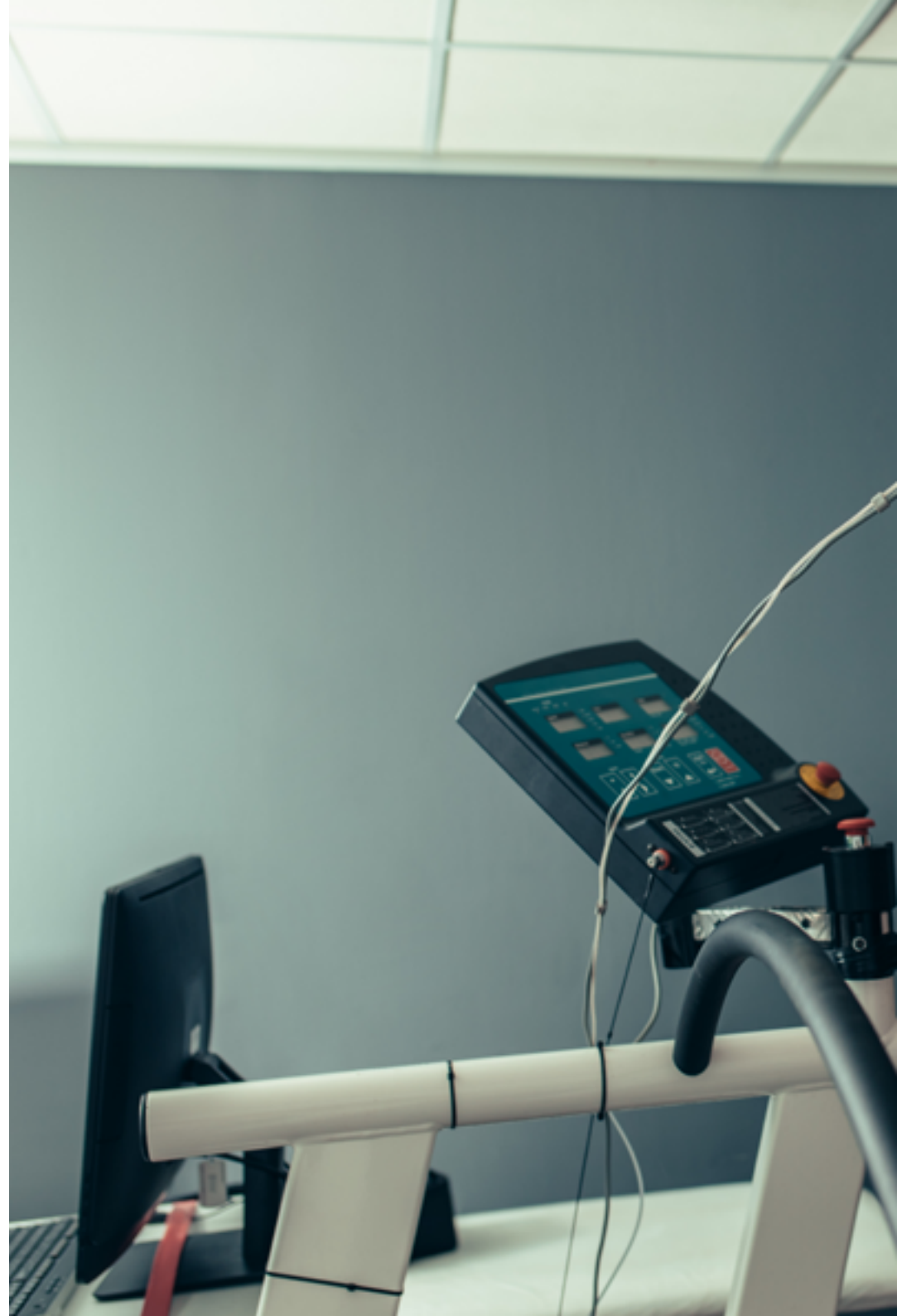
## General Objective

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- The objective of this program is to offer a complete and up-to-date vision of the most frequent pathologies in society and the factors that trigger diseases. In addition, the aim is to understand the different variables of training and its application in people with pathologies, in order to avoid possible counterproductive effects of physical exercise. It is also intended to know the existing contraindications in each pathology and its most relevant characteristics, all this in order to prevent the appearance of comorbidities or the disease itself. In summary, the objective of this program is to provide students the ability to offer personalized training adapted to the needs of each person, taking into account their health status



*Get up-to-date and learn about the triggering factors of various pathologies and diseases, deepening in their prevention through Personal Training"*







## Specific Objectives

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### Module 1. Pathology in the Current Social and Healthcare Context

- ♦ Gain an in-depth understanding of the current and future needs of the population with respect to physical exercise
- ♦ Explore other aspects that affect the health of the client/patient and that may have an impact on their physical development capacity
- ♦ Manage the reality and limitations of the most frequent diagnostic tests and their usefulness in physical exercise planning
- ♦ Interpret the interaction and impact of neuroscience and physical exercise
- ♦ Address and understand the influence of stress, nutrition and other habits on people's health
- ♦ Expand your vision of the microbiota on the health of the organism and the influence that certain factors, such as physical exercise, have on it

### Module 2. General Criteria for the Design of Physical Exercise Programs for Special Populations

- ♦ Understand the most important variables of training in depth in order to know how to apply them in an individualized way
- ♦ Manage the general criteria for the design of physical exercise programs for people with pathology
- ♦ Obtain the necessary tools to develop training planning tailored to the client's needs

### **Module 3. Obesity and Physical Exercise**

- ♦ Understand the pathophysiology of obesity in depth and its repercussions on health
- ♦ Understand the physical limitations of the obese individual
- ♦ Be able to plan and program training in an individualized way for a person with obesity

### **Module 4. Diabetes and Physical Exercise**

- ♦ In-depth understanding of the pathophysiology of diabetes and its impact on health
- ♦ Understanding the specific needs in diabetes
- ♦ Be able to plan and program training in an individualized way for a person with diabetes

### **Module 5. Metabolic Syndrome and Physical Exercise**

- ♦ In-depth understanding of the pathophysiology of metabolic syndrome
- ♦ Understand the intervention criteria to improve the health and quality of life of patients with this disease
- ♦ Be able to plan and program training in an individualized way for a person with metabolic syndrome

### **Module 6. Cardiovascular Diseases**

- ♦ Study the wide range of existing pathologies with cardiovascular involvement
- ♦ Understand the phases of action in cardiovascular rehabilitation
- ♦ Be able to plan and program training in an individualized way for a person with a cardiovascular disease





**Module 7. Osteoarticular Pathology and Non-Specific Low Back Pain**

- ♦ Study the different pathologies affecting the osteoarticular system
- ♦ Understand the term fragility and its impact on the osteoarticular system and non-specific low back pain
- ♦ Be able to plan and program the training in an individualized way in a person with different pathologies associated with the osteoarticular system and pain in a person with different diseases associated to the osteoarticular system and non-specific low back pain

**Module 8. Respiratory Pathology and Physical Exercise**

- ♦ Study the different pulmonary conditions
- ♦ Understand, in depth, the pathophysiologic characteristics of pulmonary diseases
- ♦ Be able to plan and program training in an individualized way for people with pulmonary diseases

**Module 9. Physical Exercise and Pregnancy**

- ♦ Manage the morphofunctional changes of the pregnancy process
- ♦ In-depth understanding of the biopsychosocial aspects of pregnancy
- ♦ Be able to plan and program training in an individualized way for a pregnant woman

**Module 10. Physical Exercise in Children and Adolescents and Older Adults**

- ♦ In-depth understanding of the biopsychosocial aspects of children, adolescents and older adults
- ♦ Know the particularities of each age group and their specific approach
- ♦ Be able to plan and program training in an individualized way for children, adolescents and older adults

# 04 Skills

Upon completion of this Hybrid Master's Degree in Therapeutic Personal Training, the professional will master the necessary competencies to understand and apply the different variables of training in people with pathologies, offering a broad and general vision of the most frequent pathologies in society and their most relevant characteristics. In addition, students will master the factors that trigger diseases in order to prevent them and will know the existing contraindications in the different pathologies to avoid possible counterproductive effects of physical exercise. In summary, students will be fully capable of updating their knowledge and applying it effectively in their professional practice.





*Develops skills for managing and promoting a Therapeutic Personal Training business, including marketing and client management"*





## General Skills

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- ♦ Design appropriate training programs for people with various diseases and adjust it to the needs of each individual
- ♦ Manage an appropriate technical vocabulary that will allow you to communicate with different health professionals and understand the multiple diagnostic tests, being able to generate synergy with multidisciplinary groups to improve the health of people with pathologies

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*Put what you have learned into practice in the best facilities and under the tutelage of leading professionals in the industry through this high-level educational program”*





## Specific Skills

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- ♦ Know the particularities of personal training adapted to each person and design individualized and specific programs according to their needs
- ♦ Address safe and effective intervention through physical exercise programs, in population groups with diseases
- ♦ Know the main pathologies that people may suffer, especially those in which physical exercise can be an effective therapy to improve their quality of life
- ♦ Design and carry out personalized training for people with obesity
- ♦ Knowing the relationship between diabetes and exercise and how exercise can achieve great benefits in patients
- ♦ Design specific exercise programs for people with cardiovascular pathologies
- ♦ Know how to prepare personalized training programs for users with respiratory pathologies

05

# Course Management

The faculty of the Hybrid Master's Degree in Therapeutic Personal Training is composed of professionals of recognized prestige and experience in the field of Personal Training and Physical Therapy. The teachers are specialists in different areas of training, rehabilitation and physiotherapy, which allows addressing the different aspects of the program in a complete and up-to-date manner.







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*Study with the best experts in Therapeutic Personal Training and apply your skills in a real-world practical environment with this program that includes intensive internships"*

## Management



### Dr. Rubina, Dardo

- ♦ Specialist in High Performance Sports
- ♦ CEO of the Test and Training project
- ♦ Physical Trainer at Moratalaz Sports School
- ♦ Teacher of Physical from Education in Football and Anatomy CENAFE Schools Carlet
- ♦ Coordinator of Field Hockey Physical Training at the Gimnasia y Esgrima Club in Buenos Aires
- ♦ Doctorate in High Performance Sports
- ♦ Diploma in Advanced Research Studies at the University of Castilla (La Mancha)
- ♦ Master in High Performance Sports by the Autonomous University of Madrid
- ♦ Postgraduate in Physical Activity in Populations with Pathologies by the University of Barcelona
- ♦ Competitive Bodybuilding Technician by the Extremeña Federation of Bodybuilding and Fitness
- ♦ Expert in Sports Scouting and Quantification of Training Load Cone specialization in Soccer and Sports Sciences by the University of Melilla
- ♦ Advanced Bodybuilding Expert by the International Fitness and Bodybuilding Federation (IFBB)
- ♦ Advanced Nutrition Expert by the International Fitness and Bodybuilding Federation (IFBB)
- ♦ Specialist in Physiological Assessment and Interpretation of Physical Fitness
- ♦ Certification in Technologies for Weight Control and Physical Performance by the Arizona State University





## Professors

### Ms. Avila, María Belén

- ◆ Psychologist and Nutritionist
- ◆ Psychologist and Nutritionist with private practice
- ◆ Nutrition and Diabetes service in different centers
- ◆ Nutritionist at the Argentine Diabetes Federation
- ◆ Member of: the Psychology Scientific Committee of the Hospital of Clínicas José de San Martín
- ◆ Nutritionist in the Senior Adult Scientific Committee of the Argentine Diabetes Society
- ◆ Sports Psychologist at Club Atlético Vélez Sarsfield
- ◆ National Physical Education Teacher
- ◆ Degree in Psychology
- ◆ Degree in High Performance Sports
- ◆ Specialization in Sport Psychology
- ◆ Integral Therapeutic Program for the Treatment of Overweight and Obesity by the Center for Metabolic Research (CINME)
- ◆ Certified Diabetes Educator

### D. Supital, Raúl Alejandro

- ◆ Physiatrist Specialized in Physical Activity, Health and Biomechanics
- ◆ Director of the Integral Prevention and Rehabilitation Center CIPRES
- ◆ Advisor to the Global Network of Physical Education and Sport based in Barcelona
- ◆ Head of the Department of Biological Sciences of the Superior Institute of Physical Education N.º1 Dr. Enrique Romero Brest
- ◆ Degree in Kinesiology and Physiatry at the University of Buenos Aires

**Mr. Vallodoro, Eric**

- ◆ Specialist in High Performance Sports
- ◆ Coordinator of the Biomechanics and Exercise Physiology Laboratory at the Modelo Lomas Institute.
- ◆ Full Professor of Physical Education at the Modelo Lomas Superior Institute
- ◆ Graduate in High Performance Sports at the National University of Lomas in Zamora
- ◆ Full Professor in the chairs of: Didactics of the Secondary Level, Didactics of Sports Training and Teaching Practice at the Superior Institute of the Lomas Model
- ◆ Graduate in Physical Education at Modelo Lomas Superior Institute
- ◆ Master's Degree in Physical Activity and Sports from the National University of Avellaneda Predictamen
- ◆ Master's Degree in Child and Adolescent Training and Development, 1st Promotion, National University of Lomas de Zamora Thesis

**D. Masabeu, Emilio José**

- ◆ Neuromotricity Specialist
- ◆ National Physical Education Teacher
- ◆ Teacher at José Clemente Paz University
- ◆ Professor at the National University of Villa María
- ◆ Professor at the National University of Lomas de Zamora
- ◆ Degree in Kinesiology from the University of Buenos Aires





**Mr. Crespo, Guillermo Javier**

- ◆ Coordinator of Club Body Gym (Buenos Aires)
- ◆ Assistant Coach in the Youth Weightlifting Detection and Development Program
- ◆ Coordinator of the gym and training center of the Calabresa Association (Buenos Aires)
- ◆ National Coach of Olympic Weightlifting and Sport Weightlifting at the Sports Institute Buenos Aires (Argentina)
- ◆ Degree in Nutrition from HA Barceló University Institute of Health Sciences
- ◆ Certified trainer of the Trainingym Manager system and tools

**Mr. Renda, Juan Manuel**

- ◆ Physical Preparation Specialist
- ◆ Physical Education Teacher
- ◆ Degree in Physical Education from the National University of General San Martín
- ◆ Degree in Kinesiology and Physiatry from the University Institute H.A. Barceló
- ◆ Master's Degree in Physical Education, National University of Lomas de Zamora



# 06

## Educational Plan

The syllabus of this Hybrid Master's Degree in Therapeutic Personal Training is structured around the most frequent pathologies in society and their approach through physical exercise. The student will obtain an overview of the physiology and anatomy of the human body and its relationship with the most common pathologies. In addition, the design and planning of personalized training for patients with pathologies, with the aim of preventing the onset of comorbidities or the disease itself, will be discussed in depth.





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*TECH gives you access to the most complete syllabus, designed by experts of great prestige in the field of Therapeutic Personal Training"*

## Module 1. Pathology in the Current Social and Healthcare Context

- 1.1. Introduction to the Concept of Health
  - 1.1.1. The Concept of Health
  - 1.1.2. Pathology, Disease and Syndrome
  - 1.1.3. Classification of Diseases According to Different Criteria
  - 1.1.4. Chronic Non-Communicable Diseases.
  - 1.1.5. Self-defense Mechanisms
- 1.2. Impact of Chronic Stress on Health
  - 1.2.1. Stress and Eustress. Differences and their Implications for Health
  - 1.2.2. Stress in Today's Society
  - 1.2.3. Physiology and Psycho-physical Stress
  - 1.2.4. Lifestyle Modification and Healthy Habits in the Prevention and Treatment of Stress-Related Diseases
  - 1.2.5. Psychological Benefits of an Active Lifestyle
- 1.3. Sedentary Lifestyle Modification and Sedentary Lifestyle
  - 1.3.1. Definition and Epidemiological Data
  - 1.3.2. Relationship between Sedentary Lifestyle and Pathologies
  - 1.3.3. Lifestyle Modification as a Therapeutic Guideline
  - 1.3.4. Intervention Proposals for a More Active and Healthier Lifestyle
- 1.4. Physical Activity, Physical Exercise and Health
  - 1.4.1. Differences between Physical Activity and Physical Exercise
  - 1.4.2. Implications of Physical Activity on Health over the Years.
  - 1.4.3. Physical Exercise and the Biological Adaptation Process
- 1.5. Update on Anatomico-physiological Basis for Human Performance and Health
  - 1.5.1. Muscle and Strength and their Relationship to Health
  - 1.5.2. Bioenergetic Bases of Movement: An Update
  - 1.5.3. Biomolecular Bases of Physical Exercise
- 1.6. Nutrition and Health
  - 1.6.1. The Exercise Professional as a Transmitter of Healthy Habits: The Role of Nutrition
  - 1.6.2. Basic Criteria and Strategies for Healthy Nutrition

- 1.7. Assessment of Physical Activity
  - 1.7.1. Classification of Physical Tests and Assessments
  - 1.7.2. Quality Criteria for Physical Fitness Tests
  - 1.7.3. Objective Methods of Physical Activity Assessment
  - 1.7.4. Subjective Methods of Physical Activity Assessment
- 1.8. Relationship of Gut Microbiota to Pathology and Exercise
  - 1.8.1. What is the Intestinal Microbiota?
  - 1.8.2. Relationship of the Intestinal Microbiota to Health and Disease
  - 1.8.3. Modulation of the Intestinal Microbiota through Physical Exercise
- 1.9. Neurosciences and Health
  - 1.9.1. Implications of Neuroscience on Health
  - 1.9.2. Influence of Physical Activity on the Functionality of the Nervous System and its Relation to the Immune System
- 1.10. Benefits of Physical Exercise as a Kinephylactic and Therapeutic Tool
  - 1.10.1. Main Biological Benefits of Physical Exercise
  - 1.10.2. Main Cognitive Psychological Benefits of Physical Exercise
  - 1.10.3. Final Conclusions

## Module 2. General Criteria for the Design of Physical Exercise Programs for Special Populations

- 2.1. Design of Exercise Programs for Special Populations
  - 2.1.1. Competencies and Protocols: From Diagnosis to Intervention
  - 2.1.2. Multi-disciplinarity and Inter-disciplinarity as the Basis of the Intervention Process through Physical Exercise in Special Populations.
- 2.2. General Principles of Training and their Application to the Health Field
  - 2.2.1. Principles of Adaptation (Initiation and Development)
  - 2.2.2. Principles of Adaptation Guarantees
  - 2.2.3. Adaptation Specificity Principles
- 2.3. Training Planning for Special Populations
  - 2.3.1. Planning Phase I
  - 2.3.2. Planning Phase II
  - 2.3.3. Planning Phase III

- 2.4. Training Objectives in Health Fitness Training Programs
  - 2.4.1. Strength Training
  - 2.4.2. Resistance Training
  - 2.4.3. Flexibility/ADM Training
- 2.5. The Applied Evaluation
  - 2.5.1. Diagnostic Assessment as a Tool for Training Load Control
  - 2.5.2. Morphological and Functional Assessments
  - 2.5.3. Protocol and its Importance. Data Logging
  - 2.5.4. Processing of the Data Obtained, Conclusions and Practical Application to Training
- 2.6. The Programming of Training in Special Populations: Intervention Variables (I)
  - 2.6.1. Definition of the Training Load Concept
  - 2.6.2. Training Frequency
  - 2.6.3. Training Volume
- 2.7. The Programming of Training in a Special Population: Intervention Variables (II)
  - 2.7.1. Objective Training Intensity
  - 2.7.2. Subjective Training Intensity
  - 2.7.3. Recovery and Training Density
- 2.8. The Prescription of Training in Special Populations: Intervention Variables (I)
  - 2.8.1. Selection of Training Exercises
  - 2.8.2. Ordering Training Exercises
  - 2.8.3. Training Systems
- 2.9. The Prescription of Training in Special Populations: Intervention Variables (II)
  - 2.9.1. Strength Training Methods
  - 2.9.2. Resistance Training Methods
  - 2.9.3. Concurrent Training Methods in the Health Care Field
  - 2.9.4. HIIT Training Method in the Field of Health
  - 2.9.5. Flexibility/ADM Training Methods
  - 2.9.6. Internal and External Training Load Control
- 2.10. The Design of Training Sessions
  - 2.10.1. Training Preparation Phase
  - 2.10.2. Main Phase of Training
  - 2.10.3. Recovery Phase of the Training
  - 2.10.4. Final Conclusions

### Module 3. Obesity and Physical Exercise

- 3.1. Definition, Contextualization and epidemiology
  - 3.1.1. Evolution of Obesity: Associated Cultural and Social Aspects
  - 3.1.2. Obesity and Comorbidities: The Role of Interdisciplinarity
  - 3.1.3. Childhood Obesity and its Impact on Future Adults
- 3.2. Pathophysiological Bases
  - 3.2.1. Definition of Obesity and Health Risks
  - 3.2.2. Pathophysiological Aspects of Obesity
  - 3.2.3. Obesity and Associated Pathologies
- 3.3. Assessment and Diagnosis
  - 3.3.1. Body Composition: 2-Component and 5-Component Model
  - 3.3.2. Assessment: Main Morphological Assessments
  - 3.3.3. Interpretation of Anthropometric Data
  - 3.3.4. Prescription of Physical Exercise for the Prevention and Improvement of Obesity
- 3.4. Protocols and Treatments
  - 3.4.1. First Therapeutic Guideline: Lifestyle Modification
  - 3.4.2. Nutrition: Role in Obesity
  - 3.4.3. Exercise: Role in Obesity
  - 3.4.4. Medical Treatment
- 3.5. Training Planning in Patients with Obesity
  - 3.5.1. Definition and Specification of Customer Level
  - 3.5.2. Definition and Specification of Objectives
  - 3.5.3. Definition and Specification of Assessment Processes
  - 3.5.4. Definition and Specification of Operability with Respect to Spatial and Material Resources
- 3.6. Strength Training Programming in Obese Patients
  - 3.6.1. Objectives of Strength Training in Obese People
  - 3.6.2. Volume, Intensity and Recovery of Strength Training in Obese Individuals
  - 3.6.3. Selection of Exercises and Methods of Strength Training in Obese People
  - 3.6.4. Design of Strength Training Programs in Obese People

- 3.7. Programming of Resistance Training in the Obese Patient
  - 3.7.1. Objectives of Resistance Training in Obese People
  - 3.7.2. Volume and Intensity and Recovery from Resistance Training in Obese People
  - 3.7.3. Selection of Exercises and Methods of Resistance Training in Obese People
  - 3.7.4. Design of Resistance Training Programs for Obese People
- 3.8. Joint Health and Complementary Training in Obese Patients
  - 3.8.1. Complementary Training in Obesity
  - 3.8.2. ROM/Flexibility Training in Obese People
  - 3.8.3. Improved Trunk Control and Stability in Obese People
  - 3.8.4. Other Training Considerations for the Obese Population
- 3.9. Psycho-social Aspects of Obesity
  - 3.9.1. Importance of Interdisciplinary Treatment in Obesity
  - 3.9.2. Eating Disorders
  - 3.9.3. Childhood Obesity
  - 3.9.4. Adult Obesity
- 3.10. Nutrition and Other Factors Related to Obesity
  - 3.10.1. "Omics" Sciences and Obesity
  - 3.10.2. Microbiota and its Influence on Obesity
  - 3.10.3. Protocols for Obesity Nutritional Intervention: Evidence
  - 3.10.4. Nutritional Recommendations for the Practice of Physical Exercise

## Module 4. Diabetes and Physical Exercise

- 4.1. Definition, Contextualization and epidemiology
  - 4.1.1. Definition and Fundamentals of Diabetes Mellitus
  - 4.1.2. Signs and Symptoms of Diabetes Mellitus
  - 4.1.3. Definition and Classification of Diabetes Mellitus
  - 4.1.4. Type II Diabetes and Lifestyle
- 4.2. Pathophysiological Bases
  - 4.2.1. Anatomic-Physiological Bases
  - 4.2.2. The Pancreas and the Regulation of Glycemia
  - 4.2.3. Macronutrient Metabolism in Diabetes Mellitus
  - 4.2.4. Insulin Resistance

- 4.3. Assessment and Diagnosis
  - 4.3.1. Diabetes: Assessment in the Clinical Setting
  - 4.3.2. Complications in Diabetes Mellitus
  - 4.3.3. Diabetes: Assessment and Follow-up by the Exercise Physician
  - 4.3.4. Diagnosis and Intervention Protocol in Diabetes
- 4.4. Protocols and Treatments
  - 4.4.1. Glycemic Control and Nutritional Aspects
  - 4.4.2. Treatment of Type I and Type II Diabetes Mellitus
  - 4.4.3. Pharmacological Treatment. Basic Concepts to be Taken into Consideration
  - 4.4.4. Non-pharmacological Treatment by Physical Exercise: Role in Diabetes
- 4.5. Training Planning in Patients with Diabetes
  - 4.5.1. Definition and Specification of Customer Level
  - 4.5.2. Definition and Specification of Objectives
  - 4.5.3. Definition and Specification of Assessment Processes
  - 4.5.4. Definition and Specification of Operability with Respect to Spatial and Material Resources
- 4.6. Programming of Strength Training
  - 4.6.1. Objectives of Strength Training in Diabetes People
  - 4.6.2. Volume, Intensity and Recovery of Strength Training in Diabetes Individuals
  - 4.6.3. Selection of Exercises and Methods of Strength Training in Diabetes People
  - 4.6.4. Design of Strength Training Programs in Diabetes People
- 4.7. Programming Speed Training
  - 4.7.1. Objectives of Resistance Training in Diabetes People
  - 4.7.2. Volume and Intensity and Recovery from Resistance Training in Diabetes People
  - 4.7.3. Selection of Exercises and Methods of Resistance Training in Diabetes People
  - 4.7.4. Design of Resistance Training Programs for Diabetes People
- 4.8. Precautions and Contraindications
  - 4.8.1. Blood Glucose Values and Physical Exercise
  - 4.8.2. Contraindications to the Performance of Activity in Patients with Type I Diabetes Mellitus
  - 4.8.3. Care for Problems Related to Diabetes and Physical Exercise
  - 4.8.4. Safety and First Aid in Complications during Physical Exercise Programs with Diabetics



- 4.9. Nutrition and Lifestyle in Patients with Diabetes
  - 4.9.1. Nutritional Aspects of Diabetes
  - 4.9.2. Metabolic Control and Glycemic Index
  - 4.9.3. Nutritional Recommendations for Physical Exercise
- 4.10. Design of Training Programs for Patients with Diabetes
  - 4.10.1. Design of Diabetes Training Programs
  - 4.10.2. Design of Diabetes Training Sessions
  - 4.10.3. Design of Global Intervention Programs (inter-multidisciplinary) in diabetes.

## Module 5. Metabolic Syndrome and Physical Exercise

- 5.1. Definition, Contextualization and epidemiology
  - 5.1.1. Definition of Metabolic Syndrome
  - 5.1.2. Epidemiology of Metabolic Syndrome
  - 5.1.3. The Patient with Syndrome, Considerations for Intervention.
- 5.2. Pathophysiological Bases
  - 5.2.1. Definition of Metabolic Syndrome and Health Risks
  - 5.2.2. Pathophysiological Aspects of the Disease
- 5.3. Assessment and Diagnosis
  - 5.3.1. Metabolic Syndrome and its Assessment in the Clinical Setting
  - 5.3.2. Biomarkers, Clinical Indicators and Metabolic Syndrome
  - 5.3.3. Metabolic Syndrome and its Assessment and Monitoring by the Physical Exercise Specialist
  - 5.3.4. Diagnosis and Intervention Protocol in Metabolic Syndrome
- 5.4. Protocols and Treatments
  - 5.4.1. Lifestyle and its Relationship to Metabolic Syndrome
  - 5.4.2. Exercise: Role in the Metabolic Syndrome
  - 5.4.3. The Patient with Metabolic Syndrome and Pharmacologic Treatment: Considerations for the Exercise Professional.
- 5.5. Training Planning in Patients with Metabolic Syndrome
  - 5.5.1. Definition and Specification of Customer Level
  - 5.5.2. Definition and Specification of Objectives
  - 5.5.3. Definition and Specification of Assessment Processes
  - 5.5.4. Definition and Specification of Operability with Respect to Spatial and Material Resources
- 5.6. Programming of Strength Training
  - 5.6.1. Objectives of Strength Training in Metabolic Syndrome
  - 5.6.2. Volume, Intensity and Recovery of Strength Training for Metabolic Syndrome
  - 5.6.3. Selection of Exercises and Methods of Strength Training for People with Metabolic Syndrome
  - 5.6.4. Design of Strength Training Programs in Metabolic Syndrome People
- 5.7. Programming Speed Training
  - 5.7.1. Objectives of Resistance Training in Metabolic Syndrome
  - 5.7.2. Volume and Intensity and Recovery from Resistance Training for People with Metabolic Syndrome
  - 5.7.3. Choice of Exercises and Methods of Resistance Training for People with Metabolic Syndrome
  - 5.7.4. Design of Resistance Training Programs for People with Metabolic Syndrome
- 5.8. Precautions and Contraindications
  - 5.8.1. Assessments for the Performance of Physical Exercise in the Population with Metabolic Syndrome
  - 5.8.2. Contraindications Regarding the Development of Activity in Patients with Metabolic Syndrome
- 5.9. Nursing Nutrition and Lifestyle in Patients with Metabolic Syndrome
  - 5.9.1. Nutritional Aspects in the Metabolic Syndrome
  - 5.9.2. Examples of Nutritional Intervention in Metabolic Syndrome
  - 5.9.3. Nutritional Recommendations for the Practice of Physical Exercise
- 5.10. Training Program Design in Patients with Metabolic Syndrome
  - 5.10.1. Design of Training Programs in Metabolic Syndrome
  - 5.10.2. Design of Training Sessions in Metabolic Syndrome
  - 5.10.3. Design of Global Intervention Programs (inter-multidisciplinary) in Metabolic Syndrome.
  - 5.10.4. Final Conclusions

## Module 6. Cardiovascular Diseases

- 6.1. Definition, Contextualization and epidemiology
  - 6.1.1. Definition and Prevalence
  - 6.1.2. Etiology of the Disease and Identification of Cardiovascular Risk Factors
  - 6.1.3. Cardiac and Metabolic Diseases
- 6.2. Pathophysiological Bases
  - 6.2.1. Cardiovascular System Physiology
  - 6.2.2. Atherosclerosis and Dyslipidemia
  - 6.2.3. Arterial Hypertension
  - 6.2.4. Cardiopathies, Valvulopathies and Arrhythmias
- 6.3. Assessment and Diagnosis
  - 6.3.1. Initial Risk Assessment in Heart Disease
  - 6.3.2. Risk Assessment in Post-Surgical Patients
- 6.4. Protocols and Treatments
  - 6.4.1. Risk Stratification for Physical Exercise: Primary, Secondary and Tertiary Prevention
  - 6.4.2. Risk Factor Reduction Intervention Objectives and Protocols
  - 6.4.3. Considerations in the Treatment of Associated Co-morbidities
- 6.5. Training Planning for Patients with Cardiovascular Diseases
  - 6.5.1. Definition and Specification of Customer Level
  - 6.5.2. Definition and Specification of Objectives
  - 6.5.3. Definition and Specification of Assessment Processes
  - 6.5.4. Definition and Specification of Operability with Respect to Spatial and Material Resources
- 6.6. Programming of Strength Training
  - 6.6.1. Objectives of Strength Training in cardiovascular pathologies People
  - 6.6.2. Volume, Intensity and Recovery of Strength Training in Cardiovascular Pathologies
  - 6.6.3. Selection of Exercises and Methods of Strength Training for Individuals with Cardiovascular Diseases
  - 6.6.4. Design of Strength Training Programs in Cardiovascular Pathologies

- 6.7. Programming Speed Training
  - 6.7.1. Objectives of Resistance Training in Cardiovascular Pathologies
  - 6.7.2. Volume and Intensity and Recovery from Resistance Training for Individuals with Cardiovascular Diseases
  - 6.7.3. Selection of Exercises and Methods of Resistance Training for Individuals with Cardiovascular Diseases
  - 6.7.4. Design of Resistance Training Programs for Cardiovascular Pathologies
- 6.8. Cardiac Rehabilitation.
  - 6.8.1. Benefits of Exercise in Patients with Cardiac Pathology
  - 6.8.2. Exercise Modalities
  - 6.8.3. Cardiac Rehabilitation: Phase I, II, III
  - 6.8.4. Predictability and Long-Term adherence.
  - 6.8.5. Drug- Exercise Interactions
- 6.9. Nutrition in Subjects with Cardiovascular Disease
  - 6.9.1. Nutritional Aspects in Subjects with Cardiovascular Disease
  - 6.9.2. Mediterranean Diet as a Tool for the Prevention of Cardiovascular Diseases
  - 6.9.3. Nutritional Recommendations for the Practice of Physical Exercise
- 6.10. Contraindications and Precautions
  - 6.10.1. Contraindications for the Beginning of the Practice of Physical Exercise
  - 6.10.2. Acting during an Emergency: Primary and Secondary Prevention
  - 6.10.3. RCP
  - 6.10.4. Regulations, Use and Management of Defibrillators in Sports Facilities
  - 6.10.5. Conclusions

## Module 7. Osteoarticular Pathology and Non-Specific Low Back Pain

- 7.1. Definition, Contextualization and epidemiology
  - 7.1.1. Contextualization of Osteoarticular Pathologies and Nonspecific Low Back Pain
  - 7.1.2. Epidemiology
  - 7.1.3. Definition of the Different Pathologies Associated with the Osteoarticular System
  - 7.1.4. The Osteosarcopenic Subject

- 7.2. Pathophysiological Bases
  - 7.2.1. Pathophysiological Basis of Osteoporosis
  - 7.2.2. Pathophysiological Basis of Osteoarthritis
  - 7.2.3. Pathophysiologic Bases of Nonspecific Low Back Pain
  - 7.2.4. Pathophysiological Basis of Rheumatoid Arthritis
- 7.3. Assessment and Diagnosis
  - 7.3.1. Functional Assessment in Low Back Pain
  - 7.3.2. Diagnostic Criteria in Osteoporosis and Predisposing Risk Factors for Fracture
  - 7.3.3. Diagnostic Criteria in Osteoarthritis and Coexisting Comorbidities
  - 7.3.4. Clinical Assessment of the Rheumatoid Arthritis Patient
- 7.4. Protocols and Treatments
  - 7.4.1. Non-Pharmacological Treatment and Intervention Protocol for Non-Specific Lower Back Pain
  - 7.4.2. Non-pharmacological Treatment and Intervention Protocol in Osteoporosis
  - 7.4.3. Non-pharmacologic Treatment and Intervention Protocol in Osteoarthritis
  - 7.4.4. Non-pharmacological Treatment and Intervention Protocol in Rheumatoid Arthritis
- 7.5. Training Planning
  - 7.5.1. Definition and Specification of Objectives
  - 7.5.2. Definition and Specification of Assessment Processes
  - 7.5.3. Definition and Specification of Operability with Respect to Spatial and Material Resources
  - 7.5.4. Importance of the 1983 Team
- 7.6. Programming of Strength Training
  - 7.6.1. Objectives of Strength Training in Osteoarticular Pathologies and Non-specific Lower Back Pain
  - 7.6.2. Volume, Intensity and Recovery of Strength Training in Non-specific Lower Back Pain
  - 7.6.3. Selection of Exercises and Methods of Strength Training in Non-specific Lower Back Pain
  - 7.6.4. Design of Strength Training Programs for Osteoarticular Pathologies and Non-specific Lower Back Pain
- 7.7. Programming Speed Training
  - 7.7.1. Objectives of Resistance Training in Osteoarticular Diseases and Non-Specific Lower Back Pain
  - 7.7.2. Volume and Intensity and Recovery from Resistance Training in Back Pain
  - 7.7.3. Selection of Exercises and Methods of Resistance Training in Back Pain
  - 7.7.4. Design of Resistance Training Programs for Back Pain
- 7.8. The Importance of Photography as a Communication Tool.
  - 7.8.1. Physical Exercise and its Implications for Bone Mass
  - 7.8.2. Functionality of the Lumbo-Pelvic Region
  - 7.8.3. The Importance of Postural Hygiene
  - 7.8.4. The Importance of Ergonomics in the Home and Workplace
- 7.9. Physical, Psychological and Social Burden, and Recommendations for Improving Health and Quality of Life
  - 7.9.1. Key Considerations in the Postmenopausal Woman
  - 7.9.2. Understanding the Complex Interrelationship between Exercise and Pain
  - 7.9.3. Barriers to Participation in Physical Exercise Programs
  - 7.9.4. Strategies to Promote Adherence
- 7.10. Design of Training Programs for Patients with Osteoarticular Diseases and Non-Specific Lower Back Pain
  - 7.10.1. Design of Osteoporosis Training Programs
  - 7.10.2. Design of Training Programs in Osteoarthritis
  - 7.10.3. Design of Training Programs for Nonspecific Low Back Pain
  - 7.10.4. Conclusions

## Module 8. Respiratory Pathology and Physical Exercise

- 8.1. Definition, Contextualization and epidemiology
  - 8.1.1. Definition the Respiratory Most Frequent Pathologies
  - 8.1.2. Description of the Characteristics of the Disease
  - 8.1.3. Epidemiology and Outreach
  - 8.1.4. Triggering Factors and Comorbidities
- 8.2. Pathophysiological Bases
  - 8.2.1. Physiology and Anatomy of the Respiratory System
  - 8.2.2. Gas Exchange, Ventilation and Air Flow
  - 8.2.3. COPD
  - 8.2.4. Asthma
- 8.3. Assessment and Diagnosis
  - 8.3.1. Assessment of Lung Function and Functional Capacity
  - 8.3.2. Functional Assessment of the COPD Patient
  - 8.3.3. Physical Tests and Practical Application
- 8.4. Protocols and Treatments
  - 8.4.1. Respiratory Rehabilitation Protocols for the COPD Patient
  - 8.4.2. Pharmacological Treatment and Interactions
  - 8.4.3. Non-pharmacological Treatment: Aerobic Fitness and Muscle Fitness Training
  - 8.4.4. Addressing Common Risk Factors and Comorbidities
- 8.5. Training Planning in Patients with COPD
  - 8.5.1. Definition and Specification of Customer Level
  - 8.5.2. Definition and Specification of Objectives
  - 8.5.3. Definition and Specification of Assessment Processes
  - 8.5.4. Definition and Specification of Operability with Respect to Spatial and Material Resources
- 8.6. Programming of Strength Training
  - 8.6.1. Objectives of Strength Training in Respiratory Pathology
  - 8.6.2. Volume, Intensity and Recovery of Strength Training in Respiratory Pathology
  - 8.6.3. Selection of Exercises and Methods of Strength Training in Respiratory Pathology
  - 8.6.4. Design of Strength Training Programs in Respiratory Pathology
- 8.7. Programming Speed Training
  - 8.7.1. Objectives of Resistance Training in Respiratory Pathology
  - 8.7.2. Volume and Intensity and Recovery from Resistance Training in Respiratory Pathology
  - 8.7.3. Selection of Exercises and Methods of Resistance Training in Respiratory Pathology
  - 8.7.4. Design of Resistance Training Programs for Respiratory Pathology
- 8.8. Sedentary Lifestyle Modification Recommendations in the Lifestyle
  - 8.8.1. Sedentary Behavior
  - 8.8.2. Physical Inactivity
  - 8.8.3. Smoking, Alcohol and Nutrition
- 8.9. Malnutrition in the COPD Patient and Consequences on Respiratory Function.
  - 8.9.1. Assessment Nutritional Status
  - 8.9.2. Nutritional Support in COPD
  - 8.9.3. Nutritional Guidelines in the COPD Patient
- 8.10. Considerations in the Practice of Physical Activity and Exercise
  - 8.10.1. The Selection and Arrangement of Strength and Aerobic Exercises in Training
  - 8.10.2. The Use of Concurrent Training as a Tool for the COPD Patient
  - 8.10.3. Exercise Selection and Progression in the Population with Respiratory Pathology
  - 8.10.4. Specific Pharmacological Interactions
  - 8.10.5. Conclusions



**Module 9. Physical Exercise and Pregnancy**

- 9.1. Morphofunctional Changes in the Female Body during Pregnancy
  - 9.1.1. Concept of Pregnancy
  - 9.1.2. Fetal Growth
  - 9.1.3. Main Morphofunctional Modifications
    - 9.1.3.1. Changes in Body Composition with Weight Gain
    - 9.1.3.2. Cardiovascular System Modifications
    - 9.1.3.3. Urinary and Excretory System Modifications
    - 9.1.3.4. Nervous System Modifications
    - 9.1.3.5. Respiratory System Modifications
    - 9.1.3.6. Epithelial Tissue Modifications
- 9.2. Pathophysiologies Associated with Pregnancy
  - 9.2.1. Body Mass Modification
  - 9.2.2. Modification of the Center of Gravity and Relevant Postural Adaptations
  - 9.2.3. Cardiorespiratory Adaptations
  - 9.2.4. Hematological Adaptations
    - 9.2.4.1. Blood Volume
  - 9.2.5. Adaptations of the Locomotor System
  - 9.2.6. Supine Hypotensive Syndrome
  - 9.2.7. Gastrointestinal and Renal Modifications
    - 9.2.7.1. Gastrointestinal Motility
    - 9.2.7.2. The Kidneys
- 9.3. Kinefilaxia and Benefits of Physical Exercise in Pregnant Women
  - 9.3.1. Care to be Taken During Activities of Daily Living
  - 9.3.2. Preventive Physical Work
  - 9.3.3. Biological and Psychosocial Benefits of Physical Exercise
- 9.4. Risks and Contraindications in Physical Exercise in Pregnant Women
  - 9.4.1. Absolute Contraindications to Physical Exercise
  - 9.4.2. Relative Contraindications to Physical Exercise
  - 9.4.3. Precautions to be Taken into Account during Pregnancy
- 9.5. Nutrition in Pregnant Women
  - 9.5.1. Body Mass Weight Gain with Pregnancy
  - 9.5.2. Energy Requirements Throughout Pregnancy
  - 9.5.3. Nutritional Recommendations for the Practice of Physical Exercise
- 9.6. Training Planning for Pregnant Women
  - 9.6.1. First Quarter Planning
  - 9.6.2. Second Quarter Planning
  - 9.6.3. Third Quarter Planning
- 9.7. Musculoskeletal Training Programming
  - 9.7.1. Motor Control
  - 9.7.2. Stretching and Muscle Relaxation
  - 9.7.3. Muscle Fitness Work
- 9.8. Programming Speed Training
  - 9.8.1. Modality of Low-impact Physical Work
  - 9.8.2. Weekly Workload
- 9.9. Postural and Preparatory Labor for Childbirth
  - 9.9.1. Pelvic Floor Exercises
  - 9.9.2. Postural Exercises
- 9.10. Return to Physical Activity after Delivery
  - 9.10.1. Medical Discharge and Recovery Period
  - 9.10.2. Care for the Beginning of Physical Activity
  - 9.10.3. Conclusions

## Module 10. Physical Exercise in Children, Adolescents and Older Adults

- 10.1. Approach to Physical Exercise in Children and Adolescents
  - 10.1.1. Growth, Maturation and Development
  - 10.1.2. Development and Individuality: Chronological Age vs. Biological Age
  - 10.1.3. Sensitive Phases
  - 10.1.4. Long-Term Development (Long-Term Athlete Development)
- 10.2. Physical Fitness Assessment in Children and Adolescents
  - 10.2.1. Main Evaluation Batteries
  - 10.2.2. Assessment of Coordinative Capacities
  - 10.2.3. Assessment of Conditional Capacities
  - 10.2.4. Morphological Assessment s
- 10.3. Physical Exercise Planning for Children and Adolescents
  - 10.3.1. Muscle Strength Training
  - 10.3.2. Aerobic Fitness Training
  - 10.3.3. Speed Training
  - 10.3.4. Flexibility Training
- 10.4. Neurosciences and Child and Adolescent Development
  - 10.4.1. Neurolearning in Childhood
  - 10.4.2. Motor Skills. Basis of Intelligence
  - 10.4.3. Attention and Emotion. Early Learning
  - 10.4.4. Neurobiology and Epigenetic Theory in Learning
- 10.5. Approach to Physical Exercise in the Older Adult
  - 10.5.1. Aging Process
  - 10.5.2. Morphofunctional Changes in the Older Adult
  - 10.5.3. Objectives of Physical Exercise in the Elderly
  - 10.5.4. Benefits of Physical Exercise in the Elderly
- 10.6. Comprehensive Gerontological Assessment
  - 10.6.1. Coordination Skills Test
  - 10.6.2. Katz Index of Independence in Activities of Daily Living
  - 10.6.3. Test of Conditioning Capacities
  - 10.6.4. Fragility and Vulnerability in Older Adults





- 10.7. Instability Syndrome
  - 10.7.1. Epidemiology of Elderly Woman Obesity
  - 10.7.2. Detection of Patients at Risk without a Previous Fall
  - 10.7.3. Risk Factors for Falls in the Elderly
  - 10.7.4. Post Fall Syndrome
- 10.8. Nutrition in Children and Adolescents and Older Adults
  - 10.8.1. Nutritional Requirements for each Stage of Life
  - 10.8.2. Increased Prevalence of Childhood Obesity and Type 2 Diabetes in Children
  - 10.8.3. Association of Degenerative Diseases with Saturated Fat Consumption
  - 10.8.4. Nutritional Recommendations for the Practice of Physical Exercise
- 10.9. Neurosciences and Older Adults
  - 10.9.1. Neurogenesis and Learning
  - 10.9.2. Cognitive Reserve in Older Adults
  - 10.9.3. We Can Always Learn
  - 10.9.4. Aging is not Synonymous with Disease
  - 10.9.5. Alzheimer's and Parkinson's Disease, the Value of Physical Activity
- 10.10. Physical Exercise Programming for Children and Older Adults
  - 10.10.1. Muscle Strength and Power Training
  - 10.10.2. Aerobic Fitness Training
  - 10.10.3. Cognitive Training
  - 10.10.4. Training of Coordinative Capacities
  - 10.10.5. Conclusions

# 07 Practices

By completing the online phase of this Hybrid Master's Degree in Therapeutic Personal Training, students will have the opportunity to complete intensive internships that will allow them to apply the theoretical knowledge acquired in a work environment. In this way, thanks to this internship, students will be able to develop their skills in dealing with patients, as well as in the creation and application of personalized training plans for different pathologies.







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*These practices will allow you to incorporate the most advanced training methods into your daily work”*

The internship period of this program consists of a stay in a renowned center, for 3 weeks, from Monday to Friday, with 8 consecutive hours of active participation. During this time, the student will be accompanied by a professional from the center itself and will have the opportunity to accompany users in a reference environment in the area of Therapeutic Personal Training.

In this training proposal, completely practical in nature, the activities are aimed at the development and improvement of the competencies necessary for the provision of Therapeutic Personal Training in areas and conditions that require a high level of qualification, and that are oriented to the specific training for the exercise of the activity, in a safe environment for the user and a high level of professional performance.

The practical part will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of teachers and other fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for the professional practice (learning to be and learning to relate).

The procedures described below will form the basis of the practical part of the internship, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:





Module	Practical Activity
Assessment and diagnosis	Conduct an initial interview with the client to assess their current status and gather relevant information
	Perform physical evaluation tests, such as anthropometric measurements, posture and mobility evaluation, strength and endurance tests, among others
	Perform psychological assessment tests, such as personality questionnaires and social skills tests
Training planning	Design customized training plans based on the client's objectives, needs and individual characteristics
	Select and teach specific training techniques, such as strength, endurance, flexibility and balance exercises
	Develop customized nutrition and diet plans to improve athletic performance and overall health
Practical training	Conduct personal training sessions with clients in real time, supervising and correcting exercise techniques and ensuring client progress and safety
	Use different types of training equipment, from weights and training machines to elastic bands and exercise balls
	Conduct outdoor training, using the environment and landscape to create a complete and varied workout
Specialized training	Design specialized training plans for people with special needs, such as the elderly, pregnant women, or people with disabilities
	Teach relaxation and breathing techniques to reduce stress and anxiety, and improve mental health
	Perform physical therapy and sports massage sessions to aid in the recovery of sports injuries and improve muscle, and joint health.
Communication and customer relations	Establish and maintain good communication with customers, creating long-lasting and trusting relationships
	Mastering communication and negotiation skills to ensure effective communication between the trainer and the client
	Resolve conflicts and problems related to training and client relations

## Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical internship program. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.





## General Conditions of the Internship Program

The general terms and conditions of the internship agreement for the program are as follows:

**1. TUTOR:** During the Hybrid Master's Degree, students will be assigned two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and educational.

**2. DURATION:** The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

**3. ABSENCE:** If the student does not show up on the start date of the Hybrid Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the educational tutor.

**4. CERTIFICATION:** Students who pass the Hybrid Master's Degree will receive a certificate accrediting their stay at the center.

**5. EMPLOYMENT RELATIONSHIP:** the Hybrid Master's Degree shall not constitute an employment relationship of any kind.

**6. PRIOR EDUCATION:** Some centers may require a certificate of prior education for the Hybrid Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

**7. DOES NOT INCLUDE:** The Hybrid Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed

However, students may consult with their educational tutor for any questions or recommendations in this regard. The educational tutor will provide the student with all the necessary information to facilitate the procedures in any case.

08

# Where Can I Do the Internship?

The internship period of this Hybrid Master's Degree in Therapeutic Personal Training will be carried out in centers of reference in the field. This internship will allow the student to apply the theoretical knowledge acquired during the online phase of the program and develop practical skills alongside a team of highly qualified professionals in the field of Therapeutic Personal Training. The internship sites have been carefully selected to ensure that the student has the best possible experience and can learn in a professional and safe environment.




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*TECH puts at your disposal the best international centers for you to obtain an elite preparation in the field of Therapeutic Personal Training"*





The student will be able to complete the practical part of this Hybrid Master's Degree at the following centers:



**Sports Science**

### Club Metropolitan Sagrada Familia

Country	City
Spain	Barcelona


Address: C/ de Provenza, 408, 08025 Barcelona

The largest national chain of Sports, Health and Wellness Centers in Spain

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



**Sports Science**

### Club Metropolitan Iradier

Country	City
Spain	Barcelona


Address: C/ de les Escoles Pies, 105, 08017 Barcelona

The largest national chain of Sports, Health and Wellness Centers in Spain

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



**Sports Science**

### Club Metropolitan Balmes

Country	City
Spain	Barcelona


Address: C/ de Balmes, 215, 08006 Barcelona

The largest national chain of Sports, Health and Wellness Centers

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



**Sports Science**

### Club Metropolitan Las Arenas

Country	City
Spain	Barcelona


Address: Gran Via de les Corts Catalanes, 373, 385, 08015 Barcelona

The largest national chain of Sports, Health and Wellness Centers

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



**Sports Science**

### Club Metropolitan Galileo

Country	City
Spain	Barcelona


Address: C/ de Galileu, 186, 08028 Barcelona

The largest national chain of Sports, Health and Wellness Centers

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



**Sports Science**

### Club Metropolitan Badalona

Country	City
Spain	Barcelona


Address: C. de Sant Miquel, 16, 08911 Badalona, Barcelona

The largest national chain of Sports, Health and Wellness Centers in Spain

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



**Sports Science**

### Club Metropolitan Gran Vía

Country	City
Spain	Barcelona


Address: Avinguda de la Granvia de l'Hospitalet, 142, 08907 L'Hospitalet de Llobregat, Barcelona

The largest national chain of Sports, Health and Wellness Centers

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



**Sports Science**

### Club Metropolitan Abascal

Country	City
Spain	Madrid

Address: Calle de José Abascal, 46, 28003 Madrid

The largest national chain of Sports, Health and Wellness Centers in Spain

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor






**Sports Science**

### Club Metropolitan Eurobuilding

Country	City
Spain	Madrid


Address: Hotel NH Collection Madrid Eurobuilding, Planta Superior Hotel NH Collection Eurobuilding, 28036, C. del Padre Damián, 23, 28036 Madrid

The largest national chain of Sports, Health and Wellness Centers in Spain

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



**Sports Science**

### Club Metropolitan Isozaki

Country	City
Spain	Vizcaya

Address: Paseo Uribitarte, 4, Ext, 48001 Bilbao, Vizcaya

The largest national chain of Sports, Health and Wellness Centers

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



**Sports Science**

### Club Metropolitan Begoña

Country	City
Spain	Vizcaya


Address: Masustegi Kalea, 25, 48006 Bilbao, Vizcaya

The largest national chain of Sports, Health and Wellness Centers

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



**Sports Science**

### Club Metropolitan Romareda

Country	City
Spain	Zaragoza


Address: C/ de Gonzalo Calamita, s/n, 50009 Zaragoza

The largest national chain of Sports, Health and Wellness Centers

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



**Sports Science**

### Club Metropolitan Paraíso

Country	City
Spain	Zaragoza


Address: Residencial Paraíso, 10, 50008 Zaragoza

The largest national chain of Sports, Health and Wellness Centers

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



**Sports Science**

### Club Metropolitan Sevilla

Country	City
Spain	Sevilla


Address: Av. Eduardo Dato, 49, 41018 Sevilla

The largest national chain of Sports, Health and Wellness Centers

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



**Sports Science**

### Club Metropolitan Gijón

Country	City
Spain	Asturias


Address: Estadio El Molinón Enrique Castro - Quini, Puerta 8, 33201 Gijón, Asturias

The largest national chain of Sports, Health and Wellness Centers

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



**Sports Science**

### Club Metropolitan Vigo

Country	City
Spain	Pontevedra

Address: Rúa Cánovas del Castillo, 1, 36202 Vigo, Pontevedra

The largest national chain of Sports, Health and Wellness Centers

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**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



Sports Science

### Club Metropolitan La Solana

Country	City
Spain	La Coruña

Address: P.º Marítimo Alcalde Francisco Vázquez, 21, 15001 A Coruña

The largest national chain of Sports, Health and Wellness Centers

**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



Sports Science

### MoveBon

Country	City
Spain	Madrid

Address: Calle de García de Paredes, 42, 28010 Madrid

MoveBon, a center specialized in small group trainings, outdoor or online sessions

**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor



Sports Science

### Entrenamiento Personal Madrid

Country	City
Spain	Madrid

Address: Calle de Puenteareas, 13, 28002 Madrid

Personal Training Madrid, specializing in fitness in physical conditioning and re-adaptation

**Related internship programs:**

- Therapeutic Personal Training



Sports Science

### Premium global health care Madrid

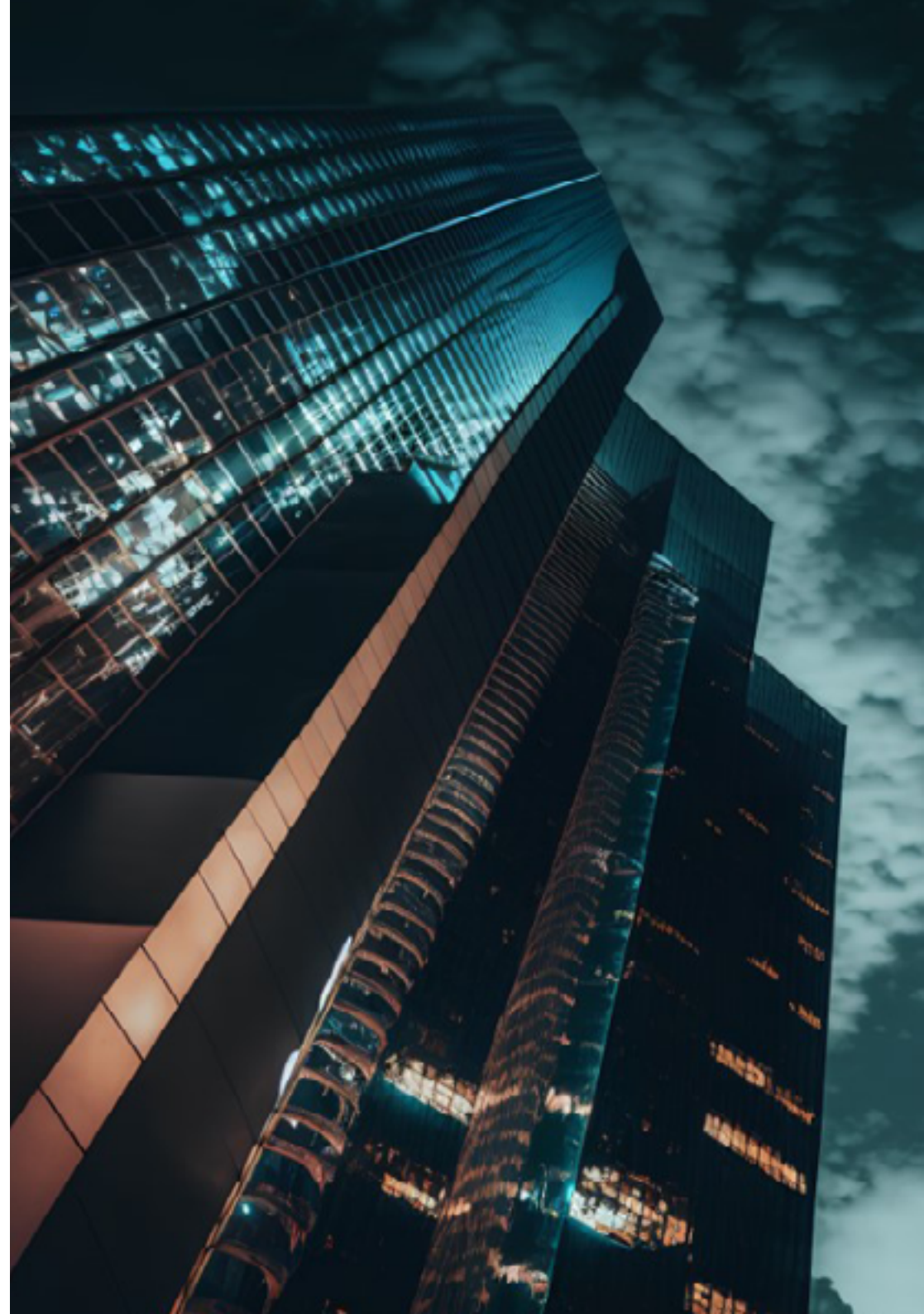
Country	City
Spain	Madrid

Address: C. de Víctor de la Serna, 4, 28016 Madrid

Rehabilitation, readaptation and personal training: these are the pillars of the Physiotherapy clinic in Chamartín

**Related internship programs:**

- MBA in Digital Marketing
- Project Management







Sports Science

### Premium global health care Fuenlabrada

Country	City
Spain	Madrid

Address: Paseo de Roma, 1, 28943 Fuenlabrada, Madrid

Rehabilitation, re-adaptation and personal training: these are the pillars of the Physiotherapy clinic in Fuenlabrada

**Related internship programs:**

- MBA in Digital Marketing
- Project Management



Sports Science

### Premium global health care Pozuelo

Country	City
Spain	Madrid

Address: Centro Comercial Monteclaro, Local 59.4, s/n, Av. de Monteclaro, d, 28223 Pozuelo de Alarcón, Madrid

Rehabilitation, re-adaptation and personal training: these are the pillars of the Physiotherapy clinic in Pozuelo

**Related internship programs:**

- MBA in Digital Marketing
- Project Management



Sports Science

### Fitness 4 All

Country	City
Spain	Madrid

Address: C. de Virgen de Lluç, 104, 28027 Madrid

For the people who come, it is a different experience, a new concept of gym

**Related internship programs:**

- Therapeutic Personal Training
- Fitness Instructor

09

# 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"*

### 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 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.





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.



# 10 Certificate

The Hybrid Master's Degree in Therapeutic Personal Training guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Master's Degree diploma 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 **Hybrid Master's Degree diploma in Therapeutic Personal Training** 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.

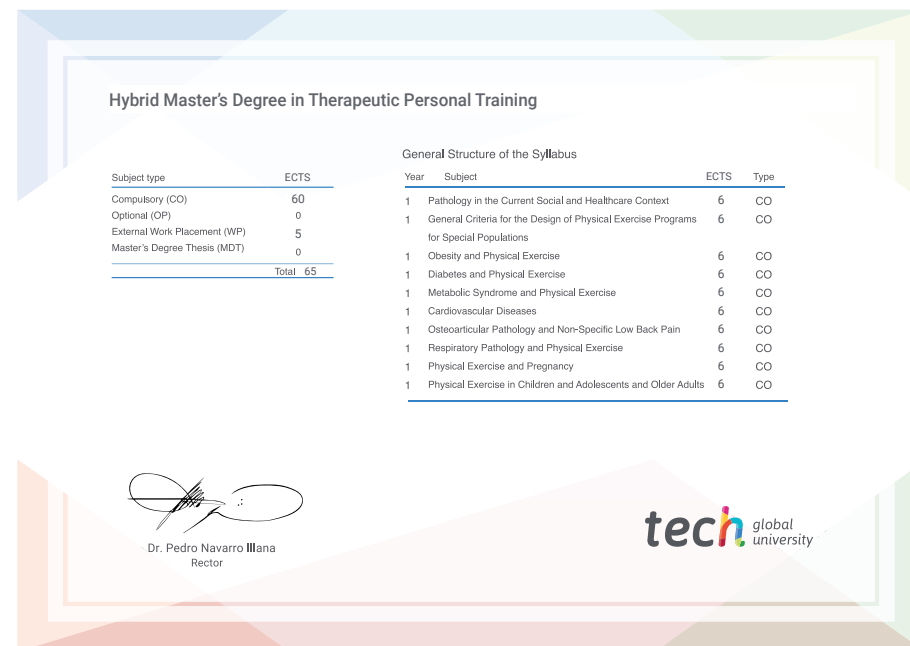
Title: **Hybrid Master's Degree in Therapeutic Personal Training**

Course Modality: **Hybrid (Online + Clinical Internship)**

Duration: **12 months**

Certificate: **TECH Global University**

Recognition: **60 + 5 ECTS Credits**



\*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 quality

online technologies

development languages  
virtual classroom

**tech** global  
university

**Hybrid Master's Degree**  
Therapeutic Personal Training

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 ECTS Credits

# Hybrid Master's Degree Therapeutic Personal Training

Endorsed by the NBA

