



# Master's Degree

# Therapeutic Personal Training

» Modality: online

» Duration: 12 months

» Certificate: TECH Global University

» Credits: 60 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/sports-science/master-degree/master-therapeutic-personal-training

# Index

02 Introduction to the Program Why Study at TECH? p. 4 p. 8 05 03 Syllabus **Teaching Objectives Career Opportunities** p. 24 p. 12 p. 30 06 80 **Teaching Staff** Study Methodology Certificate p. 34 p. 44 p. 50





# tech 06 | Introduction to the Program

Therapeutic Personal Training is a growing discipline within the field of Sports Science, driven by the need to provide effective alternatives for the recovery and prevention of various pathologies. The integration of exercise into clinical and rehabilitative settings has proven to be a key strategy for improving quality of life, reducing the risk of chronic diseases, and promoting functional recovery. For this reason, this approach requires highly specialized professionals capable of designing programs tailored to different health conditions and individual needs.

This Master's Degree in Therapeutic Personal Training offers a 100% online modality, which represents a significant advantage for those looking to specialize without compromising their professional activities. Through a cutting-edge platform, students will access updated content, interactive multimedia materials, and a teaching team with experience in both sports and therapeutic fields. Thanks to this model, professionals can manage their learning with flexibility, adapting it to their pace, with no restrictions on schedules or travel.

TECH focuses on a dynamic and efficient teaching method, based on practical cases and innovative learning strategies. As such, this university qualification will offer a high-level academic experience, preparing professionals to apply their knowledge with rigor and effectiveness in the field of therapeutic personal training.

Additionally, thanks to the membership in **The Chartered Association of Sport and Exercise Sciences (CASES)**, students will gain access to exclusive educational resources, discounts on events and specialized publications, and practical benefits such as professional insurance. They will also be able to join an active community, participate in committees, and obtain accreditations that enhance their development, visibility, and professional prospects in the field of sports and exercise science.

This **Master's Degree in Therapeutic Personal Training** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by experts in 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
- Practical exercises where the self-assessment process can be carried out to improve learning
- Special emphasis on innovative methodologies in Personal Training
- 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



You will acquire knowledge about the relationship between exercise and various pathologies, understanding how Therapeutic Training can be key in treatments"



You will learn to manage the health and physical performance of individuals with chronic diseases, creating safe and effective routines"

The teaching staff includes professionals from the field of Sports, bringing their work experience into the program, alongside renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive learning experience designed to prepare for real-life situations.

This program is designed around Problem-Based Learning, whereby the student must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

You will optimize athletic performance with Therapeutic Training strategies, improving recovery and physical abilities.

You will learn advanced techniques for the physical rehabilitation of injuries, accelerating recovery and preventing future damage. What are you waiting for to enroll in this comprehensive postgraduate program?.







# tech 10 | Why Study at TECH?

#### The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

#### The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistuba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

#### The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.



The most complete syllabus





World's
No.1
The World's largest
online university

# The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

#### A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

#### The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

#### **Leaders in employability**

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.









# -0

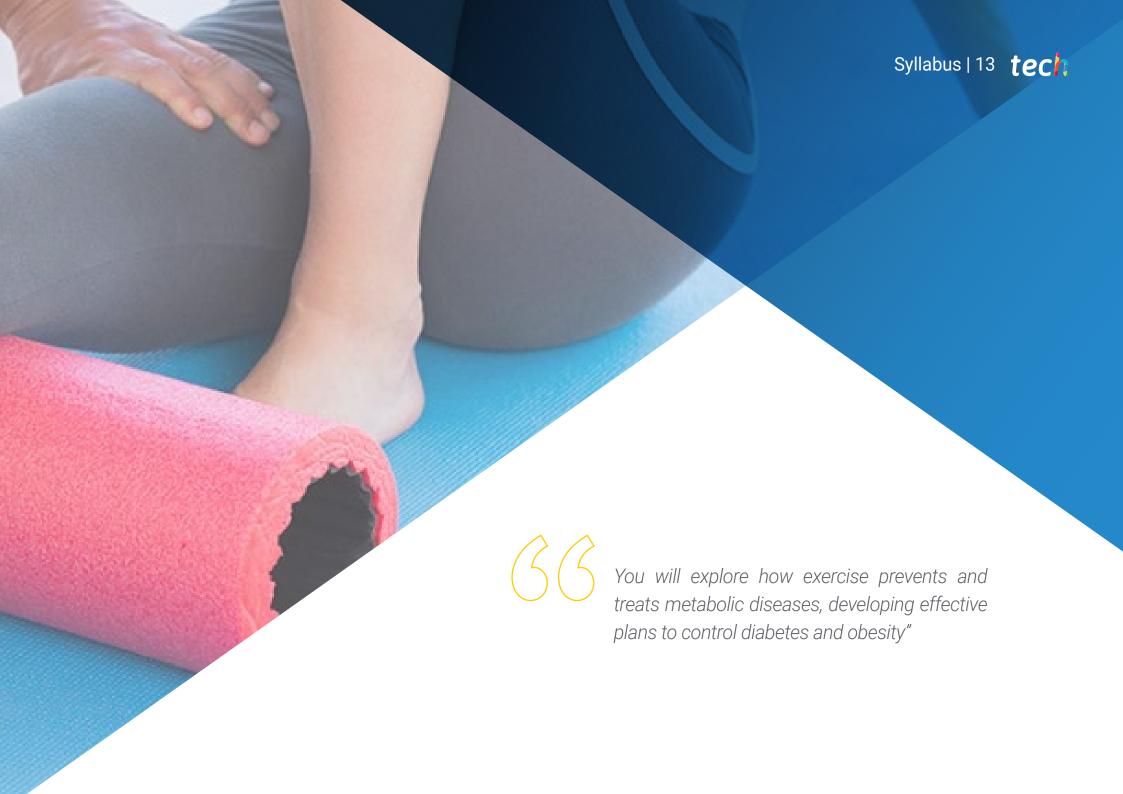
#### **Google Premier Partner**

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.

#### The top-rated university by its students

Students have positioned TECH as the world's toprated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.





# tech 14 | Syllabus

### 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 Anatomo-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. Multidisciplinarity and Interdisciplinarity 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. Pharmacological 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

# tech 16 | Syllabus

- 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. Anatomo-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



# Syllabus | 17 tech

- 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

# tech 18 | Syllabus

- 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 in Metabolic Syndrome
  - 5.6.3. Selection of Exercises and Methods of Strength Training in Metabolic Syndrome People
  - 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 in Metabolic Syndrome People
  - 5.7.3. Selection of Exercises and Methods of Resistance Training in Metabolic Syndrome People
  - 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. Designs of Global (Inter-Multidisciplinary) Intervention Programs 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
  - 5.2.4. 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 in Cardiovascular Pathologies
  - 6.7.4. Design of Resistance Training Programs for Cardiovascular Pathologies
- 5.8. 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 Prevention of Cardiovascular Disease
  - 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

# tech 20 | Syllabus

- 7.6. Programming of Strength Training
  - 7.6.1. Objectives of Strength Training in Osteoarticular Pathologies and Non-pecific 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 Nonspecific Lower Back Pain
- 7.7. Programming Speed Training
  - 7.7.1. Objectives of Resistance Training in Osteoarticular Pathologies and Non-specific Lower Back Pain
  - 7.7.2. Volume and intensity and recovery of resistance training in osteoarticular pathologies and low back pain
  - 7.7.3. Selection of exercises and resistance training methods for osteoarticular pathologies and low 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 Pathologies and Nonspecific Low 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 (Chronic Obstructive Pulmonary Disease)
  - 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
- 3.5. Training Planning in Patients with COPD
  - 8.5.1. Definition and Specification of Customer Level
  - 8.5.2. Definition and Specification of Objectives
  - 3.5.3. Definition and Specification of Assessment Processes
  - 8.5.4. Definition and Specification of Operability with Respect to Spatial and Material Resources

# Syllabus | 21 tech

- 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

# tech 22 | Syllabus

- 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 and 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

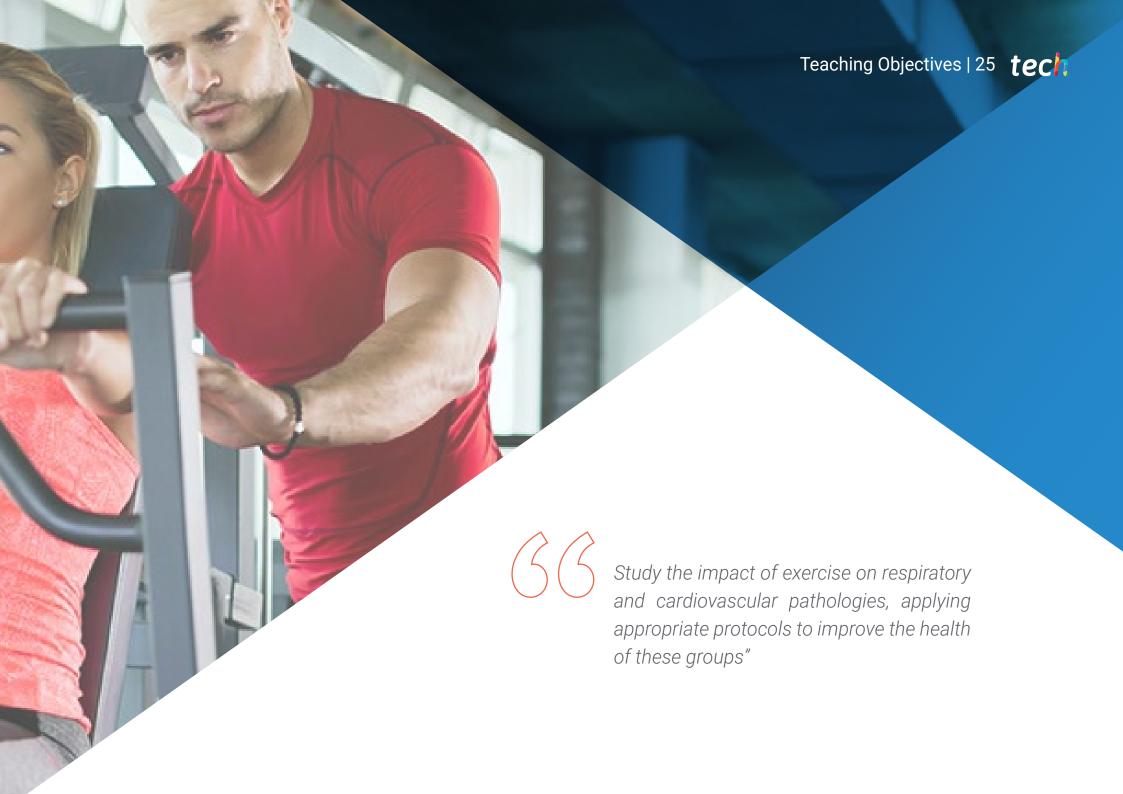




		5
		Ī

- 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





# tech 26 | Teaching Objectives



## **General Objectives**

- Deepen the scientific foundations of Therapeutic Personal Training, applying the principles of Biomechanics and Physiology to the design of exercise programs
- Develop competencies for the functional assessment of individuals with different health conditions, enabling the planning of training adapted to their specific needs
- Apply strategies for injury prevention and rehabilitation through physical exercise, optimizing recovery and patient well-being
- Integrate knowledge of the pathophysiology of various diseases into therapeutic exercise prescriptions, ensuring safe and effective interventions
- Enhance the use of technological tools and innovative methodologies for assessing and tracking the progress of each case
- Equip professionals to intervene in different populations, from athletes to individuals with chronic diseases or undergoing rehabilitation
- Develop critical analysis skills to interpret scientific studies and apply the most current evidence in professional practice
- Promote an interdisciplinary approach that facilitates collaboration with health professionals to optimize patient treatment
- Provide tools for managing and promoting therapeutic training services, expanding job opportunities in clinical, sports, and rehabilitation settings
- Foster a commitment to continuous improvement and ongoing updates in the field of therapeutic training, ensuring high-level professional performance





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

- Analyze the impact of chronic diseases on society and healthcare systems
- Understand the role of physical exercise in the prevention and treatment of prevalent pathologies
- Evaluate epidemiological trends and their relationship with physical activity and lifestyle
- Identify the main challenges in implementing exercise programs within the healthcare sector

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

- Establish fundamental principles for training planning in populations with specific needs
- Adapt exercise protocols based on health conditions and individual capabilities
- Apply functional assessment methodologies to design safe and effective programs
- Identify the risks and benefits of exercise in different vulnerable populations

#### Module 3. Obesity and Physical Exercise

- Understand the physiological mechanisms of obesity and its relationship with exercise
- Design physical activity programs focused on body fat reduction and metabolic improvement
- Apply training strategies that minimize joint impact and promote adherence
- Evaluate the effectiveness of exercise in controlling weight and body composition

#### Module 4. Diabetes and Physical Exercise

- Analyze the effects of exercise on glucose regulation and insulin sensitivity
- Design physical activity programs for people with type 1 and type 2 diabetes
- Apply monitoring protocols and control of metabolic response to exercise
- Prevent complications associated with diabetes through movement-based interventions

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

- Understand the pathophysiology of metabolic syndrome and its relationship with lifestyle
- Design exercise interventions to improve insulin resistance, blood pressure, and lipid profile
- Apply combined training strategies (aerobic and strength) to optimize results
- Evaluate the progression and effectiveness of exercise in reversing risk factors

#### Module 6. Cardiovascular Diseases

- Analyze the relationship between physical activity and the prevention of cardiovascular diseases
- Design exercise programs adapted for patients with heart disease
- Apply evidence-based cardiovascular rehabilitation protocols
- Evaluate the physiological response to training in populations at risk of cardiovascular disease

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

- Understand the pathophysiological mechanisms of osteoarticular injuries and low back pain
- Design exercise programs that improve mobility and reduce chronic pain
- Apply strengthening and stabilization strategies to prevent relapses
- Evaluate the functional progression of patients with musculoskeletal pathologies

## Module 8. Respiratory Pathology and Physical Exercise

- Analyze the effects of exercise on respiratory diseases such as COPD and asthma
- Design physical activity programs adapted to ventilatory limitations
- Apply respiratory retraining strategies to improve functional capacity
- Evaluate effort tolerance and progression in patients with lung conditions

## Module 9. Physical Exercise and Pregnancy

- Understand the physiological changes during pregnancy and their impact on physical activity
- Design safe exercise programs for each trimester of pregnancy
- Apply training strategies that promote maternal-fetal well-being
- Evaluate the benefits of exercise in preventing obstetric complications

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

- Analyze the role of exercise in motor and cognitive development in childhood
- Design physical activity programs adapted to the needs of older adults
- Apply injury prevention strategies and improve mobility in both stages
- Evaluate the effects of exercise on quality of life and healthy aging

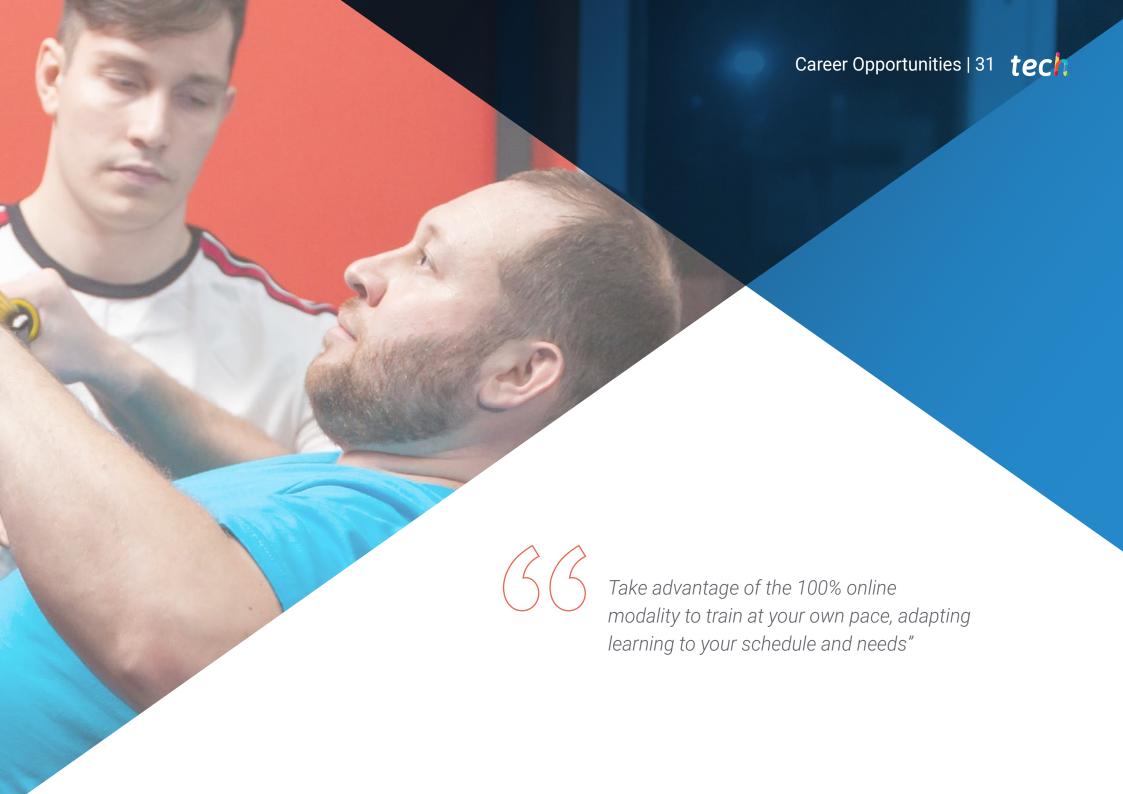






You will develop skills to design safe training programs during pregnancy and in childhood, with a focus on safety and well-being"





# tech 32 | Career Opportunities

#### **Graduate Profile**

The graduate will be characterized by their ability to design and supervise exercise programs tailored to specific needs, demonstrating a deep understanding of personalized training techniques. They will also possess the skills to assess the physical condition of various populations and apply interventions that optimize performance and promote health. Additionally, they will have a critical and flexible mindset to adapt to the latest trends in the sector, including new technologies. Ultimately, their professional profile will position them as an expert capable of transforming the physical well-being of their clients, maximizing their potential through exercise.

You will access career opportunities in gyms, sports centers, and clinics, positioning yourself as an expert in therapeutic training.

- Adaptability: Ability to adjust to the specific needs and characteristics of each individual or group, considering various pathologies and conditions
- **Critical Thinking:** Analyze, evaluate, and make informed decisions regarding the design and implementation of exercise programs
- Effective Communication: Convey complex concepts clearly and accessibly to clients of various profiles
- Time Management and Organization: Plan and manage multiple training programs efficiently, maximizing results



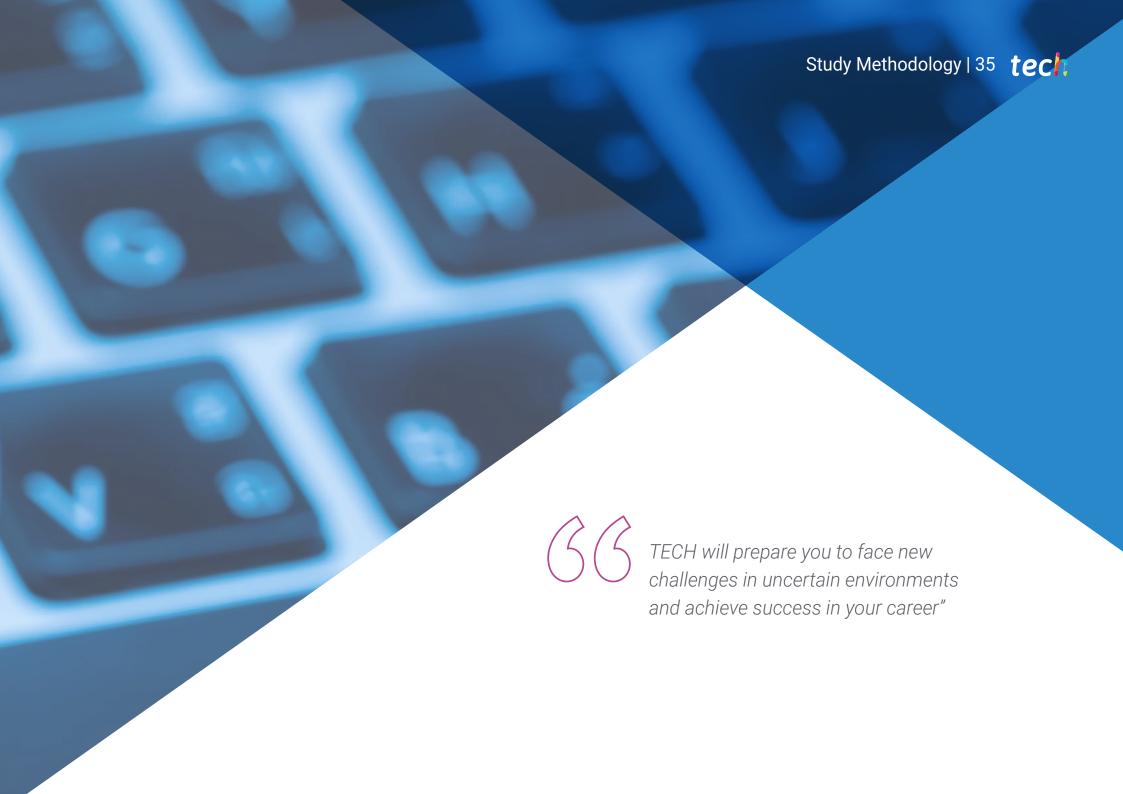


# Career Opportunities | 33 tech

After completing the university program, you will be able to apply your knowledge and skills in the following positions:

- **1. Specialized Personal Trainer:** Designer and supervisor of exercise programs tailored to the specific needs of clients, improving their physical performance and well-being.
- **2. Physical Rehabilitation Specialist:** Responsible for injury recovery through therapeutic physical exercise programs, helping patients regain functionality and mobility.
- **3. Health and Wellness Advisor:** Providing personalized recommendations on exercise and healthy habits, promoting an active and balanced lifestyle.
- **4. Sports Program Coordinator:** Manager of training programs in sports centers or health organizations, focusing on groups with specific needs.
- **5. Online Training Consultant:** Remote advisor, designing exercise programs adapted to clients' capabilities using digital platforms.
- **6. Instructor for Special Populations:** Designer of exercise routines for individuals with chronic diseases, such as diabetes, obesity, or cardiovascular pathologies.
- **7. Athlete Training Coordinator:** Developer of specific training plans to optimize performance for high-level athletes, preventing injuries and improving physical abilities.
- **8. Corporate Wellness Manager:** Responsible for implementing physical exercise programs in companies to improve employee health and performance, promoting physical activity in the workplace.



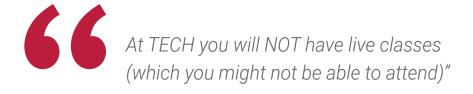


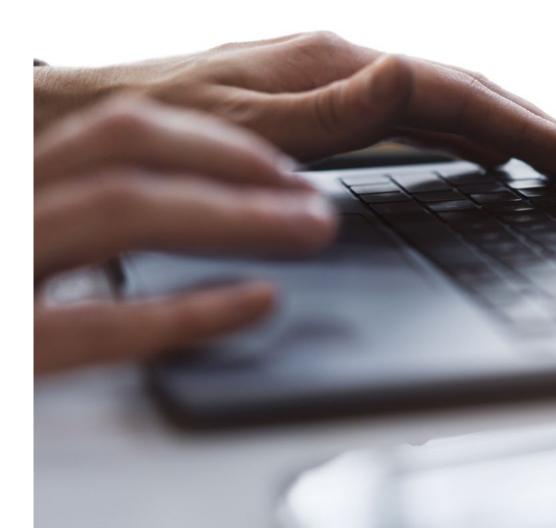
## The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.







## The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.



TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want"

## tech 38 | Study Methodology

#### Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



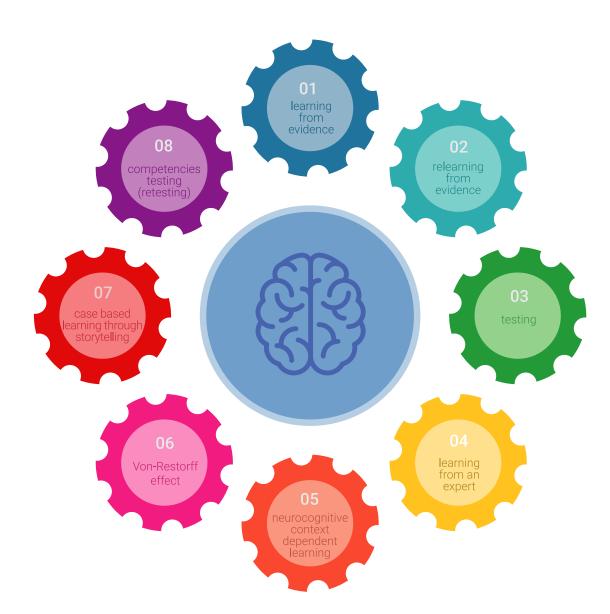
## Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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



## tech 40 | Study Methodology

## A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

### The effectiveness of the method is justified by four fundamental achievements:

- 1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
- 2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- **4.** Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

## Study Methodology | 41 tech

## The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.

## tech 42 | Study Methodology

As such, the best educational materials, thoroughly prepared, will be available in this program:



#### **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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



#### **Practicing Skills and Abilities**

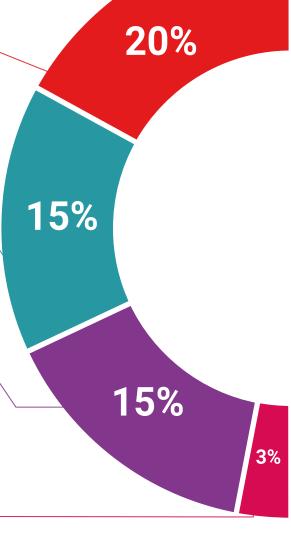
You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



#### **Interactive Summaries**

We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".





#### **Additional Reading**

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.

## Study Methodology | 43 tech



Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.



### **Testing & Retesting**

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.



#### Classes

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

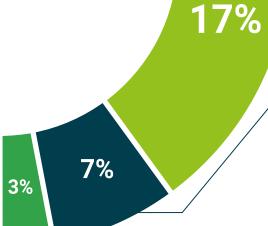




#### **Quick Action Guides**

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.





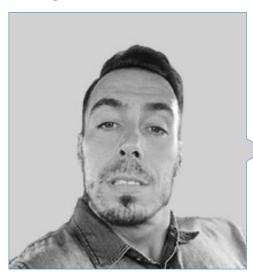


The teaching staff of this university program is composed of highly esteemed professionals in the field of Therapeutic Personal Training and physical health. With a solid academic background and extensive practical experience, the specialists not only provide updated knowledge but also an applied perspective of the most innovative methodologies. Furthermore, their experience working with populations with specific needs ensures teaching that is adapted to the real demands of the sector. This combination of theoretical and practical knowledge guarantees high-quality education, enabling graduates to access the best practices in the field of therapeutic exercise.





## Management



## Dr. Rubina, Dardo

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

#### **Teachers**

#### 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 following chairs: Didactics of the Secondary Level, Didactics of Sports
  Training and Teaching Practice at the Higher 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

## Mr. 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

### 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.°1 Dr. Enrique Romero Brest
- Degree in Kinesiology and Physiatry at the University of Buenos Aires

#### Mr. Renda, Juan Manuel

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

#### Mr. Crespo, Guillermo Javier

- Coordinator of the Club Body gym
- Assistant Coach in the Youth Weightlifting Detection and Development Program
- Coordinator of the gym and training center of the Calabrian Association
- 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

# tech 48 | Teaching Staff

### Ms. Avila, María Belén

- Sports Psychologist and Nutritionist with a private practice
- Nutritionist at the Argentine Diabetes Federation
- Nutritionist in the Senior Adult Scientific Committee of the Argentine Diabetes Society
- Sports Psychologist at Club Atlético Vélez Sarsfield
- Expert in Comprehensive Therapy for the Treatment of Overweight and Obesity from the Center for Metabolic Research
- Certified Diabetes Educator by the Argentine Diabetes Society
- Specialist in Sports Psychology by the Argentine Sports Psychology Association
- Bachelor's Degree in Psychology from the University of Salvador
- Bachelor's Degree in High-Performance Sports from the National University of Lomas de Zamora
- Member of: the Psychology Scientific Committee of the Hospital of Clínicas José de San Martín







A unique, essential and decisive learning experience to boost your professional development"





## tech 52 | Certificate

This private qualification will allow you to obtain a **Master's Degree 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** private qualification 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.

TECH is a member of the distinguished professional organization **The Chartered Association of Sport and Exercise Sciences (CASES)**. This membership reaffirms its commitment to excellence in management and specialized training in the sports field.

Accreditation/Membership





Title: Master's Degree in Therapeutic Personal Training

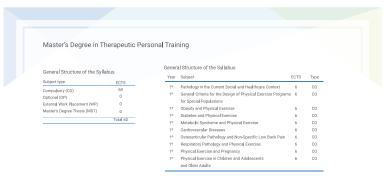
Modality: online

Duration: 12 months

Accreditation: 60 ECTS



The Official Online





<sup>\*</sup>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.



# Master's Degree Therapeutic Personal Training

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online



Therapeutic Personal Training

Accreditation/Membership





