



# Postgraduate Certificate

Planning Applied to High Performance in Sports

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/in/sports-science/postgraduate-certificate/plannig-applied-high-performance-sports

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# tech 06 | Introduction

In this Postgraduate Certificate you will find a detailed training of key aspects in sports performance, treated with a unique didactic and depth in the current academic offer. Each subject will be taught by true specialists in the field, which guarantees the highest level of knowledge in the subject.

This Postgraduate Certificate in Planning Applied to High Performance Sports will provide the student with theoretical contents of the highest quality and depth. One of the characteristics that differentiate this Postgraduate Certificate from others is the relationship between the different topics of the program at a theoretical level but, above all, at a practical level, making the student obtain real examples of teams and athletes of the highest sports performance worldwide, as well as from the professional world of sports, resulting in the student being able to build knowledge in the most complete way.

Another strong point of this Postgraduate Certificate in Planning Applied to High Sports Performance is the training of the student in the use of new technologies applied to Sports Performance. The student will not only learn about new technology in the field of performance, but will learn how to use it and, more importantly, how to interpret the data provided by each device to make better decisions regarding training programming.

The teaching team of this Postgraduate Certificate in Planning Applied to High Performance Sports has made a careful selection of each of the topics of this specialization to offer the student an opportunity to study 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 course university with a rich content that will help you reach the elite of High Performance Sports. In addition, as it is an university 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 Planning Applied to High Performance Sports** contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- The study of numerous case studies presented by specialists in high-performance sports 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 high level Postgraduate Progression and improve your skills in 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 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 specialization 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 training programmed to train in real situations.

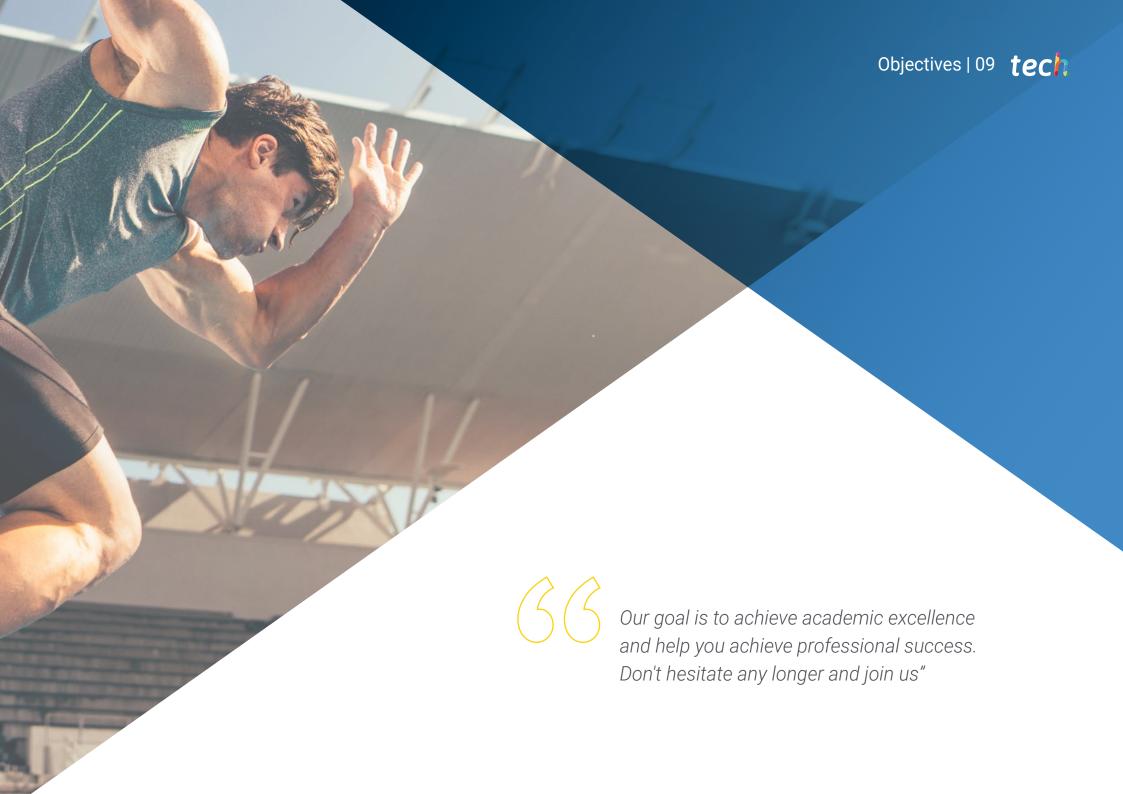
This program is designed around Problem Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned, and experienced experts in High Performance in Sports with extensive experience.

This Postgraduate Certificate allows training in simulated environments, which provide immersive learning programmed to train in real situations.

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





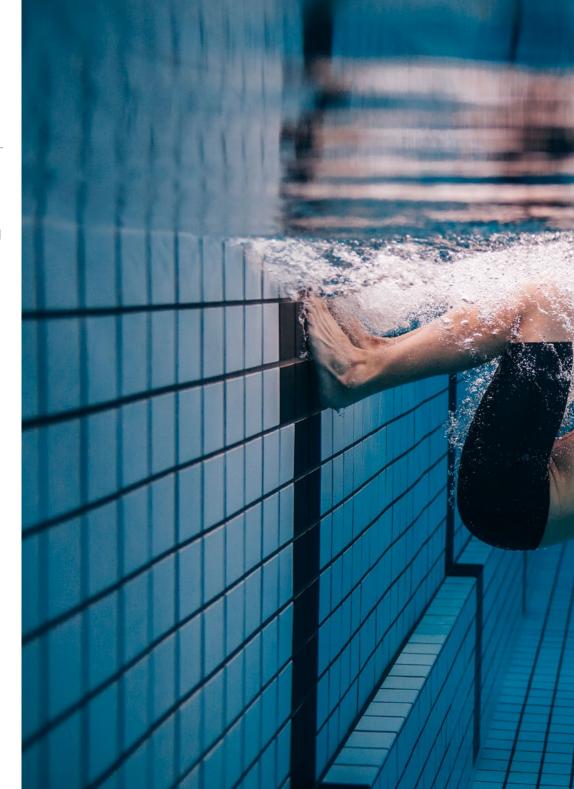


# tech 10 | Objectives



## **General Objectives**

- Master and apply with certainty the most current training methods to improve sports performance
- To effectively master statistics and thus be able to make a correct use of the data obtained from the athlete, as well as to initiate research processes
- Acquire knowledge based on the most current scientific evidence with full applicability in the practical field
- To master all the most advanced methods in Applied Plan for High Performance Sports
- Master the principles governing Exercise Physiology, as well as Biochemistry
- Master the principles governing Biomechanics applied directly to Sports Performance
- Master the principles governing Nutrition applied to sports performance
- Successfully integrate all the knowledge acquired in the different modules in real practice





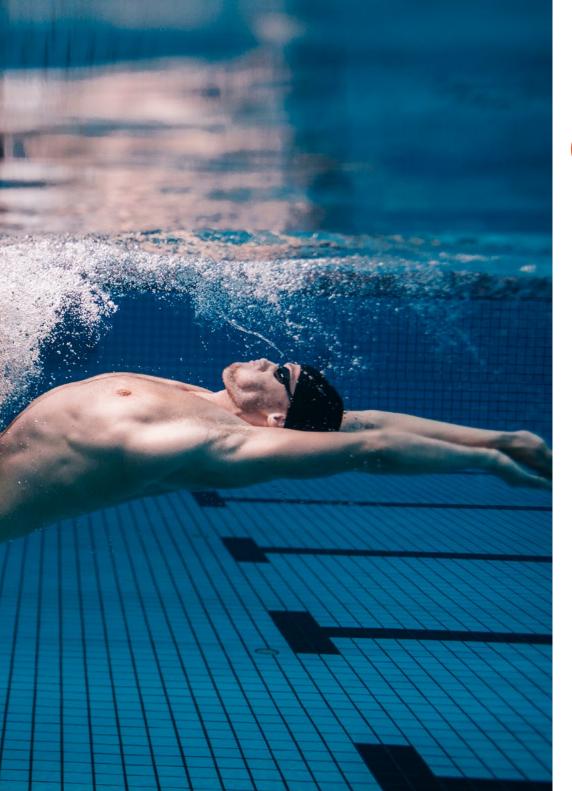


# **Specific Objectives**

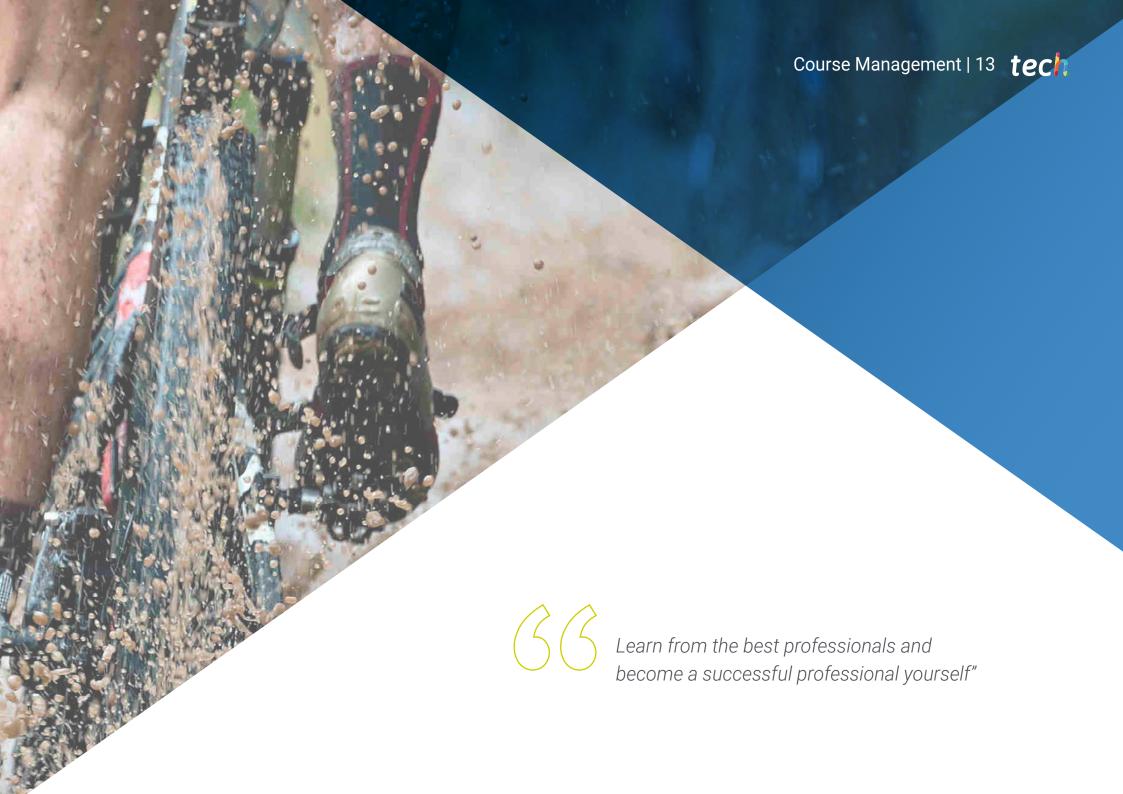
- Understand the internal logic of planning, such as its proposed core models
- Apply the Dose-Response concept in training
- Clearly differentiate the impact of programming with planning and its dependencies
- Acquire the ability to design different planning models according to the work reality
- Apply the concepts learned in an annual and/or multi-year planning design



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







#### **International Guest Director**

Tyler Friedrich, Ph.D., is a leading personality in the international field of Sports Performance and Applied Sports Science. With a strong academic background, he has demonstrated an exceptional commitment to excellence and innovation, and has contributed to the success of numerous elite athletes internationally.

Throughout his career, Tyler Friedrich has deployed his expertise in a wide range of sporting disciplines, from football to swimming, volleyball to field hockey. His work in performance data analysis, especially through the Catapult athlete GPS system, and his integration of sports technology into performance programs, has established him as a leader in athletic performance optimization.

As Director of Sports Performance and Applied Sports Science, Dr. Friedrich has led strength and conditioning training, as well as the implementation of specific programs for several Olympic sports, including volleyball, rowing and gymnastics. Here, he has been responsible for integrating equipment services, sports performance in soccer and sports performance in Olympic sports. In addition, incorporating DAPER sports nutrition within an athlete performance team.

Also certified by USA Weightlifting and the National Strength and Conditioning Association, he is recognized for his ability to combine theoretical and practical knowledge in the development of high performance athletes. In this way, Dr. Tyler Friedrich has left an indelible mark on the world of Sports Performance, being an outstanding leader and driver of innovation in his field.



# Dr. Friedrich, Tyler

- Director of Sports Performance and Applied Sports Science at Stanford University
- Sports Performance Specialist
- Associate Director of Athletics and Applied Performance at Stanford University
- Director of Olympic Sport Performance at Stanford University
- Sports Performance Coach at Stanford University
- Ph.D. in Philosophy, Health and Human Performance from Concordia University Chicago
- Master of Science in Exercise Science from the University of Dayton
- Bachelor of Science, Exercise Physiology from the University of Dayton



# tech 16 | Course Management

### 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
- Certification in Weight Management and Physical Performance Technologies
- Postgraduate course in Physical Activity in Populations with Pathologies
- Diploma in Advanced Studies (DEA) University of Castilla la Mancha
- PhD Candidate in ARD

#### **Professors**

#### Mr. Masse, Juan

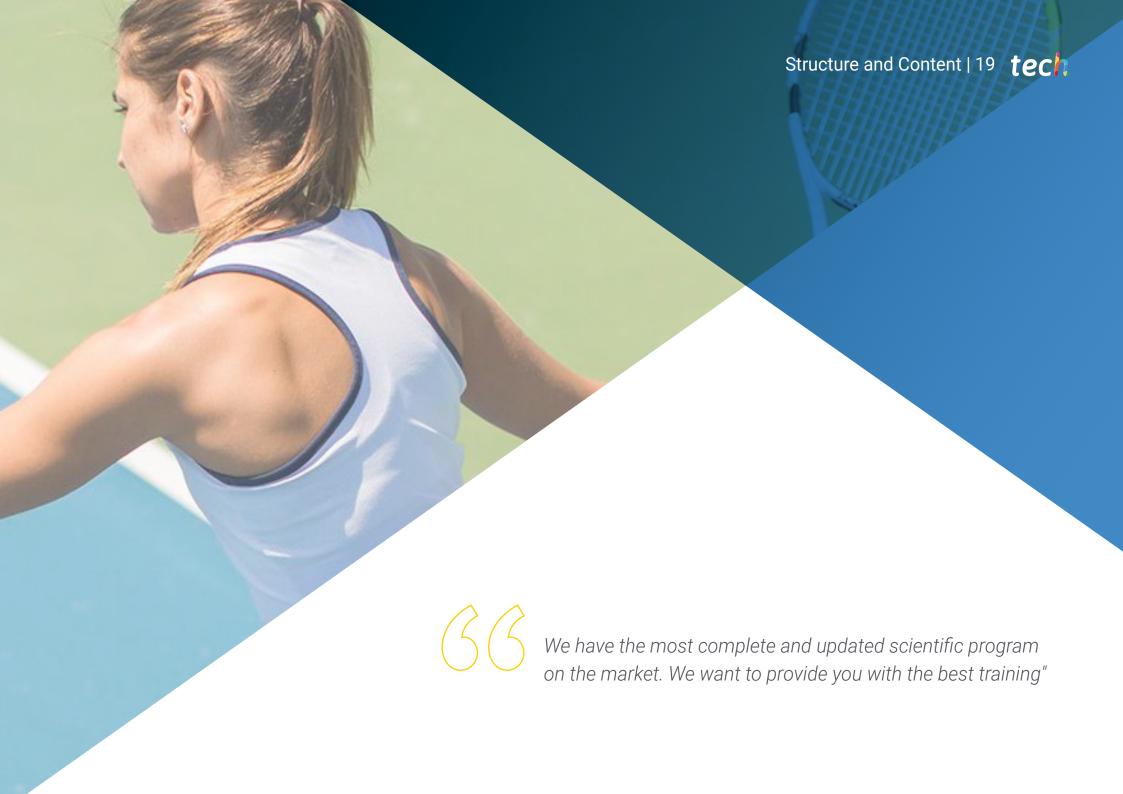
- Director of the Athlos study group
- Physical trainer for several professional soccer teams in South America, experienced teacher





Our teaching team will provide you with all their knowledge so that you are up to date with the latest information on the subject"





## tech 20 | Structure and Content

#### Module 1. Planning Applied to High Performance in Sports

- 1.1. Basic Fundamentals
  - 1.1.1. Adaptation Criteria
    - 1.1.1.1. General Adaptation Syndrome
    - 1.1.1.2. Current Performance Capability, Training Requirement
  - 1.1.2. Fatigue, Performance, Conditioning as Tools
  - 1.1.3. Dose-Response Concept and its Application
- 1.2. Basic Concepts and Applications
  - 1.2.1. Concept and Application of the Plan
  - 1.2.2. Concept and Application of Peridization
  - 1.2.3. Concept and Application of Programming
  - 1.2.4. Concept and Application of Load Control
- 1.3. Conceptual Development of Planning and its Different Models
  - 1.3.1. First Historical Planning Records
  - 1.3.2. First Proposals, Analyzing the Bases
  - 1.3.3. Classic Models
    - 1.3.3.1. Traditional
    - 1.3.3.2. Pendulum
    - 1.3.3.3. High Loads
- 1.4. Models Focused on Individuality and/or Load Concentration
  - 1.4.1. Blocks
  - 1.4.2. Integrated Macrocycle
  - 1.4.3. Integrated Model
  - 1.4.4. ATR
  - 1.4.5. Keeping in Shape
  - 1.4.6. By Objectives
  - 1.4.7. Structural Bells
  - 1.4.8. Self-Regulation (APRE)
- 1.5. Models Focused on Specificity and/or Movement Capacity
  - 1.5.1. Cognitive (or Structured Microcycle)
  - 1.5.2. Tactical Periodization
  - 1.5.3. Conditional Development by Movement Capacity





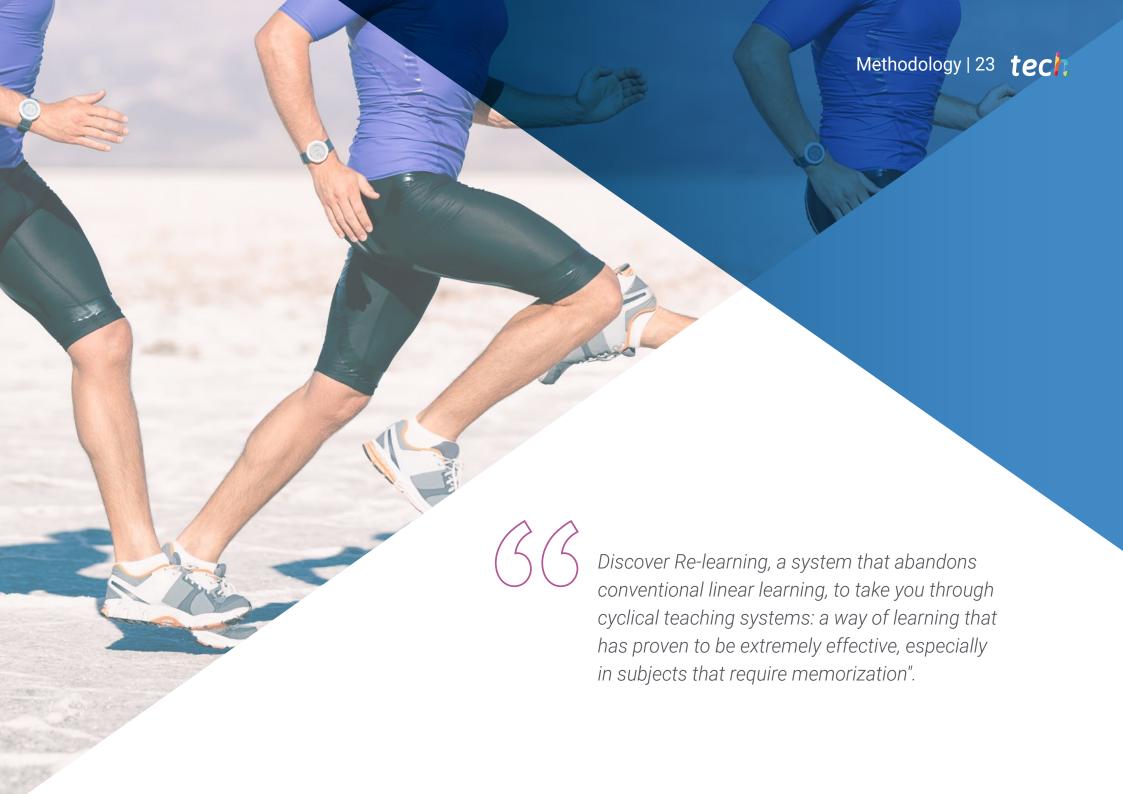
## Structure and Content | 21 tech

- 1.6. Criteria for Correct Programming and Periodization
  - 1.6.1. Criteria for Programming and Periodization in Strength Training
  - 1.6.2. Criteria for Programming and Periodization in Endurance Training
  - 1.6.3. Criteria for Programming and Periodization in Speed Training
  - 1.6.4. "Interference" Criteria in Scheduling and Periodization in Concurrent Training
- 1.7. Planning Through Load Control With a GNSS Device (GPS)
  - 1.7.1. Basis of Session Saving for Appropriate Control1.7.1.1. Calculation of the Average Group Session for a Correct Load Analysis1.7.1.2. Common Errors in Saving and Their Impact on Plannning
  - 1.7.2. Relativization of the Load, a Function of Competence
  - 1.7.3. Load Control by Volume or Density, Range and Limitations
- 1.8. Integrating Thematic Unit 1 (Practical Application)
  - 1.8.1. Construction of a Real Model of Short-Term Planning
    1.8.1.1. Selecting and Applying the Periodization Model
    1.8.1.2. Designing the Corresponding Planning
  - Integrating Thematic Unit 2 (Practical Application)
  - 1.9.1. Producing a Pluriannual Plannification
  - 1.9.2. Producing an Annual Plannification



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





# tech 24 | Methodology

#### At TECH we use the Case Method

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."



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 intensive Sports Science program at TECH Technological University 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 provide our students with material from the best university 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.

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.



### Re-learning Methodology

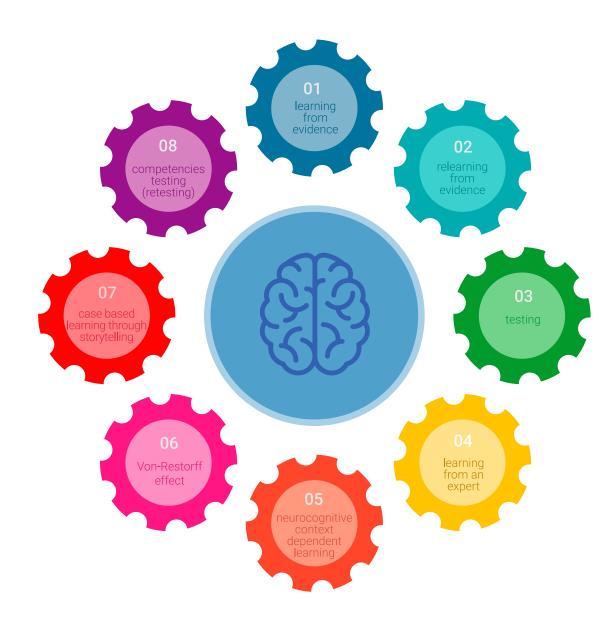
Our university is the first in the world to combine Harvard University *case studies* with a 100%-online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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

In 2019, we obtained the best learning results of all 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 university 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.



### Methodology | 27 tech

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.

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 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**

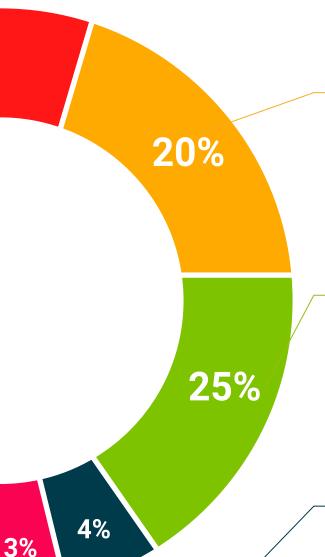
They will carry out activities to develop specific competencies and skills in each thematic area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization we live in.



#### **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**

They will complete a selection of the best case studies in the field used at Harvard. Cases that are presented, analyzed, and supervised by the best senior management specialists in Latin America.



#### **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 multimedia content presentation training Exclusive system was awarded by Microsoft as a "European Success Story".

#### **Testing & Retesting**

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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 your goals.







This **Postgraduate Certificate in Planning Applied to High Performance Sports** contains the most complete and up-to-date scientific program on the market.

After passing the evaluation, the student will receive by mail with acknowledgement of receipt the corresponding to a **Postgraduate Certificate** issued by **TECH Technological University** by tracked delivery\*.

The certificate issued by **TECH Technological University** will express the qualification obtained in the Postgraduate Certificate, and will meet the requirements commonly demanded by job exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Certificate in Planning Applied to High Sports Performance Official N° of Hours: **150 h.** 

#### Endorsed by the NBA





technological university



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