## Postgraduate Diploma Pilates Method on Machines



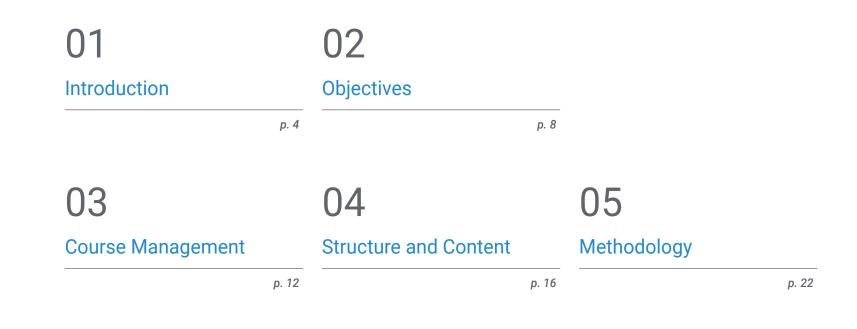


**Postgraduate Diploma** Pilates Method on Machines

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

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-pilates-method-machines

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Certificate

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## 01 Introduction

As technologies advance, Machine Pilates has achieved greater effectiveness in the rehabilitation of multiple pathologies. In this respect, for the healthcare field, these advances have made it possible to perfect therapeutic methods and adapt them to each patient. In view of these advances, TECH has designed this 100% online program that offers medical professionals a complete update on the use of such equipment, therapeutic fundamentals, and their application in athletes. All this, with an advanced multimedia content, available 24 hours a day, from any digital device with Internet connection. An opportunity to update your knowledge through a university proposal at the academic forefront.



Thanks to this Postgraduate Diploma, you will be up to date with the advances in the Pilates Method in Machine"

## tech 06 | Introduction

The scientific studies carried out on the use of the Pilates method by machine to treat certain injuries or prevent them have favored the inclusion of these physical exercises in the medical guidelines. Likewise, technological advances have allowed the equipment used to be much more effective in addressing everything from frequent back injuries in any population to injuries derived from continuous sports practice.

Given this reality, TECH has created this Postgraduate Diploma, which provides the clinician with an update on the different Pilates devices in Machine, as well as the benefits of each one of them and the best practices in terms of space and choice of environment.

A syllabus that will lead you to delve into the differences between classical Pilates and therapeutic Pilates or injury prevention methods used in sports such as soccer, tennis, basketball, and handball, among others. All of this is accompanied by a variety of multimedia resources stored in a virtual library with unlimited access throughout the course of this academic journey.

Undoubtedly, it is a unique opportunity to obtain a complete update through a flexible program, with accessible content from any digital device with an Internet connection. Therefore, without schedules or attendance, the graduate will be able to reconcile their daily activities with a high-quality university proposal.

This **Postgraduate Diploma in Pilates Method on Machine** 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 Physiotherapy and specialists in Pilates
- 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
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection



With TECH, you will update your knowledge of the various equipment in Pilates Methods and how they can transform physical conditions"

### Introduction | 07 tech



The program's teaching staff includes professionals from the sector who bring to this training the experience of their work, as well as renowned specialists from reference societies and prestigious universities.

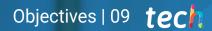
Its multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, students will be assisted by an innovative interactive video system developed by renowned experts. Through case studies, you will delve into the different types of breathing and how this is vital when practicing Pilates in body rehabilitation.

> Delve whenever you wish into the relevance of the Core in the recovery process.

# 02 **Objectives**

This Postgraduate Diploma has been elaborated with the purpose of giving the medical professional an update in the knowledge and abilities that will allow them to apply the Pilates Method in Machine to their field of action. In this way, you will be able to develop physical training and rehabilitation plans that directly benefit the physical and psychological health of patients. To achieve this, TECH provides the graduate with multimedia resources such as video summaries, available in a virtual library, accessible 24 hours a day with no time restrictions.



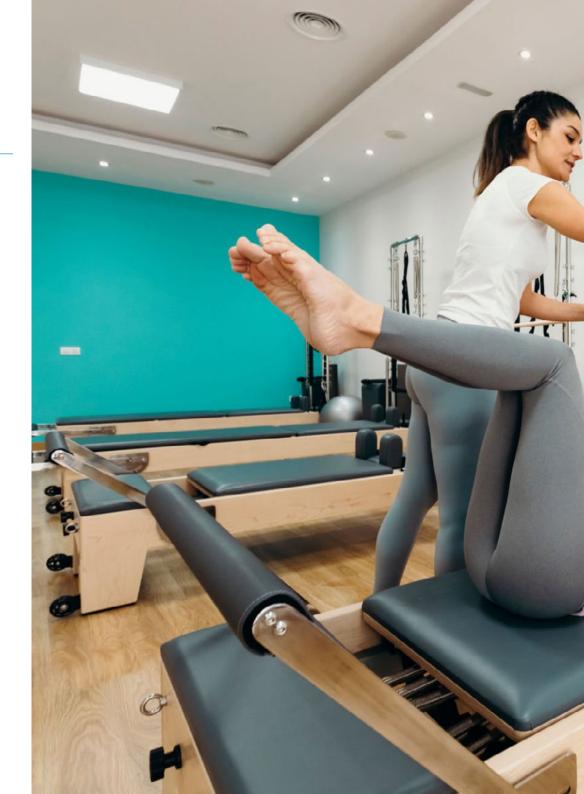
Thanks to this program, you will broaden your knowledge of the Biomechanics of the spine and the most appropriate exercises for its recovery"

## tech 10 | Objectives



## General Objectives

- Enhance knowledge and professional skills in the practice and teaching of Pilates exercises on the floor, on different machines, and with implements
- Differentiate the applications of Pilates exercises and the adaptations to be made for each patient
- Establish an exercise protocol adapted to the symptomatology and pathology of each patient
- Delineate the progressions and regressions of exercises according to the different phases in the process of recovery from an injury
- Avoid contraindicated exercises based on prior assessment of patients and clients
- Handle in-depth the apparatus used in the Pilates Method
- To provide the necessary information to be able to search for scientific and updated information on Pilates treatments applicable to different pathologies
- Analyze the needs and improvements of Pilates equipment in a therapeutic space for Pilates exercise
- Develop actions that improve the effectiveness of Pilates exercises based on the principles of the method
- Perform correctly and analytically exercises based on the Pilates Method
- Analyze the physiological and postural changes that affect pregnant women
- Design exercises adapted to the woman in the course of pregnancy until delivery
- Describe the application of the Pilates Method in high-level athletes



## Objectives | 11 tech





### Specific Objectives

#### Module 1. The Pilates gym

- Describe the space where Pilates is performed
- Be aware of the machines to do Pilates
- Expose protocols and exercise progressions

#### Module 2. Fundamentals of the Pilates Method

- Delve into fundamentals of Pilates
- Identify the most relevant exercises
- Explain the Pilates positions to be avoided

#### Module 3. Pilates in sports

- Identify the most frequent injuries in each sport
- Indicate the risk factors predisposing to injury
- Select exercises based on the Pilates Method adapted to each sport

In your clinical practice you will implement the most advanced techniques in Pilates as treatment and prevention of injuries in swimmers"

## 03 Course Management

In order to preserve the excellence that distinguishes TECH programs, this certification has an academic staff composed of leading professionals in the world of Physiotherapy, along with specialists in the Pilates Method. As a result, the physician will be guaranteed to receive an up-to-date process based on the latest evidence and with a syllabus created by active experts in this growing field.

You will have an updated curriculum designed by specialists in Pilates Methods with which you will delve into the most effective treatments for athletes"

## tech 14 | Course Management

### Management



### Mr. González Arganda, Sergio

- Physiotherapist of Atlético de Madrid Football Club
- CEO Fisio Domicilio Madrid
- Lecturer in the Master's Degree in Physical Preparation and Sports Rehabilitation in Soccer
- Lecturer in the University Expert in Clinical Pilates
- · Lecturer in the Master of Biomechanics and Sports Physiotherapy
- Master in Osteopathy of the Locomotor System by the Madrid School of Osteopathy
- Expert in Pilates Rehabilitation by the Royal Spanish Gymnastics Federation
- Master's Degree in Biomechanics applied to Injury Assessment and Advanced Techniques in Physiotherapy
- Physiotherapy Graduate at Comillas Pontifical in University

### Professors

#### Ms. Díaz Águila, Estrella

- Physiotherapist at H3
- Physiotherapist at Physiotherapy Castilla Clinic
- Physiotherapist at Fiosiomagna Clinic
- Physiotherapist at CEMAJ Medical Center
- Master's Degree in Osteopathy at Alcalá University
- Musculoskeletal ultrasound course for physiotherapists at MV Clinic
- PHL Back School Course: Therapeutic Pilates, hypopressive and functional exercise at the College of Physiotherapists of Andalusia
- Postgraduate Certificate in Physiotherapy at the University of Alcalá



## 04 Structure and Content

This university certificate has been designed to offer the medical professional an update on the Pilates Method on Machines. In this way, the specialist will delve into equipment such as the Reformer, the Chair, and the Barrel. In addition, you will expand your knowledge of the Different concepts related to the method, types of breathing, analysis, effects, and conclusions, and the biomechanics of spine and its application in Pilates. All this is in a program that is characterized by providing video summaries of each topic, videos in focus, specialized readings, and case studies.

You will take advantage of the opportunity to update your knowledge at your own pace of study with TECH's innovative Relearning system"

## tech 18 | Structure and Content

#### Module 1. The gym/Pilates studio

- 1.1. The Reformer
  - 1.1.1. Introduction to the Reformer
  - 1.1.2. Reformer Benefits
  - 1.1.3. Main exercises on the Reformer
  - 1.1.4. Main errors on the Reformer
- 1.2. The Cadillac or Trapeze table
  - 1.2.1. Introduction to Cadillac
  - 1.2.2. Cadillac Benefits
  - 1.2.3. Main exercises on the Cadillac
  - 1.2.4. Main errors on the Cadillac
- 1.3. The chair
  - 1.3.1. Introduction to the chair
  - 1.3.2. Chair benefits
  - 1.3.3. Main exercises on the chair
  - 1.3.4. Main Errors on the chair
- 1.4. The Barrel
  - 1.4.1. Introduction to the Barrel
  - 1.4.2. Barrel Benefits
  - 1.4.3. Main exercises on the Barrel
  - 1.4.4. Main errors on the Barrel
- 1.5. "Combo" models
  - 1.5.1. Introduction to the Combo model
  - 1.5.2. Combo model benefits
  - 1.5.3. Main exercises on the Combo model
  - 1.5.4. main errors in the Combo model
- 1.6. The flexible ring
  - 1.6.1. Introduction to flexible ring
  - 1.6.2. Flexible ring benefits
  - 1.6.3. Main exercises on the flexible ring
  - 1.6.4. Main Errors on the flexible ring

- 1.7. The Spine Corrector
  - 1.7.1. Introduction to Spine corrector
  - 1.7.2. Spine corrector benefits
  - 1.7.3. Main exercises on the Spine corrector
  - 1.7.4. Main Errors on the Spine corrector
- 1.8. Implements adapted to the method
  - 1.8.1. Foam roller
  - 1.8.2. Fit Ball
  - 1.8.4. Elastic bands
  - 1.8.5. Bosu
- 1.9. The Space
  - 1.9.1. Equipment preferences
  - 1.9.2. The Pilates space
  - 1.9.3. Pilates instruments
  - 1.9.4. Best practices in terms of space
- 1.10. The Environment
  - 1.10.1. Environment concept
  - 1.10.2. Characteristics of different environments
  - 1.10.3. Environment choice
  - 1.10.4. Conclusions

#### Module 2. Fundamentals of the Pilates Method

- 2.1. The different concepts of the method
  - 2.1.1. The concepts according to Joseph Pilates
  - 2.1.2. Evolution of Concepts
  - 2.1.3. Subsequent generations
  - 2.1.4. Conclusions
- 2.2. Breathing
  - 2.2.1. The different types of breathing
  - 2.2.2. Analysis of types of breathing
  - 2.2.3. The Effects of breathing
  - 2.2.4. Conclusions

### Structure and Content | 19 tech

- 2.3. Pelvis as the core of stability and movement
  - 2.3.1. The Joseph Pilates Core
  - 2.3.2. The Scientific Core
  - 2.3.3. Anatomical basis
  - 2.3.4. Core in recovery processes
- 2.4. The organization of the shoulder girdle
  - 2.4.1. Anatomical Review
  - 2.4.2. Shoulder Girdle Biomechanics
  - 2.4.3. Pilates applications
  - 2.4.4. Conclusions
- 2.5. The organization of lower limb movement
  - 2.5.1. Anatomical Review
  - 2.5.2. Biomechanics the Lower Limb
  - 2.5.3. Pilates applications
  - 2.5.4. Conclusions
- 2.6. The articulation of the spine
  - 2.6.1. Anatomical Review
  - 2.6.2. Biomechanics of the Spine
  - 2.6.3. Pilates applications
  - 2.6.4. Conclusions
- 2.7. Body segment alignments
  - 2.7.1. Posture
  - 2.7.2. Posture in Pilates
  - 2.7.3. Segmental alignments
  - 2.7.4. Muscle and fascial chains
- 2.8. Functional integration
  - 2.8.1. Concept of functional Integration
  - 2.8.2. Implications on different activities
  - 2.8.3. The task
  - 2.8.4. The Context

- 2.9. Fundamentals of Therapeutic Pilates
  - 2.9.1. History of Therapeutic Pilates
  - 2.9.2. Concepts in Therapeutic Pilates
  - 2.9.3. Criteria in Therapeutic Pilates
  - 2.9.4. Examples of injuries or pathologies
- 2.10. Pilates clásico y Pilates terapéutico
  - 2.10.1. Differences between both methods
  - 2.10.2. Justification
  - 2.10.3. Progressions
  - 2.10.4. Conclusions

#### Module 3. Pilates in sports

- 3.1. Soccer
  - 3.1.1. Most Common Injuries
  - 3.1.2. Pilates as treatment and prevention
  - 3.1.3. Benefits and objectives
  - 3.1.4. Example in elite athletes
- 3.2. Racquet Sports
  - 3.2.1. Most Common Injuries
  - 3.2.2. Pilates as treatment and prevention
  - 3.2.3. Benefits and objectives
  - 3.2.4. Example in elite athletes
- 3.3. Basketball
  - 3.3.1. Most Common Injuries
  - 3.3.2. Pilates as treatment and prevention
  - 3.3.3. Benefits and objectives
  - 3.3.4. Example in elite athletes
- 3.4. Handball
  - 3.4.1. Most Common Injuries
  - 3.4.2. Pilates as treatment and prevention
  - 3.4.3. Benefits and objectives
  - 3.4.4. Example in elite athletes

## tech 20 | Structure and Content

#### 3.5. Golf

- 3.5.1. Most Common Injuries
- 3.5.2. Pilates as treatment and prevention
- 3.5.3. Benefits and objectives
- 3.5.4. Example in elite athletes
- 3.6. Swimming
  - 3.6.1. Most Common Injuries
  - 3.6.2. Pilates as treatment and prevention
  - 3.6.3. Benefits and objectives
  - 3.6.4. Example in elite athletes
- 3.7. Athletics
  - 3.7.1. Most Common Injuries
  - 3.7.2. Pilates as treatment and prevention
  - 3.7.3. Benefits and objectives
  - 3.7.4. Example in elite athletes
- 3.8. Dance and performing arts
  - 3.8.1. Most Common Injuries
  - 3.8.2. Pilates as treatment and prevention
  - 3.8.3. Benefits and objectives
  - 3.8.4. Example in elite athletes
- 3.9. Roller Hockey
  - 3.9.1. Most Common Injuries
  - 3.9.2. Pilates as treatment and prevention
  - 3.9.3. Benefits and objectives
  - 3.9.4. Example in elite athletes
- 3.10. Rugby
  - 3.10.1. Most Common Injuries
  - 3.10.2. Pilates as treatment and prevention
  - 3.10.3. Benefits and objectives
  - 3.10.4. Example in elite athletes





## Structure and Content | 21 tech

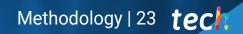


You will optimize your Pilates practice space, knowing the equipment preferences, the characteristics of the environment, and the best practices to follow"

# 05 **Methodology**

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.** 

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.



Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

## tech 24 | Methodology

### At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional practice.

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Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

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

 Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.

2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.

- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



## tech 26 | Methodology

### **Relearning Methodology**

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



## Methodology | 27 tech

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.



## tech 28 | Methodology

This program offers the best educational material, prepared with professionals in mind:



#### **Study Material**

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

20%

15%

3%

15%

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



#### **Surgical Techniques and Procedures on Video**

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



#### **Interactive Summaries**

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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



#### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.

## Methodology | 29 tech



#### **Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

20%

7%

3%

17%



#### **Testing & Retesting**

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### Quick Action Guides

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

# 06 **Certificate**

The Postgraduate Diploma in Machine Pilates Method guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.



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

## tech 32 | Certificate

This **Postgraduate Diploma in Pilates Method on Machines** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma**, issued by **TECH Technological University** via tracked delivery\*.

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

Title: Postgraduate Diploma in Pilates Method on Machine Official N° of Hours: **450 h.** 



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

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## Postgraduate Diploma Pilates Method on Machines

