

Postgraduate Certificate

Strength Training for the Improvement of Movement Skills

Endorsed by the NBA



tech global
university





Postgraduate Certificate

Strength Training for the Improvement of Movement Skills

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

Website: www.techtute.com/us/sports-science/postgraduate-certificate/strength-training-improvement-movement-skills

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Certificate

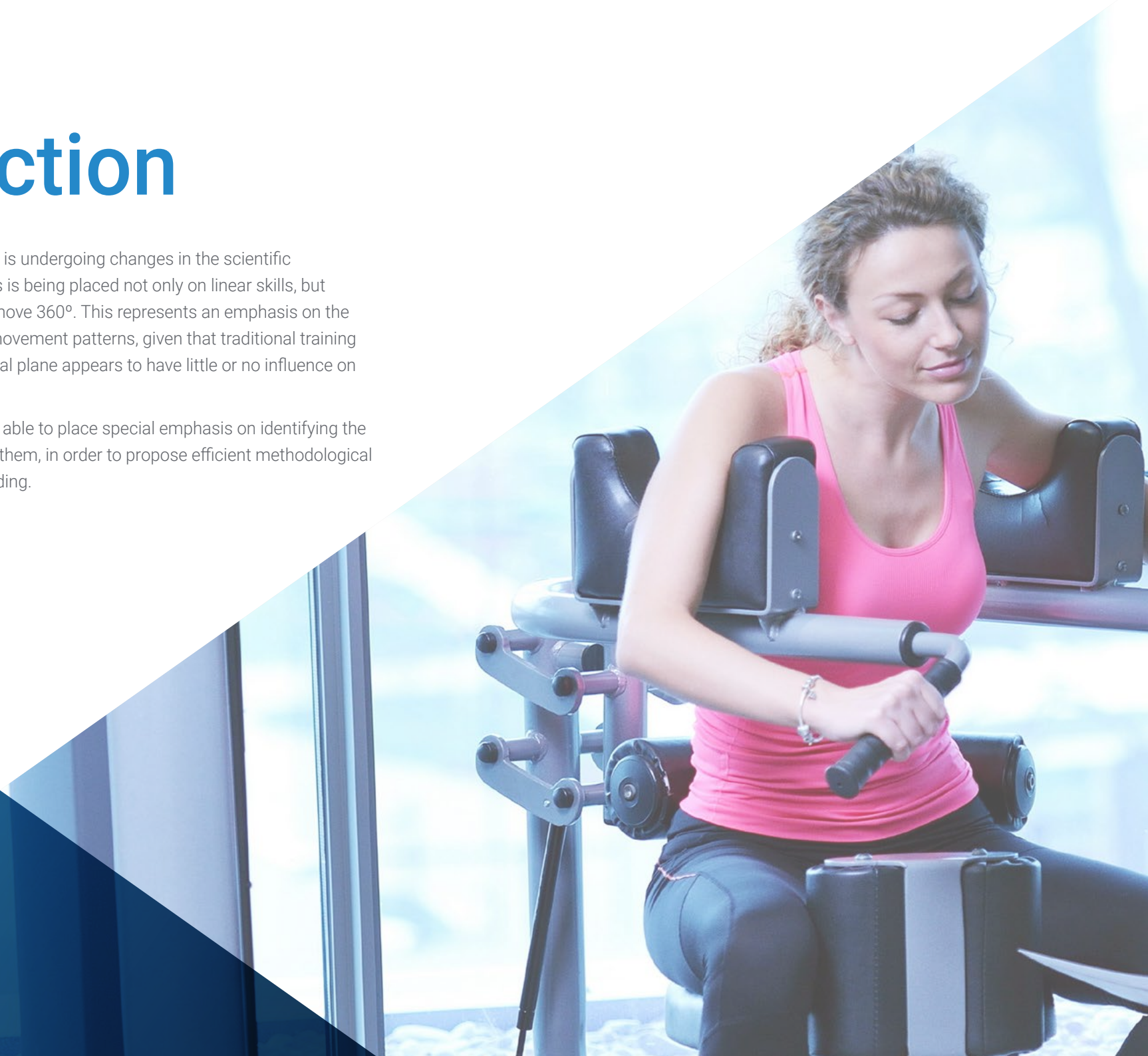
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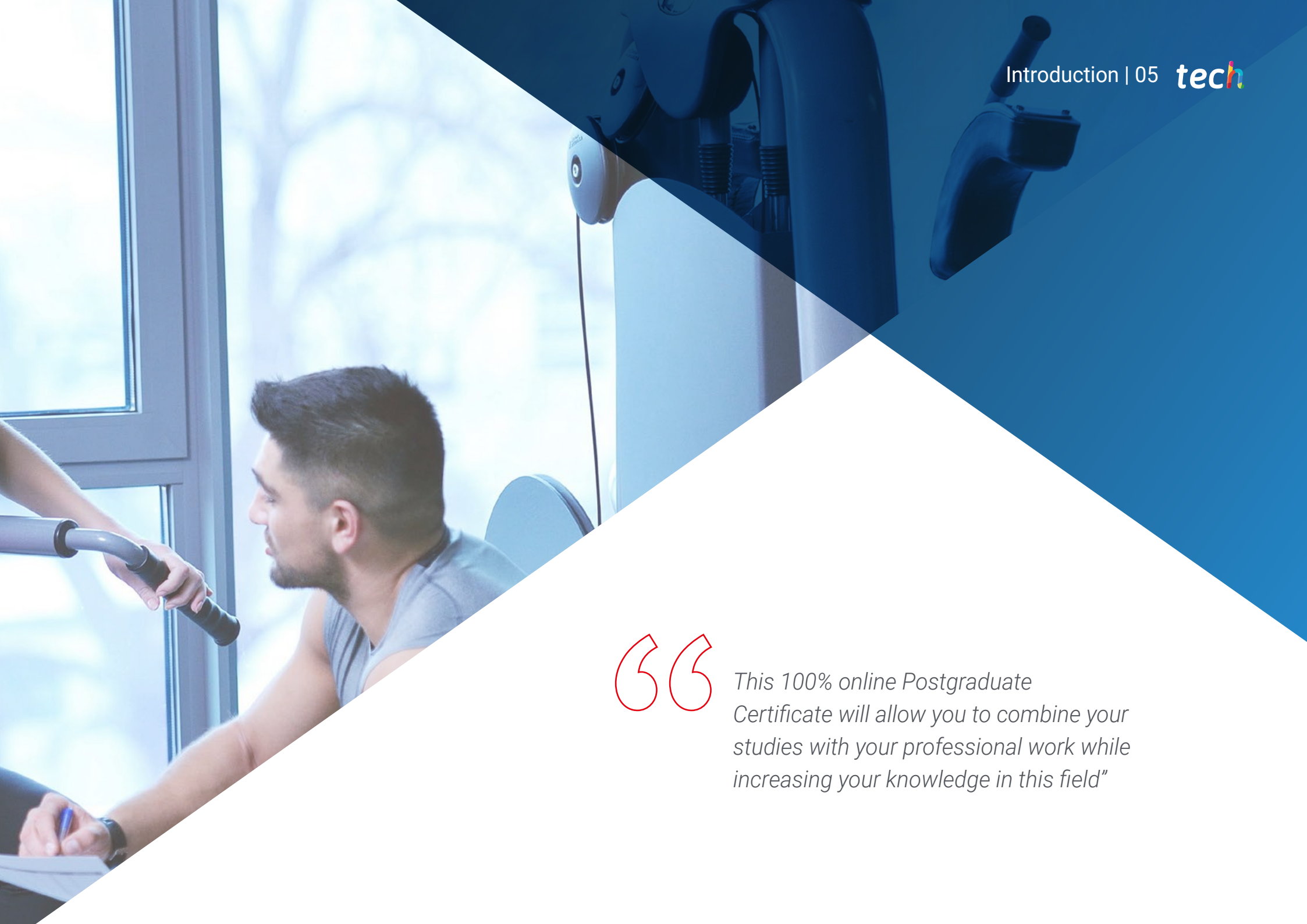
01

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.





“

This 100% online Postgraduate Certificate will allow you to combine your studies with your professional work while increasing your knowledge in this field”

In recent years, strength training has burst into the scientific community with great impetus, covering multiple contexts ranging from sports performance in time and brand sports, to situational sports through 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 Postgraduate Certificate, 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.

Students of this Postgraduate Certificate will have a differentiating qualification with respect to their professional colleagues, being able to perform in all areas of sport as a specialist in Strength Training.

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

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

Therefore, TECH Global University has set out to create content of the highest teaching and educational quality that will turn students into successful professionals, following the highest quality standards in teaching at an international level. Therefore, this Postgraduate PROGRAM offers you a wide range of content that will help you to 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 **Postgraduate Certificate in Strength Training to Improve Movement Skills** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ◆ The development of numerous case studies presented by specialists in personal training
- ◆ The graphic, schematic and practical contents of the course are designed to provide all the essential information required for professional practice
- ◆ 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 this Postgraduate Certificate 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 program’s teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading 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, the student will be assisted by an innovative interactive video system created by renowned experts.

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

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



02 Objectives

The main objective of this program is the development of theoretical and practical learning, so that the sports science professional can master in a practical and rigorous way the Strength Training for the Improvement of Movement Skills.





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Our goal is to achieve academic excellence and help you achieve professional success. Don't hesitate any longer and join us”



General Objectives

- ◆ Delve into the knowledge based on the most current scientific evidence with full applicability in the practical field regarding Strength training
- ◆ Master all the most advanced methods of strength training
- ◆ Apply with certainty the most current educational 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 and biochemistry
- ◆ Deepen in the principles governing 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 skills development process
- ◆ Linking and relating field and gym work to enhance the skills

“

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

03

Course Management

The teaching staff, experts in Personal Training, enjoys considerable prestige in the profession and are professionals with years of teaching experience who have come together to help Students to give a boost to their career. To this end, they have developed this program with recent updates in the field that will allow you to train and enhance your skills in this sector.





“

Learn from the best professionals and become a successful professional yourself”

Management



Dr. Rubina, Dardo

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



Professors

D. Gizzarelli, Matías Bruno

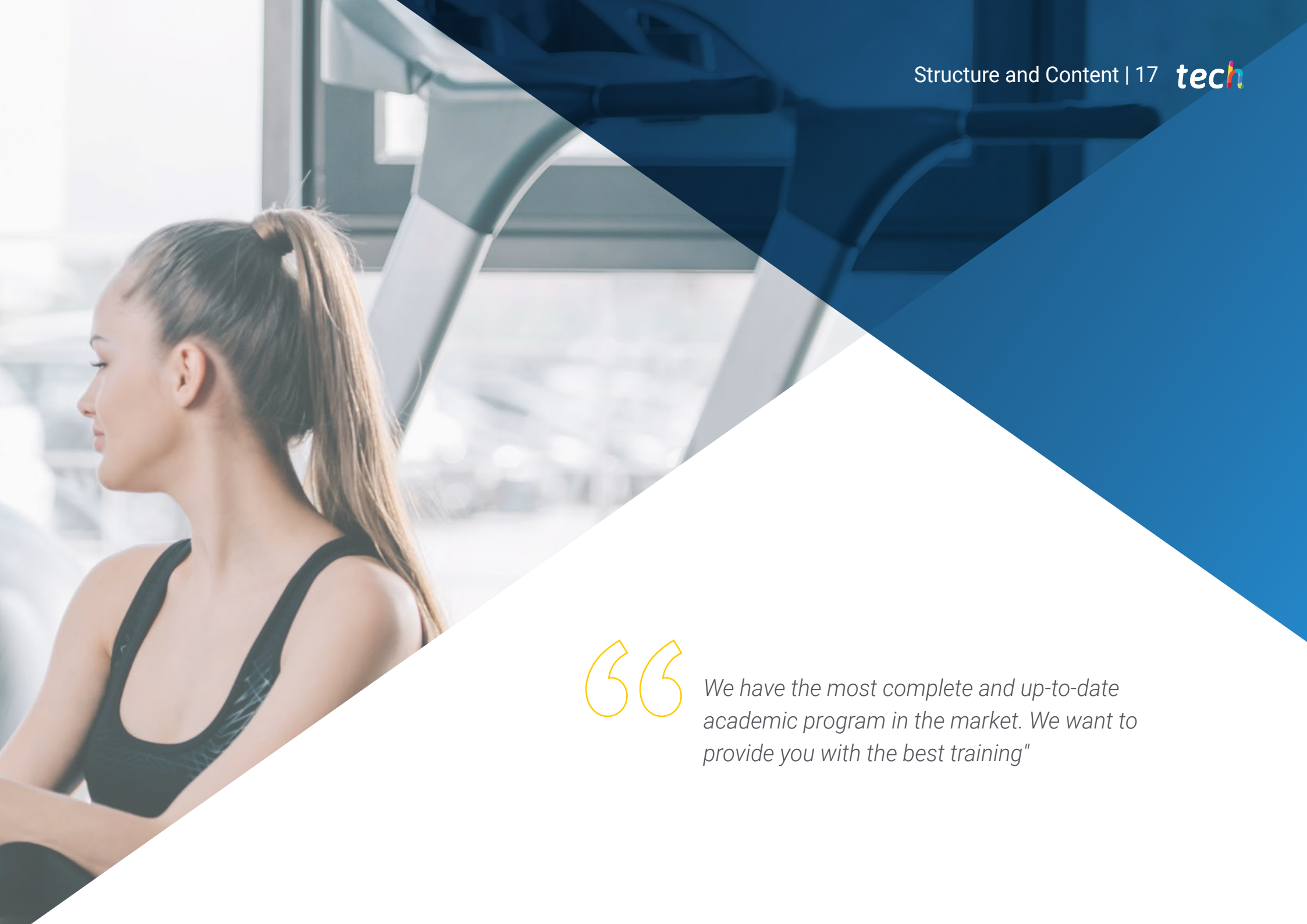
- ◆ Specialized EXOS performance coach for basketball players
- ◆ Degree in Physical Education
- ◆ Postgraduate Diploma in Applied Neurosciences
- ◆ Author of the Book Basketball Training: Physical Preparation

04

Structure and Content

The structure of the syllabus has been designed by a team of professionals with knowledge of the implications of training in daily practice, who are aware of the relevance of the up-to-date quality training in the field of personal training, and are committed to quality teaching using new educational technologies.





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We have the most complete and up-to-date academic program in the market. We want to provide you with the best training”

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 Strength 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
 - 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



A unique, key, and decisive educational experience to boost your professional development”

05 Methodology

This academic program offers students a different way of learning. Our methodology follows a cyclical learning process: **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.





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

Case Study to contextualize all content

Our program offers a revolutionary method of skills and knowledge development. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.



At TECH, you will experience a way of learning that is shaking the foundations of traditional universities around the world"



You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.



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

A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and professional reality is taken into account.

“ *Our program prepares you to face new challenges in uncertain environments and achieve success in your career”*

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

What should a professional do in a given situation? This is the question we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

In 2019, we obtained the best learning results of all online universities in the world.

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

Our university is the only one in the world authorized to employ this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



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

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

From the latest scientific evidence in the field of neuro science, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

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



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



Study Material

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

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



Classes

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

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



Practising Skills and Abilities

They will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



Additional Reading

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





Case Studies

Students will complete a selection of the best case studies chosen specifically for this situation. Cases that are presented, analyzed, and supervised by the best specialists in the world.



Interactive Summaries

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

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



Testing & Retesting

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



06 Certificate

This Postgraduate Certificate in Strength Training for the Improvement of Movement Skills guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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

This private qualification will allow you to obtain in **Postgraduate Certificate in Strength Training for the Improvement of Movement Skills** 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.

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

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**

Endorsed by the **NBA**



*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.



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