

# Postgraduate Certificate Strength Training Methodology

Endorsed by the NBA





## Postgraduate Certificate

### Strength Training Methodology

Course Modality: **Online**

Duration: **6 weeks**

Certificate: **TECH Technological University**

Official N° of hours: **150 h.**

Website: [www.techtute.com/us/sports-science/postgraduate-certificate/strenght-training-methodology](http://www.techtute.com/us/sports-science/postgraduate-certificate/strenght-training-methodology)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Certificate

---

*p. 28*

# 01

# Introduction

Over the years there has been an enormous variation of very different conceptions in the contribution of pedagogical structures for the approach to the strength training process, which is defined and understood by the term "methods" Each one of them seasoned with the bias of its original paradigm. For all this and many other aspects, it becomes inevitable to raise the need to analyze many of these precepts regarding strength training, in order to develop a view as accurate as critical and that allows to be transferable to the field of professional performance and real scenario of the day to day.



“

*The Postgraduate Certificate allows training in simulated environments, which provide immersive learning programmed to train for real situations”*

The current training methodology has long been influenced by well-defined and heterogeneous areas such as weightlifting, powerlifting, sports training, bodybuilding and physiotherapy or motor rehabilitation.

This Postgraduate Certificate 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 Postgraduate Certificate in Strength Training Methodology 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, 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 course 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 **Postgraduate Certificate in Strength Training Methodology** 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 work
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



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

“

*This Postgraduate Certificate 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 obtain a qualification 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 program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn 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 an innovative interactive video system created by recognized experts in Strength Training Methodology and with great experience.

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

*Increase your knowledge of Strength Training Methodology with this high-level program.*



# 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 Methodology.







“

*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 of 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, 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 in-depth knowledge of the different methodological proposals of strength training and their applicability to the field of practice
- ◆ Select the most appropriate methods for specific needs
- ◆ Recognize and safely apply the different methods proposed in the literature



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

03

# Course Management

Our teaching team, experts in Personal Training, all have extensive prestige in the profession and are professionals with years of teaching experience who have come together to help you give a boost to your profession. To this end, they have developed this Postgraduate Certificate with the latest developments in the field that will allow you to specialize and increase your skills in this sector.





“

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

## Management



### Mr. 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
- Specialist in Strength Training for the Prevention of Injuries, Functional and Physical-Sports Rehabilitation
- Specialist in Strength Training Applied to Physical and Sports Performance
- Specialist in Applied Biomechanics and Functional Assessment
- Certification in Weight Management and Physical Performance Technologies
- Postgraduate course in Physical Activity in Populations with Pathologies
- Postgraduate Degree in Injury Prevention and Rehabilitation
- Certification in Functional Assessment and Corrective Exercise
- Certification in Functional Neurology
- Diploma in Advanced Studies (DEA) University of Castilla la Mancha
- PhD Candidate in ARD



## Professors

### Mr. Masse, Juan

- ◆ Degree in Physical Education
- ◆ Director of the Athlos study group
- ◆ Physical trainer for several professional soccer teams in South America, experienced teacher

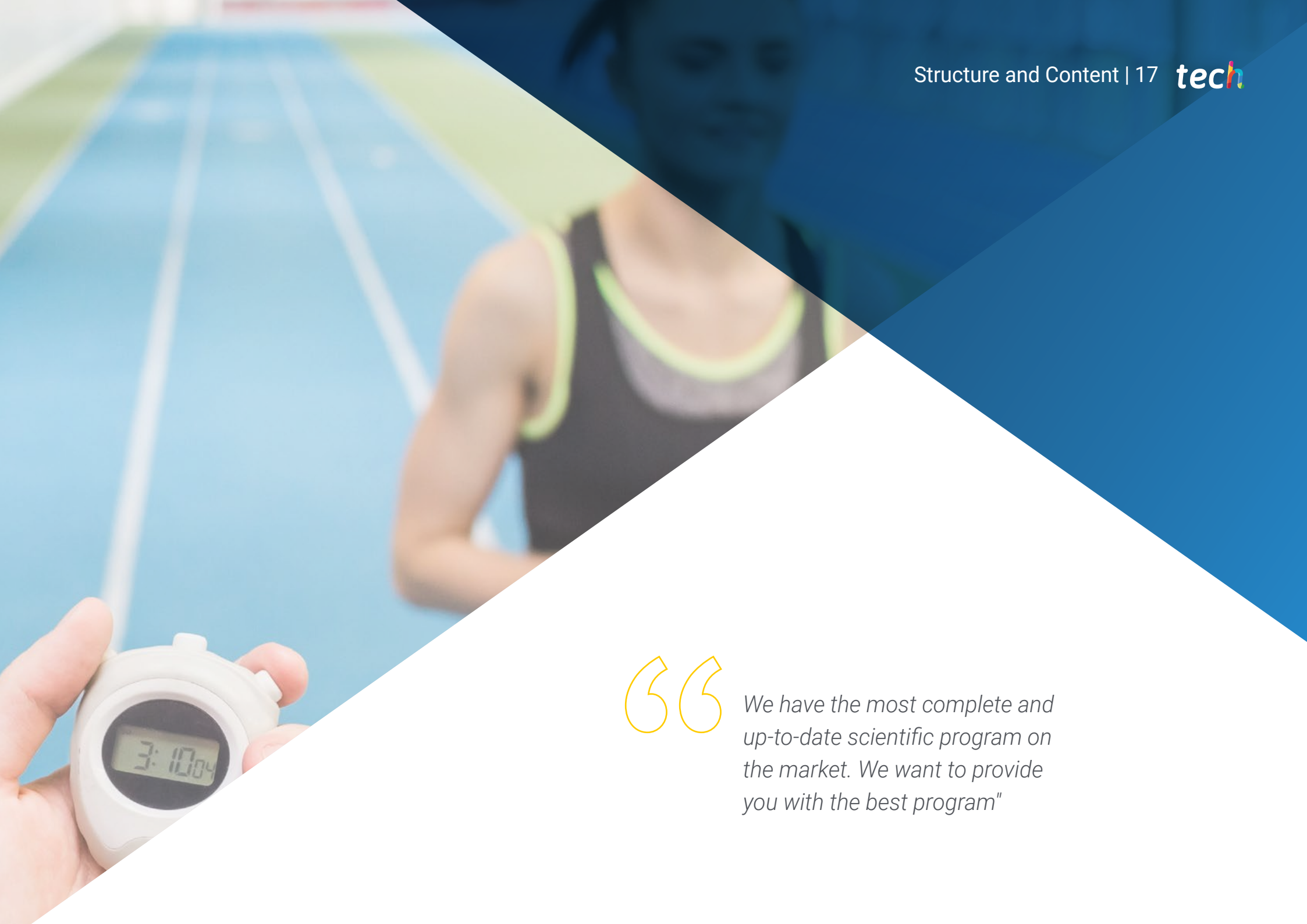
# 04

# Structure and Content

The content structure has been designed by a team of professionals knowledgeable about the implications of training in daily practice, aware of the relevance of the current specialization in the field of personal training; and committed to quality teaching through new educational technologies.







“

*We have the most complete and up-to-date scientific program on the market. We want to provide you with the best program"*

## Module 1. Strength Training Methodology

- 1.1. Training Methods Derived from Powerlifting
  - 1.1.1. Functional Isometrics
  - 1.1.2. Forced Repetitions
  - 1.1.3. Eccentrics in Competition Exercises
  - 1.1.4. Main Characteristics of the Most-Used Methods in Powerlifting
- 1.2. Training Methods from Weightlifting
  - 1.2.1. Bulgarian Method
  - 1.2.2. Russian Method
  - 1.2.3. Origin of the Popular Methodologies in the School of Olympic Lifting
  - 1.2.4. Differences Between the Bulgarian and Russian Concepts
- 1.3. Zatsiorsky's Methods
  - 1.3.1. Maximum Effort Method (ME)
  - 1.3.2. Repeated Effort Method (RE)
  - 1.3.3. Dynamic Effort Method (DE)
  - 1.3.4. Load Components and Main Characteristics of Zatsiorsky's Methods
  - 1.3.5. Interpretation and Differences in Mechanical Variables (Force, Power and Speed) between ME, RE and DE and their Internal Response
- 1.4. Pyramidal Methods
  - 1.4.1. Classic Ascending
  - 1.4.2. Classic Descending
  - 1.4.3. Double
  - 1.4.4. Skewed Pyramid
  - 1.4.5. Truncated Pyramid
  - 1.4.6. Flat or Stable Pyramid
  - 1.4.7. Load Components (Volume and Intensity) of the Different Proposals of the Pyramidal Method



- 1.5. Training Methods Derived from Bodybuilding
  - 1.5.1. Superseries
  - 1.5.2. Triseries
  - 1.5.3. Compound Series
  - 1.5.4. Giant Series
  - 1.5.5. Congestive Series
  - 1.5.6. Wave-Like Loading
  - 1.5.7. ACT (Anti-Catabolic Training)
  - 1.5.8. Bulk
  - 1.5.9. Cluster
  - 1.5.10. 10x10 Satziorsky
  - 1.5.11. Heavy Duty
  - 1.5.12. Ladder
  - 1.5.13. Characteristics and Load Components of the Different Methodological Proposals of Training Systems Coming From Bodybuilding
- 1.6. Methods from Sports Training
  - 1.6.1. Plyometry
  - 1.6.2. Circuit Training
  - 1.6.3. Cluster Training
  - 1.6.4. Contrast
  - 1.6.5. Main Characteristics of Strength Training Methods Derived from Sports Training
- 1.7. Methods From Non-Conventional and CROSSFIT Training
  - 1.7.1. EMOM (Every Minute on the Minute)
  - 1.7.2. Tabata
  - 1.7.3. AMRAP (As Many Reps as Possible)
  - 1.7.4. For Time
  - 1.7.5. Main Characteristics of Strength Training Methods Derived from Crossfit Training
- 1.8. Speed-Based Training (VBT)
  - 1.8.1. Theoretical Foundation
  - 1.8.2. Practical Considerations
  - 1.8.3. Own Data
- 1.9. The Isometric Method
  - 1.9.1. Concepts and Physiological Fundamentals of Isometric Stresses
  - 1.9.2. Yuri Verkhoshanski Proposal
- 1.10. Methodology of Repeat Power Ability (RPA) From Alex Natera
  - 1.10.1. Theoretical Foundation
  - 1.10.2. Practical Applications
  - 1.10.3. Published Data vs Own Data
- 1.11. Training Methodology Proposed by Fran Bosch
  - 1.11.1. Theoretical Foundation
  - 1.11.2. Practical Applications
  - 1.11.3. Published Data vs Own Data
- 1.12. Cal Dietz and Matt Van Dyke's Three-Phase Methodology
  - 1.12.1. Theoretical Foundation
  - 1.12.2. Practical Applications
- 1.13. New Trends in Quasi-Isometric Eccentric Training
  - 1.13.1. Neurophysiological Arguments and Analysis of Mechanical Responses Using Position Transducers and Force Platforms for Each Proposed Strength Training



*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 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"*

### Case Study to contextualize all content

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

“

*At TECH, you will experience a learning methodology 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 train 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 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.

*Relearning 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 for success.*

From the latest scientific evidence in the field of neuroscience, 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 neurocognitive 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 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.



### 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 area. 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 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.



06

# Certificate

This Postgraduate Certificate in Strength Training Methodology guarantees you, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Technological University.





“

*Successfully complete this program  
and receive your university degree  
without travel or laborious paperwork”*

This **Postgraduate Certificate in Strength Training Methodology** 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\*.

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

Title: **Postgraduate Certificate in Strength Training Methodology**

Official N° of hours: **150 h.**

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.

future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
development languages  
virtual classroom

**tech** technological  
university

**Postgraduate Certificate**

Strength Training

Methodology

Course Modality: Online

Duration: 6 weeks

Certificate: TECH Technological University

Official N° of hours: 150 h.

# Postgraduate Certificate

## Strength Training Methodology

Endorsed by the NBA

