



## Pilates Method on Machines

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 18 ECTS

» Schedule: at your own pace

» Exams:online

Website: https://portal-tech-eu-win.azurewebsites.net/us/medicine/postgraduate-diploma/postgraduate-diploma-pilates-method-machines

# Index

> 06 Certificate

> > p. 30





## 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"



You will delve into the most innovative techniques used to strengthen muscles through Pilates on a Machine"

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.

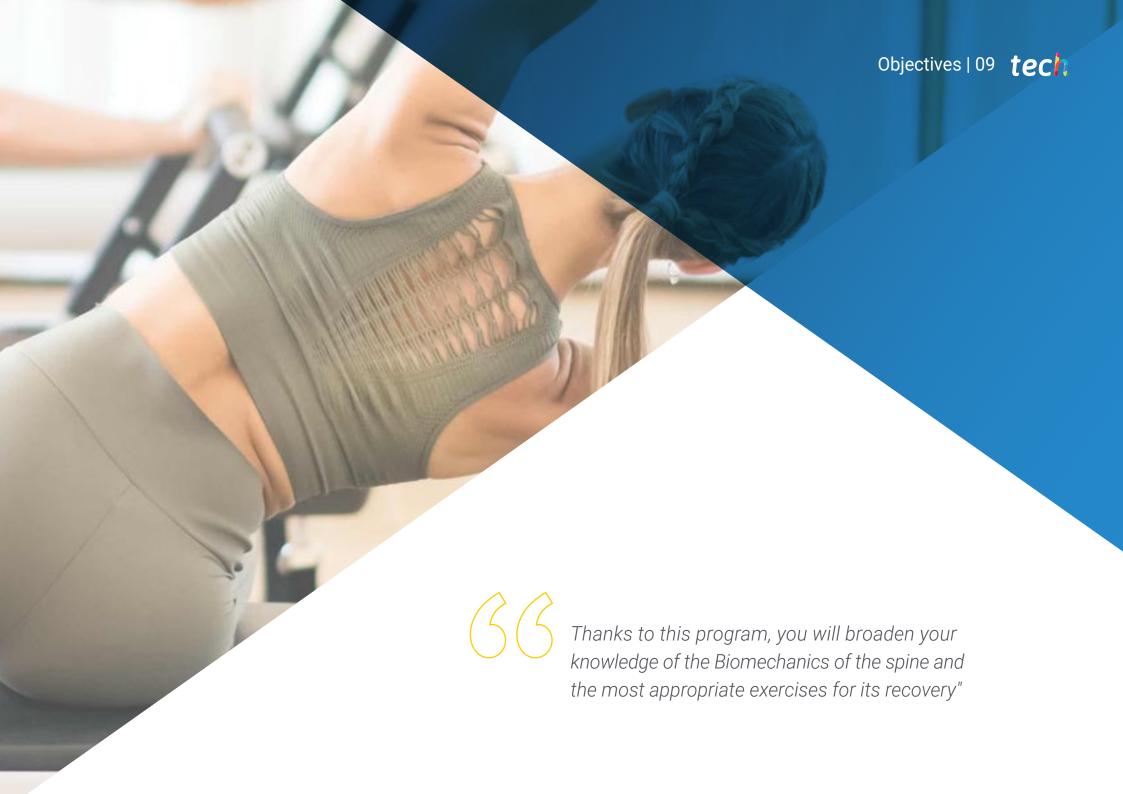
The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, students will be assisted by an innovative interactive video system developed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





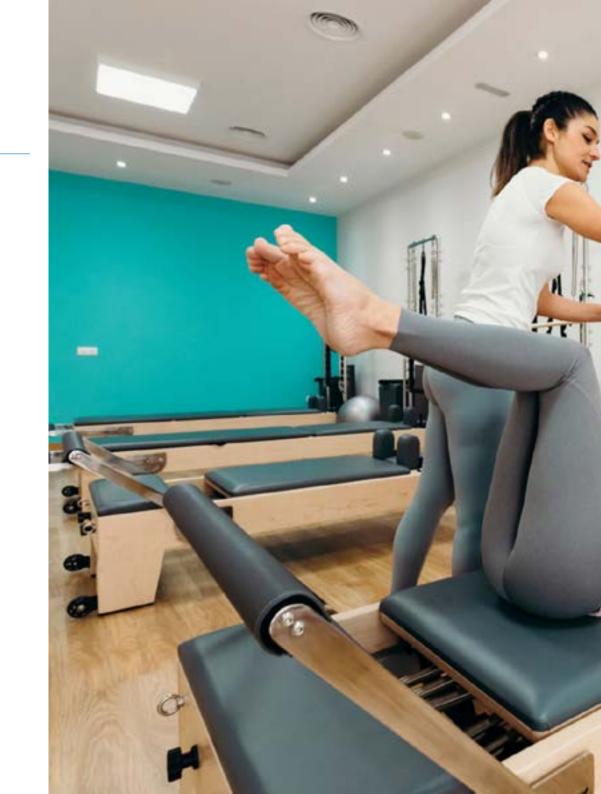


## tech 10 | Objectives



## 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







## **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

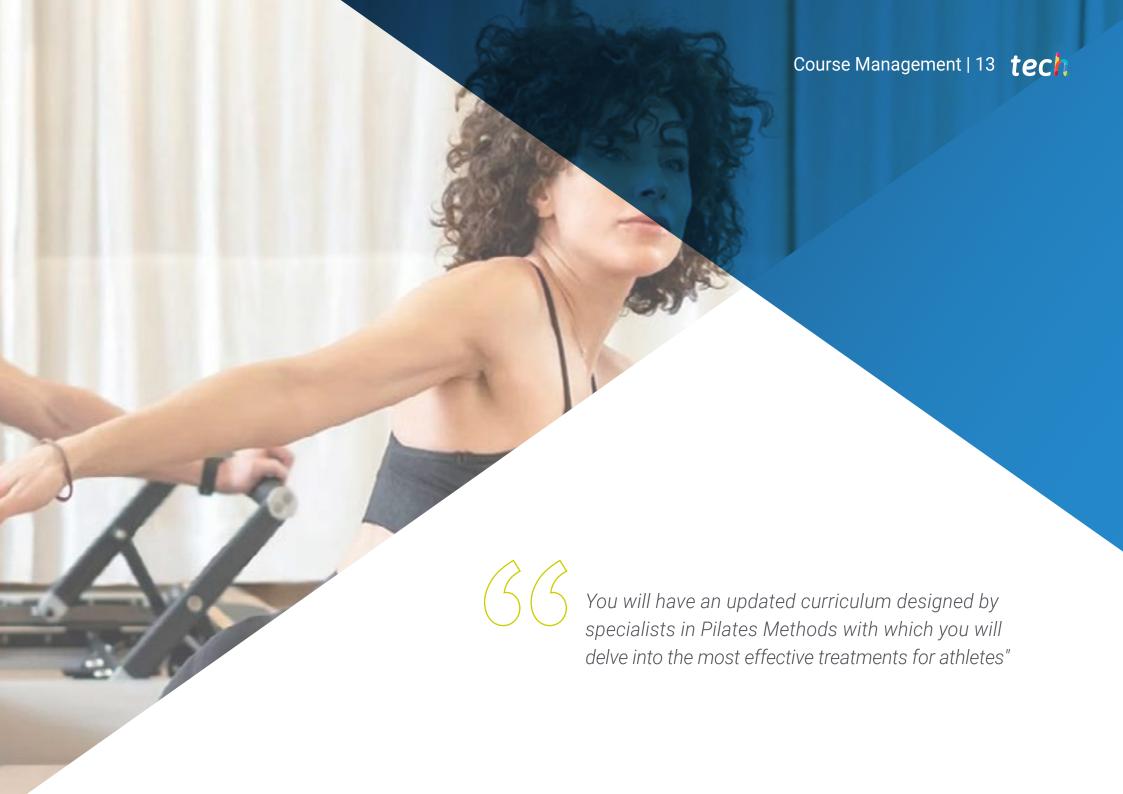
#### Module 3. Pilates in sports

- 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"





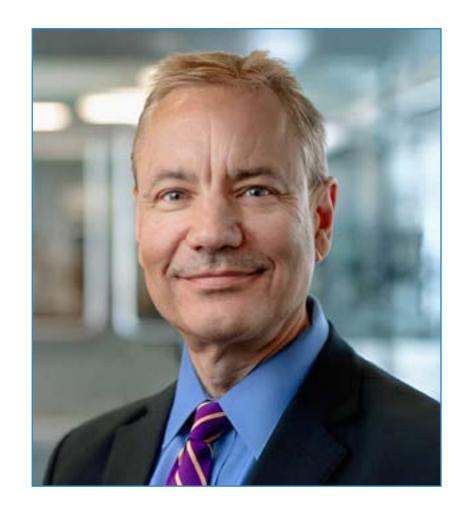
#### **International Guest Director**

Dr. Edward Laskowski is a leading international figure in the field of Sports Medicine and Physical Rehabilitation. Board certified by the American Board of Physical Medicine and Rehabilitation, he has been an integral part of the prestigious staff at the Mayo Clinic, where he has served as Director of the Sports Medicine Center.

In addition, his expertise spans a wide range of disciplines, from Sports Medicine, to Fitness and Strength and Stability Training. As such, he has worked closely with a multidisciplinary team of specialists in Physical Medicine, Rehabilitation, Orthopedics, Physiotherapy and Sports Psychology to provide a comprehensive approach to the care of his patients.

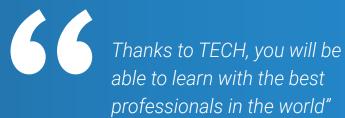
Likewise, his influence extends beyond clinical practice, as he has been recognized nationally and internationally for his contributions to the world of sport and health. Accordingly, he was appointed by President George W. Bush to the President's Council on Physical Fitness and Sports, and awarded a Distinguished Service Award from the Department of Health and Human Services, underscoring his commitment to promoting healthy lifestyles.

In addition, he has been a key element in renowned sporting events, such as the Winter Olympics (2002) in Salt Lake City and the Chicago Marathon, providing quality medical care. Add to this his dedication to outreach, which has been reflected in his extensive work in creating academic resources, including the Mayo Clinic CD-ROM on Sports, Health and Fitness, as well as his role as Contributing Editor of the book "Mayo Clinic Fitness for EveryBody." With a passion for debunking myths and providing accurate, up-to-date information, Dr. Edward Laskowski continues to be an influential voice in Sports Medicine and Fitness worldwide.



## Dr. Edward Laskowski

- Director, Mayo Clinic Sports Medicine Center, United States
- Consultant Physician to the National Hockey League Players Association, United States
- Physician at the Mayo Clinic, United States
- Member of the Olympic Polyclinic at the Olympic Winter Games (2002), Salt Lake City, Salt Lake City, United States
- Specialist in Sports Medicine, Fitness, Strength Training and Stability Training
- Board Certified by the American Board of Physical Medicine & Rehabilitation
- Contributing Editor of the book "Mayo Clinic Fitness for EveryBody"
- Distinguished Service Award from the Department of Health and Human Services
- Member of: American College of Sports Medicine



## tech 16 | Course Management

#### Management



#### Mr. González Arganda, Sergio

- Physiotherapist of Atlético de Madrid Football Club (2005-2023)
- CEO Fisio Domicilio Madrid
- Teacher in the Master's Degree in Physical Preparation and Sports Readaptation in Football
- Teacher in the Postgraduate Diploma in Clinical Pilates
- Teacher in the Master's Degree in Biomechanics and Sports Physiotherapy
- Master's Degree in Osteopathy of the Locomotor System from the Madrid School of Osteopathy
- Expert in Pilates and Rehabilitation from the Royal Spanish Gymnastics Federation
- Master's Degree in Biomechanics Applied to Injury Assessment and Advanced Techniques in Physiotherapy
- Graduate in Physiotherapy from the Comillas Pontifical University

#### **Professors**

#### Ms. Valiente Serrano, Noelia

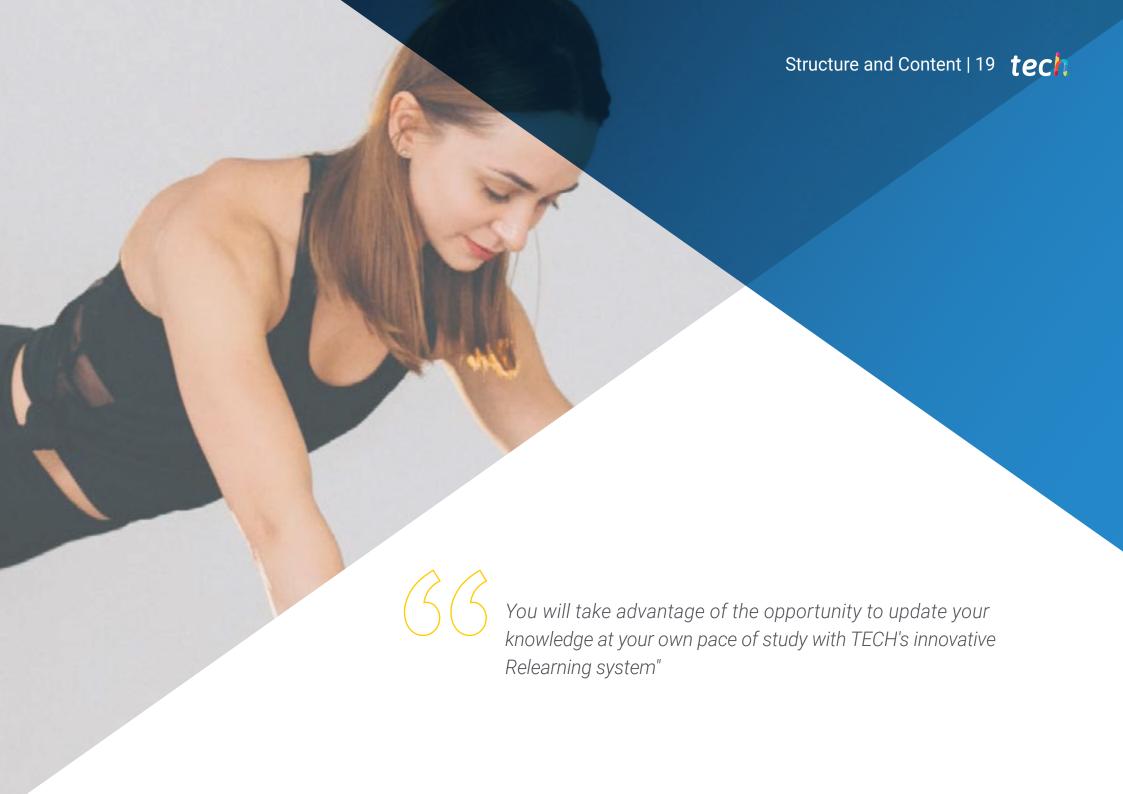
- Physiotherapist at Fisio Domicilio Madrid
- Physiotherapist at Keiki Fisioterapia
- Physiotherapist at Jemed Importaciones

#### Mr. Longás de Jesús, Antonio

- Physiotherapist at Lagasca Clinic
- Physiotherapist at Fisio Domicilio Madrid
- Physiotherapist at Club de Rugby Veterinaria







### tech 20 | 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
  - 132 Chair benefits
  - 1.3.3. Main exercises on the chair
  - 134 Main Errors on the chair
- 1.4. The Barrel
  - 141 Introduction to the Barrel
  - 142 Barrel Benefits
  - 1.4.3. Main exercises on the Barrel
  - 144 Main errors on the Barrel
- 1.5. "Combo" models
  - 151 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 | 21 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 22 | Structure and Content

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	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







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





## tech 26 | 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.



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.
- 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.





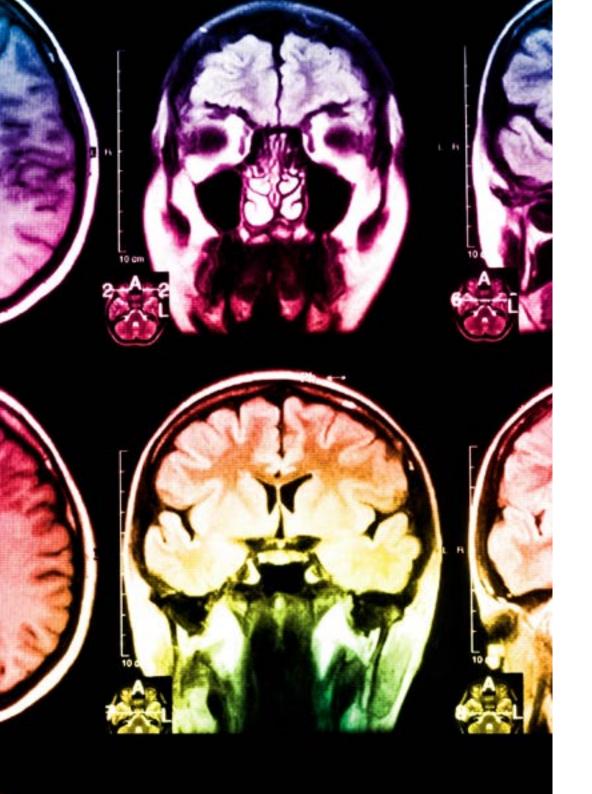
#### Relearning Methodology

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 | 29 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.

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



#### **Study Material**

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

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



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

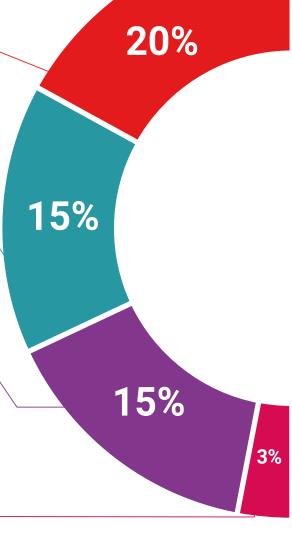
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many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



#### **Interactive Summaries**

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

This exclusive 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.

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

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



#### **Testing & 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.



#### Classes

There is scientific evidence on the usefulness of learning by observing experts.

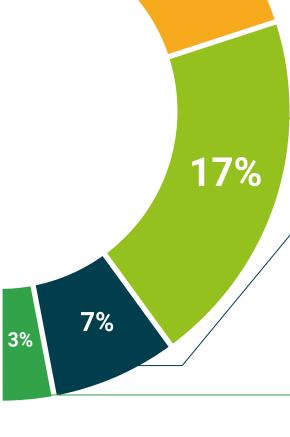
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **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.









## tech 34 | Certificate

This program will allow you to obtain your **Postgraduate Diploma in Pilates Method on Machines** 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: Postgraduate Diploma in Pilates Method on Machines

Modality: online

Duration: 6 months

Accreditation: 18 ECTS



Mr./Ms. \_\_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Postgraduate Diploma in Pilates Method on Machines

This is a program of 450 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



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

health confidence people information tutors guarantee accreditation teaching technology learning



## Postgraduate Diploma

# Pilates Method on Machines

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 18 ECTS
- » Schedule: at your own pace
- » Exams:online

