



Postgraduate Certificate

Strength Training for the Improvement of Movement Skills

» Modality: online

» Duration: 2 months

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

We bsite: techtitute.com/us/sports-science/postgraduate-certificate/strength-training-improvement-movement-skills

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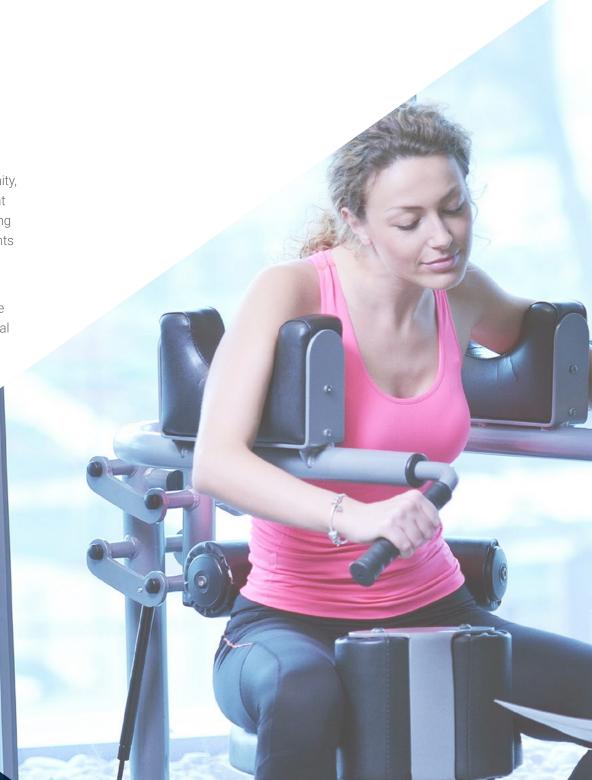
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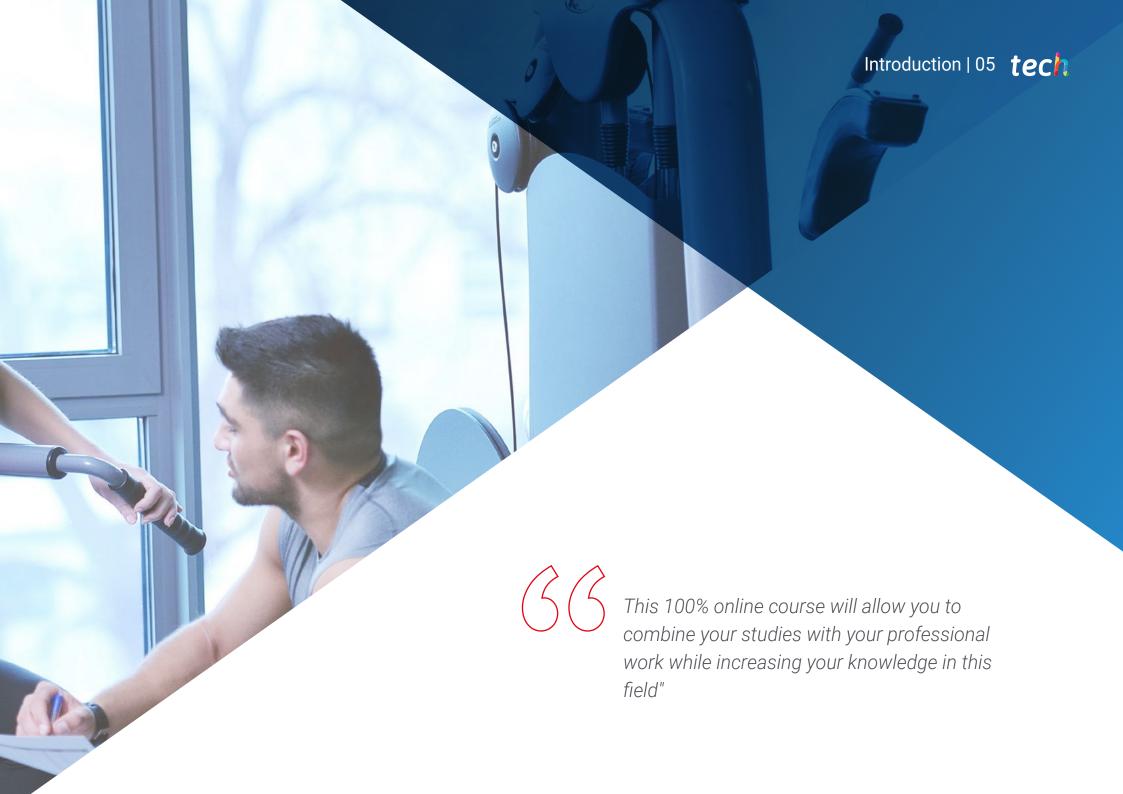
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01 Introduction

The current paradigm of field sports is undergoing changes in the scientific community, where greater emphasis is being placed not only on linear skills, but also on skills that allow athletes to move 360°. This represents an emphasis on the specificity of training with specific movement patterns, given that traditional training focused on movements in the sagittal plane appears to have little or no influence on improving sports performance.

Throughout this program, we will be able to place special emphasis on identifying the main skills, classifying and ordering them, in order to propose efficient methodological proposals based on their understanding.





tech 06 | Introduction

In recent years, strength training has burst with great impetus in the scientific community, covering multiple contexts ranging from sports performance in time and brand sports to situational sports, including the whole range of sports modalities.

Many sports involve straight-line sprints, but short sprints with changes in direction are more often repeated. The ability to run repeatedly and change direction while running is a determinant of performance in many sports, such as soccer, tennis and basketball. Moreover, it often requires recognition and appropriate reaction to different sporting situations. Individuals select and refine movements based on cues relevant to the activity, including a rival and/or an external object.

Throughout this course, special emphasis will be placed on identifying the main skills, classifying and ordering them, in order to propose efficient methodological proposals based on their understanding.

The student of this course will have a differentiating training with respect to their professional colleagues, being able to perform in all areas of sport as a specialist in Strength Training.

This course addresses the vital importance of strength in human performance in all its possible expressions with a unique level of theoretical depth and a level of descent to the practical totally different from what has been seen so far.

The teaching team of this Course in Strength Training for the Improvement of Movement Skills has made a careful selection of each of the topics of this training in order to offer the student a study opportunity as complete as possible and always linked to current events.

Thus, at TECH we have set out to create contents of the highest teaching and educational quality that will turn our students into successful professionals, following the highest quality standards in teaching at an international level. Therefore, we show you this Postgraduate Diploma with a rich content that will help you reach the elite of physical training. In addition, as it is an online course, the student is not conditioned by fixed schedules or the need to move to another physical location, but can access the contents at any time of the day, balancing their work or personal life with their academic life.

This **Course in Strength Training for the Improvement of Movement Skills** contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- The development of numerous case studies presented by specialists in personal training.
- The graphic, schematic, and eminently practical contents with which they are created contain information that is indispensable for professional practice.
- It contains exercises where the self-assessment process can be carried out to improve learning.
- Algorithm-based interactive learning system for decision-making.
- 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.



Immerse yourself in the study of this Postgraduate Diploma of high scientific rigor and improve your skills in strength training for high performance sports"



This course is the best investment you can make in selecting a refresher program for two reasons: in addition to updating your knowledge as a personal trainer, you will earn a degree from the leading online university in Spanish: TECH"

The teaching staff includes professionals from the field of sports science, who bring their experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will allow the professional a situated and contextual learning, that is, a simulated environment that will provide an immersive teaching programmed to train in real situations.

This program is designed around Problem Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year. For this, the professional will be assisted by a novel interactive video system made by recognized experts in Strength Training for the Improvement of Movement Skills and with great experience.

Specialize and stand out in a sector with high demand for professionals.

Increase your knowledge in Strength Training for Movement Skills Improvement with this high-level training.







tech 10 | Objectives



General Objectives

- Delve into the knowledge based on the most current scientific evidence with full applicability in the practical field of strength training
- Master all the most advanced methods of strength training
- Apply with certainty the most current training methods to improve sports performance regarding strength
- Effectively master strength training for performance enhancement in time and mark sports as well as situational sports
- Master the principles governing Exercise Physiology, as well as Biochemistry
- Delve into the principles that govern the Theory of Complex Dynamic Systems as they relate to strength training
- Successfully integrate strength training for the improvement of Motor Skills immersed in sport
- Successfully master all the knowledge acquired in the different modules in real practice







Specific Objectives

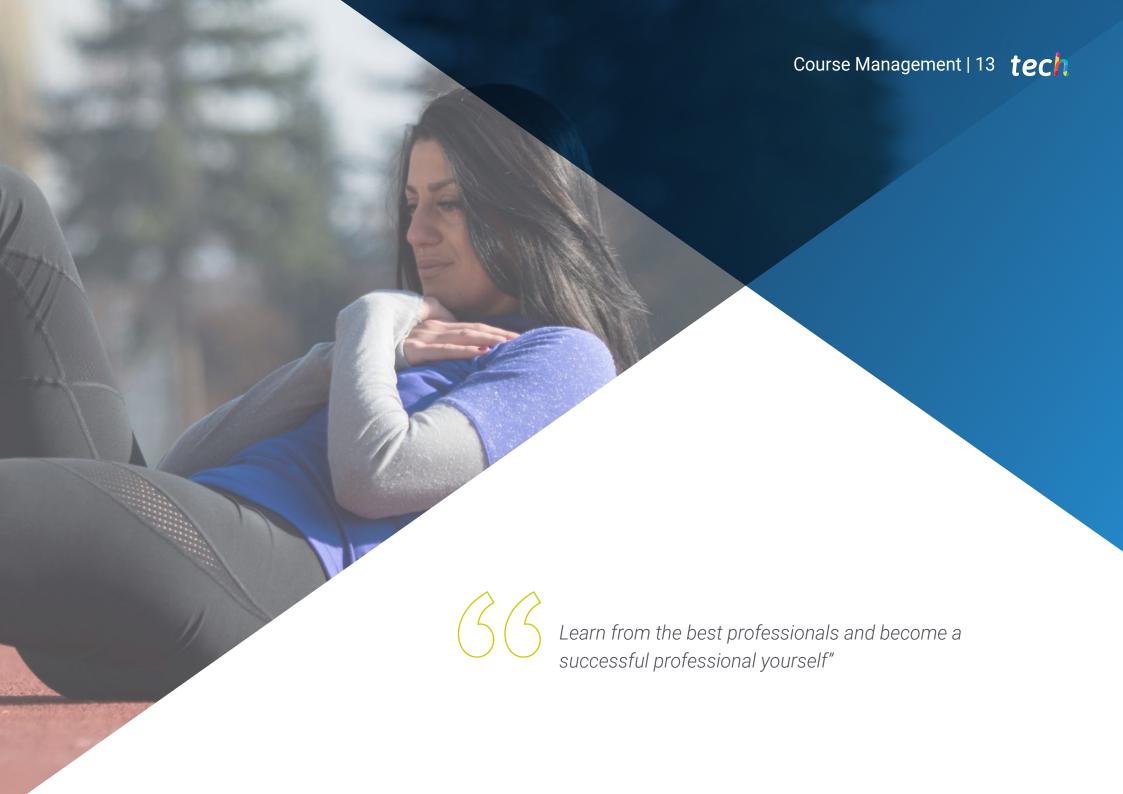
- Gain an in-depth understanding of the relationship between strength and skills
- Identify the main skills in sports in order, to analyze them, understand them and then enhance them through training
- Organize and systematize the skill development process
- Linking and relating field and gym work to enhance the skills



The sports field requires trained professionals and we give you the keys to position yourself among the professional elite"

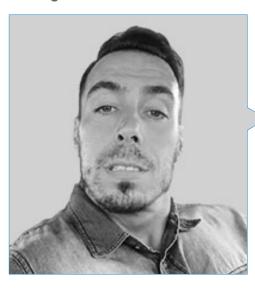






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Management



Rubina, Dardo

- CEO of Test and Training
- EDM Physical Training Coordinator
- Physical trainer of the EDM First Team
- Master's Degree in ARD COE
- EXOS CERTIFICATION
- \cdot Specialist in Strength Training for the Prevention of Injuries, Functional and Physical-Sports Rehabilitatior
- Specialist in Strength Training Applied to Physical and Sports Performance
- Specialist in Applied Biomechanics and Functional Evaluation.
- Certification in Weight Management and Physical Performance Technologies
- Postgraduate course in Physical Activity in Populations with Pathologies
- Postgraduate diploma in Injury Prevention and Rehabilitation.
- Functional Assessment and Corrective Exercise Certificate.
- Certificate in Functional Neurology
- Diploma in Advanced Studies (DEA) University of Castilla la Mancha
- PhD Candidate in ARD

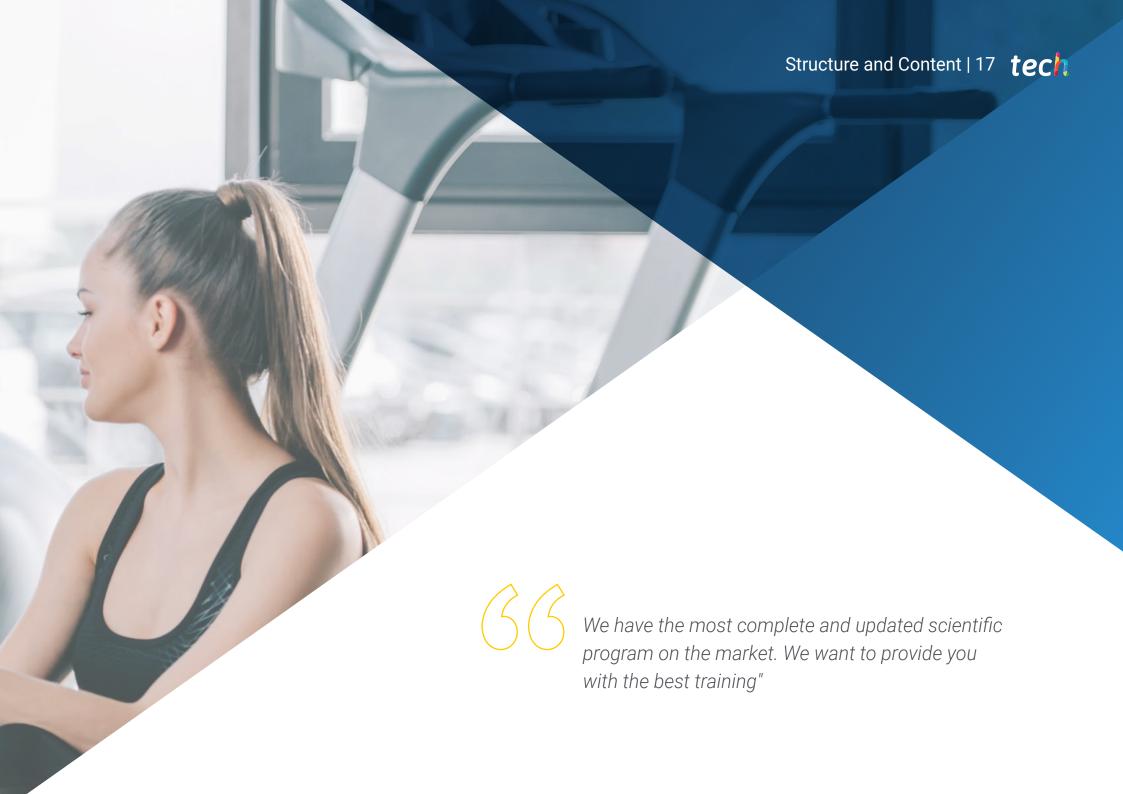
Professors

D. Gizzarelli, Matías Bruno

- Degree in Physical Education
- Training in Applied Neurosciences
- EXOS Performance Specialist
- Author of the Book "Basketball Training: Physical Preparation



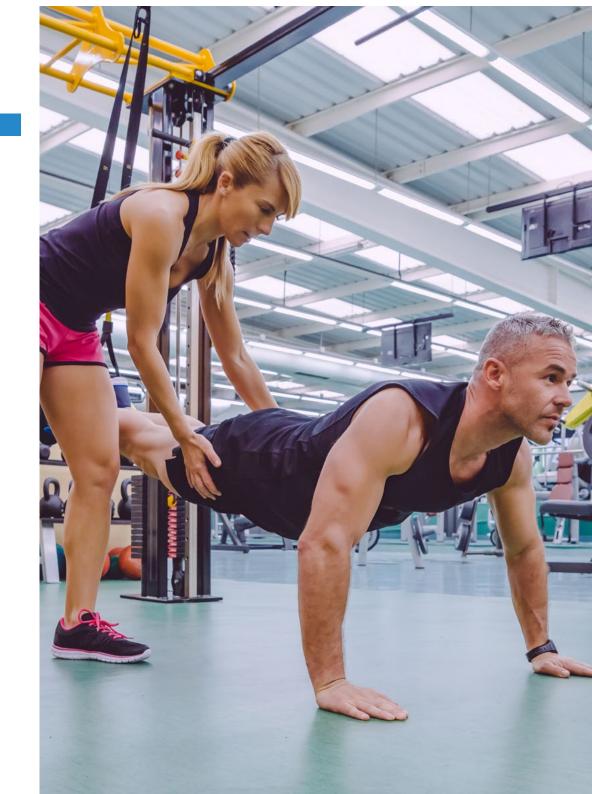




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Module 1. Strength Training for the Improvement of Movement Skills

- 1.1. Strength in Skill Development
 - 1.1.1. The Importance of Strength in Developing Skills
 - 1.1.2. Benefits of Skills-based strength training
 - 1.1.3. Types of strength present in Skills
 - 1.1.4. Training Means Necessary for the Development of Srength in Skills
- 1.2. Skills in Team Sports
 - 1.2.1. General concepts
 - 1.2.2. Skills in Performance Development
 - 1.2.3. Classifying Skills
 - 1.2.3.1. Locomotive Skills
 - 1.2.3.2. Manipulative Skills
- 1.3. Agility and Movements
 - 1.3.1. Basic Concepts
 - 1.3.2. The Importance of Sports
 - 1.3.3. Agility Components
 - 1.3.3.1. Classification of Movement skills
 - 1.3.3.2. Physical Factors: Strength
 - 1.3.3.3. Anthropometric Factors
 - 1.3.3.4. Perceptual-Cognitive Components
- 1.4. Posture
 - 1.4.1. The Importance of Posture in Skills
 - 1.4.2. Posture and Mobility
 - 1.4.3. Posture and CORE
 - 1.4.4. Posture and Center of Pressure
 - 1.4.5. Biomechanical Analysis of Efficient Posture
 - 1.4.6. Methodological Resources
- 1.5. Linear Skills (Linear Abilities)



1.5.1.	Features of Linear Skills
	1.5.1.1. Main Planes and Vectors

1.5.2. Classification

1.5.2.1. Starting, Braking and Deceleration

1.5.2.1.1. Definitions and Context of Use

1.5.2.1.2. Biomechanical Analysis

1.5.2.1.3. Methodological Resources

1.5.2.2. Acceleration

1.5.2.2.1. Definitions and Context of Use

1.5.2.2.2. Biomechanical Analysis

1.5.2.2.3. Methodological Resources

1.5.2.3. Backpedal

1.5.2.3.1. Definitions and Context of Use

1.5.2.3.2. Biomechanical Analysis

1.5.2.3.3. Methodological Resources

1.6. Multidirectional Skills: Shuffle

1.6.1. Classification of Multidirectional Skills

1.6.2. Shuffle Definitions and Context of Use

1.6.3. Biomechanical Analysis

1.6.4. Methodological Resources

1.7. Multidirectional Skills: Crossover

1.7.1. Crossover as a Change of Direction

1.7.2. Crossover as a Transitional Movement

1.7.3. Definitions and Context of Use

1.7.4. Biomechanical Analysis

1.7.5. Methodological Resources

1.8. Jump Skills 1

1.8.1. The Importance of Jumps in Skills

1.8.2. Basic Concepts

1.8.2.1. Biomechanics of Jumps

1.8.2.2. CEA

1.8.2.3. Stiffness

1.8.3. Jump Classification

1.8.4. Methodological Resources

1.9. Jump Skills 2

1.9.1. Methods

1.9.2. Acceleration and Jumps

1.9.3. Shuffle and Jumps

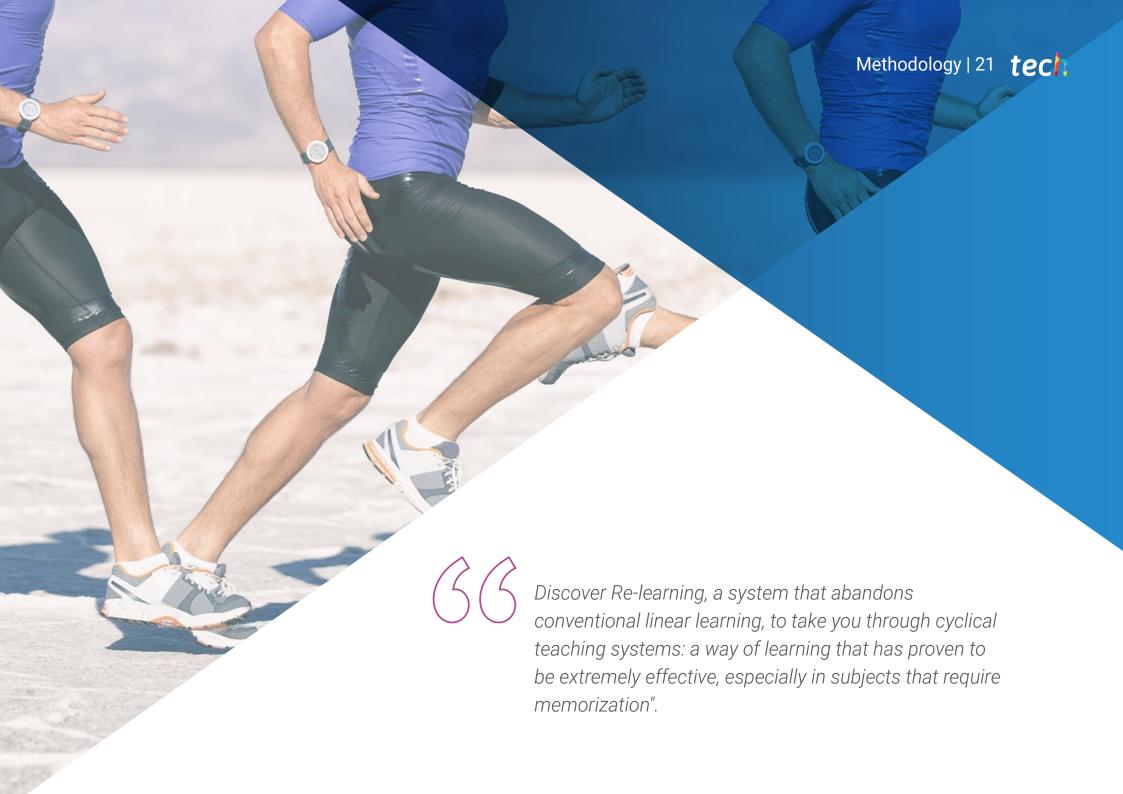
1.9.4. Crossover and Jumps

1.9.5. Methodological Resources

1.10. Programming Variables







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At TECH we use the Case Method

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



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



Our University is the first in the world to combine Harvard Business School case studies with a 100%-online learning system based on repetition.



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

A learning method that is different and innovative.

This Sports Science program at TECH Technological University is an intensive program that prepares you to face all the challenges in this field, both nationally and internationally. We are committed to promoting your personal and professional growth, the best way to strive for success, that is why at TECH you will use Harvard case studies, with which we have a strategic agreement that allows us to offer you material from the best university in the world.



We are the only online university that offers Harvard materials as teaching materials on its courses"

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

In a given situation, what would you do? This is the question that you are presented with in the case method, an action-oriented learning method. Throughout the course, you will be presented with multiple real cases. You will have to combine all your knowledge, and research, argue, and defend your ideas and decisions.



Re-Learning Methodology

Our University is the first in the world to combine Harvard University case studies with a 100%-online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance Harvard case studies with the best 100% online teaching method: Re-learning.

In 2019 we obtained the best learning results of all Spanish-language online universities in the world.

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

Our University is the only one in Spanish-speaking countries licensed to incorporate this successful method. In 2019 we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best Spanish online university indicators.



Methodology | 25 tech

In our program, learning is not a linear process, but rather a spiral (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically. With this methodology we have trained more than 650,000 university graduates with unprecedented success. In fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, markets, and financial instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

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

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

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

In this program you will have access to the best educational material, prepared with you 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.

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.



Video Techniques and Procedures

We bring you closer to the latest techniques, to the latest educational advances, to the forefront of current affairs. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



Interactive Summaries

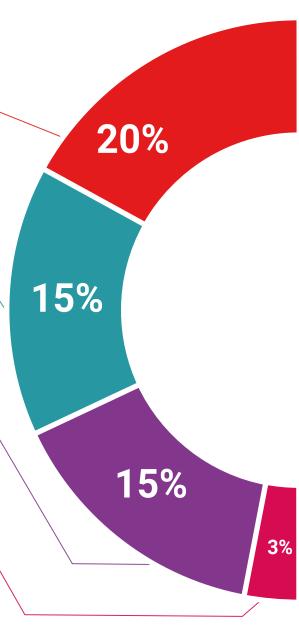
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge. This unique training system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



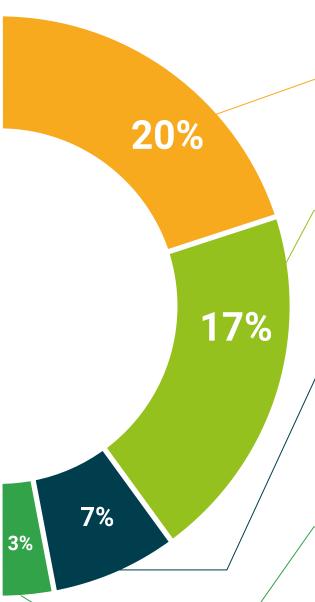
Additional Reading

By participating in this course you will have access to a virtual library where you will be able to complement and keep your training up-to-date with the latest articles on the subject, consensus documents, international guidelines...

An invaluable resource that you will be able to use even when you finish your course with us.



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Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Re-testing

We periodically evaluate and re-evaluate your knowledge throughout the program through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



Learning from an expert

Observing an expert performing a task is the most effective way of learning. It is called Learning from an expert: a proven way to reinforce knowledge and recall what has been learned. For this reason, we include this type of learning in our course classes.



There is scientific evidence suggesting that observing third-party experts can be useful. Learning from an expert strengthens knowledge and memory, and generates confidence in our future difficult decisions.



Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.





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This Postgraduate Certificate in Strength Training for the Improvement of Movement Skills 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 Certificate** issued by **TECH - Technological University via tracked delivery.**

This degree contributes to the academic development of the professional and adds a high university curricular value to their training. It is 100% valid in all competitive examinations, labour exchanges and professional career evaluation committees.

Title: Postgraduate Certificate in Strength Training for the Improvement of Movement Skills

ECTS: 6

Official Number of Hours: 150

Endorsed by the NBA





^{*}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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