

Postgraduate Certificate Strength Training in Situational Sports

Endorsed by the NBA



tech global
university



Postgraduate Certificate Strength Training in Situational Sports

- » Modality: Online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/sports-science/postgraduate-certificate/strength-training-situational-sports

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01

Introduction

Being a very strong athlete in a given exercise does not necessarily mean being a strong athlete for the specific requirements of the game. From this perspective, developing movement ability as a basic pedagogical principle of training, which is the "transfer" to specific performance, is of great importance. Therefore, with this high-level program you will specialize in strength training in situational sports, under the guidance of professionals with extensive experience in the field.



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This 100% online program will allow you to balance your studies with your professional work, while increasing your knowledge in this field”

In recent years, strength training has gained great momentum in the scientific community, covering multiple contexts ranging from performance in individual, time-based sports to competitive team sports, covering the whole range of sports disciplines.

Historically, situational sports have not only incorporated methodologies from other disciplines, but have also transformed the objective of these disciplines into their own, considering the objective of developing strength on an exercise, when this is only a means to their own reality. Based on this reality, it is essential that situational sports build their own objectives for the development of strength and with it the creation of their methodology.

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

The teaching team of this Postgraduate Certificate in Strength Training in Situational Sports 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.

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 in Situational Sports** 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 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 certificate from the world's largest online university: TECH”

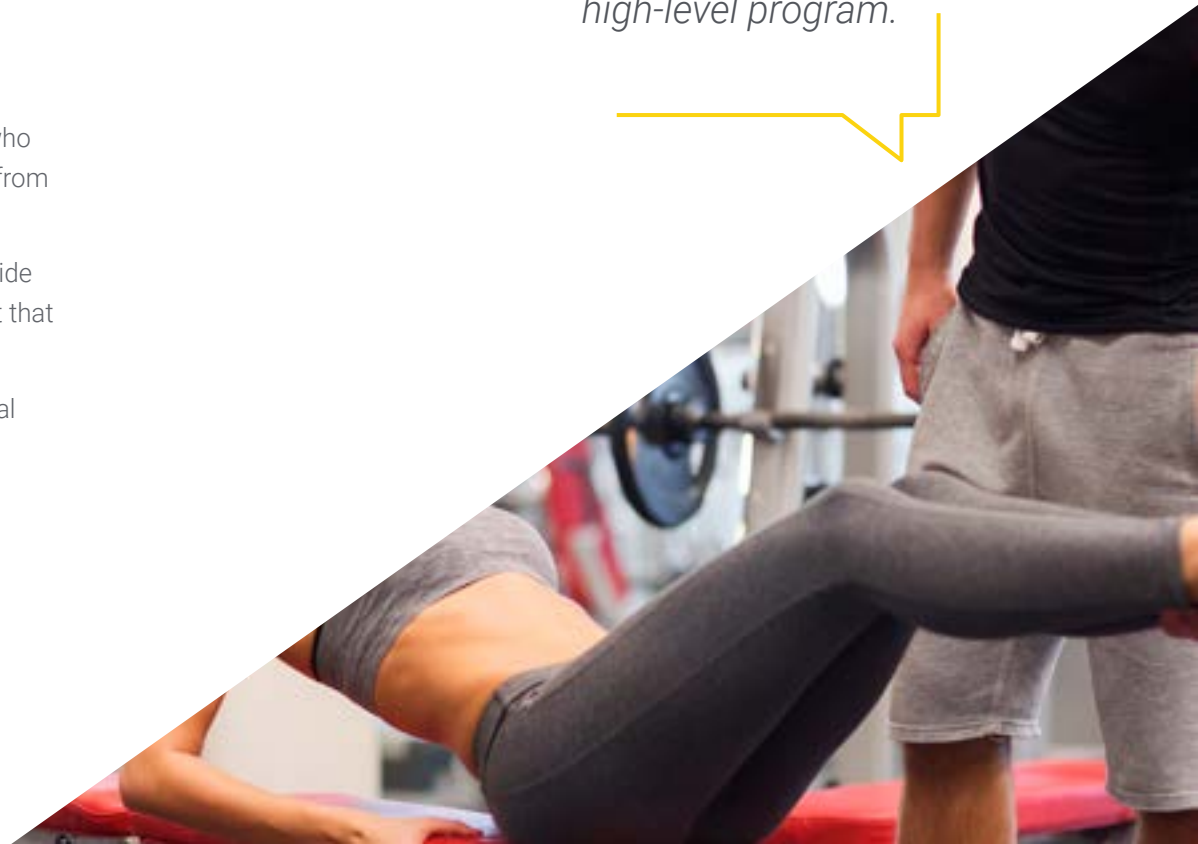
This program offers training in simulated environments, which provides an immersive learning experience designed to train for real-life situations.

Increase your knowledge in Strength Training in Situational Sports with this high-level program.

Its teaching staff includes professionals belonging to the field of sports sciences, who bring to this training the experience of their work, as well as recognized specialists from leading companies 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 course. For this, the professional will be assisted by an innovative interactive video system developed by recognized experts in Strength Training under the Complex Dynamic Systems Paradigm and with great experience.



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 in Situational Sports.



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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

- ♦ Deepen your knowledge based on the most current scientific evidence with full applicability in the practical field of strength training.
- ♦ Master knowledge of all the most advanced methods of strength training.
- ♦ Confidently apply the most current training methods for the improvement of sports performance in terms of strength.
- ♦ Efficiently master knowledge of strength training to improve performance in individual, time-based sports as well as competitive, team sports.
- ♦ Master the principles governing Exercise Physiology, as well as Biochemistry
- ♦ Deepen knowledge of the principles that govern the Theory of Complex Dynamic Systems and how this relates to strength training.
- ♦ Successfully integrate strength training to improve motor skills used in sport.
- ♦ Successfully master all the knowledge acquired in different modules and be able to apply it in practice.





Specific Objectives

- ◆ Gain an in-depth understanding of the logic of movement-based training design.
- ◆ Differentiate between means and methods for strength
- ◆ Detect priority movement patterns for applying force in the sport at hand
- ◆ Understand the functioning and application of technological means in the service of strength training

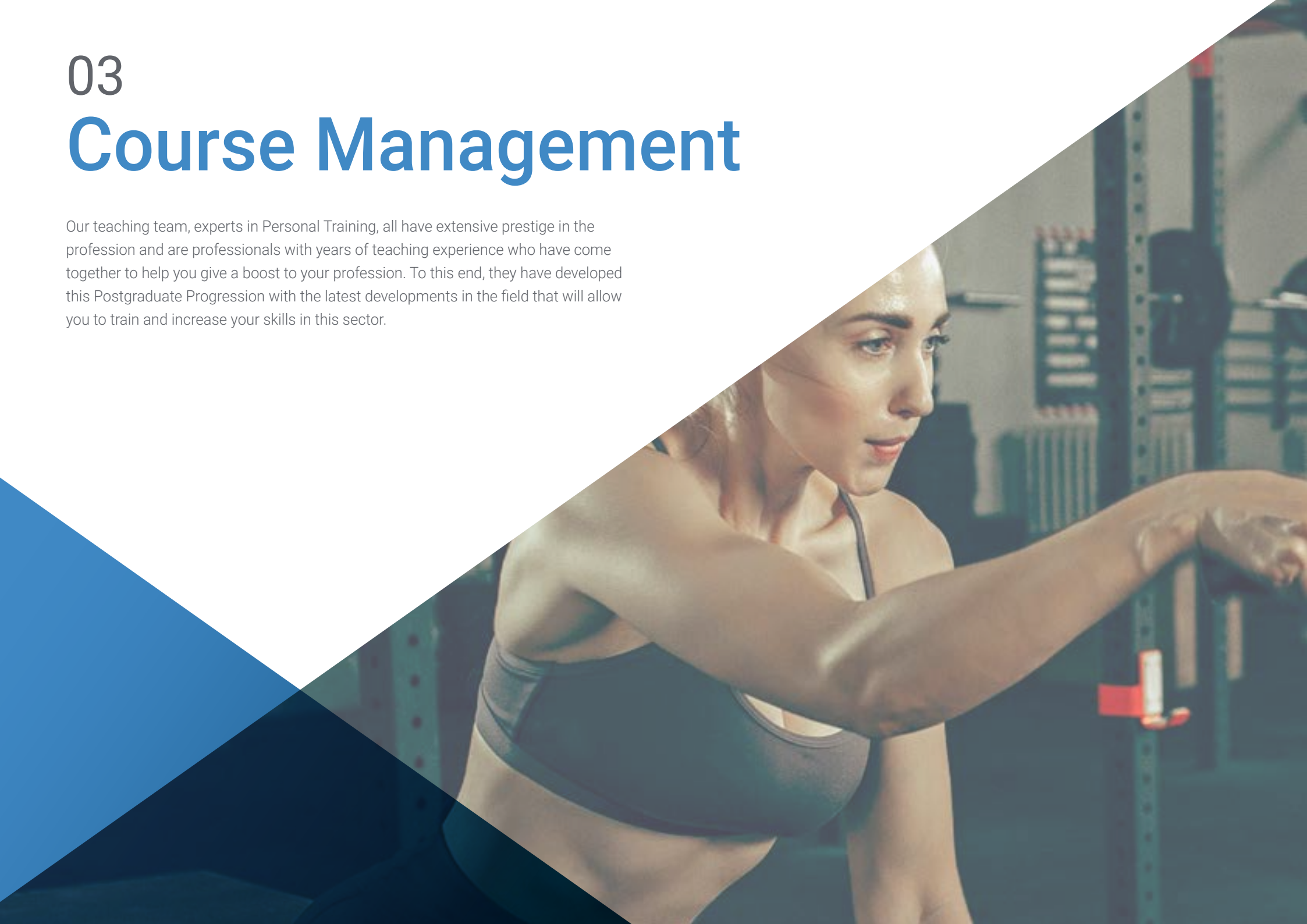
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The sports field requires prepared professionals and we give you the keys to position yourself among the professional elite"

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 Progression with the latest developments in the field that will allow you to train and increase your skills in this sector.



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*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

Graduate. Palarino, Matías

- ◆ Degree in Physical Activity and Sport
- ◆ Physical trainer in Professional Soccer
- ◆ Physical Trainer in Field Hockey
- ◆ Physical Trainer in Rugby
- ◆ Extensive teaching experience in physical training and weight load control courses.

Graduate. Tinti, Hugo

- ◆ Degree in Physical Activity and Sport
- ◆ Master's Degree in Big Data
- ◆ Specialist in Technologies and Injury Prevention in Soccer
- ◆ Specialist in Load Management

Graduate. Vaccarini, Adrián

- ◆ Degree in sports medicine
- ◆ Head of the Applied Sciences Department of the Peruvian soccer federation
- ◆ Physical Trainer of the Peruvian National Soccer Team (present in the last World Cup)

Graduate. Vilariño, Leandro

- ◆ Degree in Physical Activity and Sport
- ◆ Teacher at the Peruvian Federation of Soccer
- ◆ Teacher of the Postgraduate Diploma in Sports Medicine
- ◆ Physical Trainer in professional soccer in Argentinian and Bolivian Leagues



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 relevance of quality specialization in the field of personal training; and committed to quality teaching through new educational technologies.

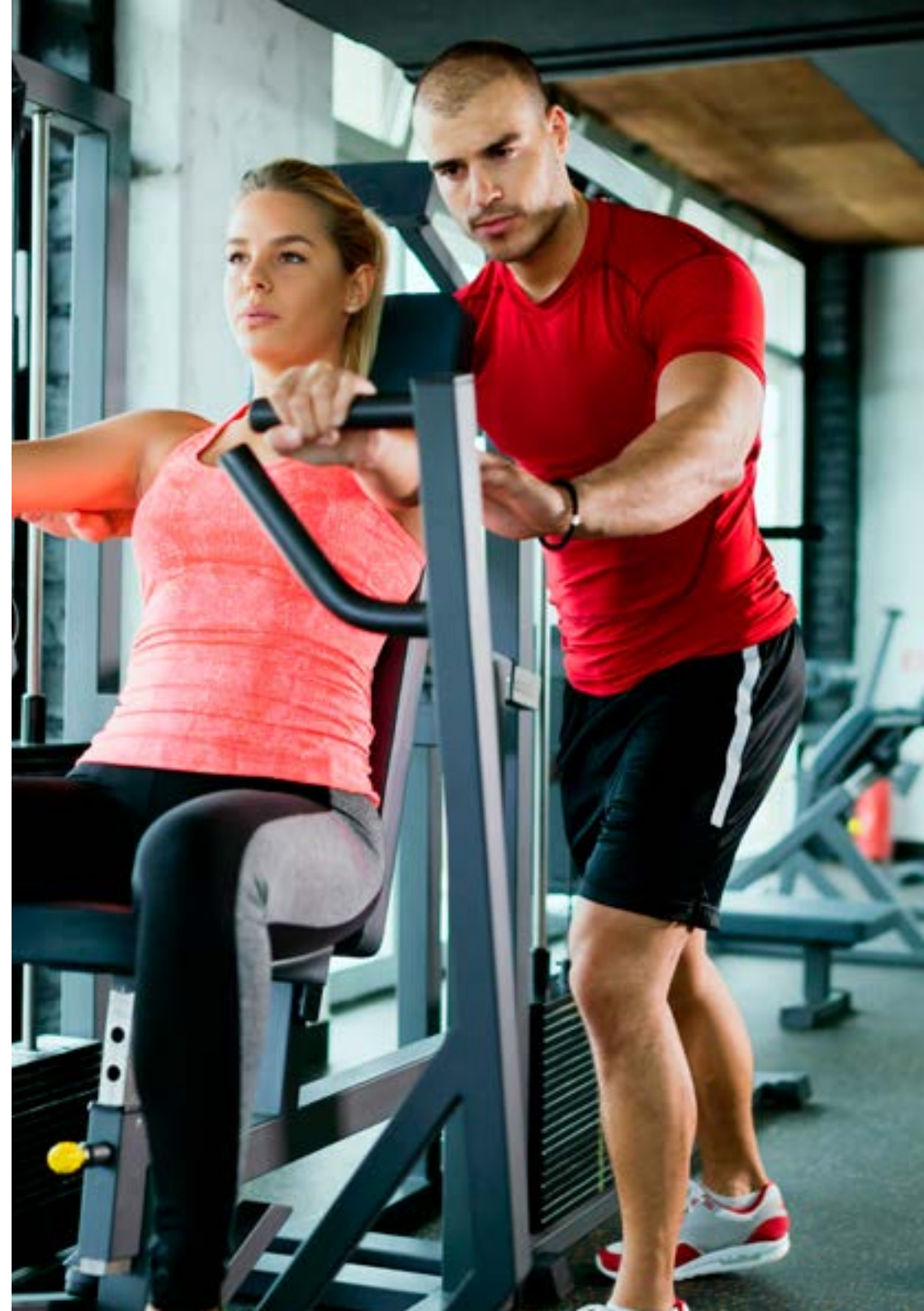


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We have the most complete and up-to-date scientific program on the market. We want to provide you with the best specialization"

Module 1. Strength Training in Situational Sports

- 1.1. Basic Fundamentals
 - 1.1.1. Functional and Structural Adaptations
 - 1.1.1.1. Functional Adaptations
 - 1.1.1.2. Load-Pause Ratio (Density) as a Criterion for Adaptation
 - 1.1.1.3. Strength as a Base Quality
 - 1.1.1.4. Mechanisms or Indicators for Structural Adjustments
 - 1.1.1.5. Utilization, Conceptualization of the Muscular Adaptations Provoked, as an Adaptive Mechanism of the Imposed Load. (Mechanical Stress, Metabolic Stress, Muscle Damage)
 - 1.1.2. Motor Unit Recruitment
 - 1.1.2.1. Recruitment Order, Central Nervous System Regulatory Mechanisms, Peripheral Adaptations, Central Adaptations Using Tension, Speed or Fatigue as a Tool for Neural Adaptation.
 - 1.1.2.2. Order of Recruitment and Fatigue During Maximum Effort
 - 1.1.2.3. Recruitment Order and Fatigue During Sub-Maximum Efforts
 - 1.1.2.4. Fibrillar Recovery
- 1.2. Specific Fundamentals
 - 1.2.1. Movement as a Starting Point
 - 1.2.2. Quality of Movement as a General Objective for Motor Control, Motor Pattern and Motor Programming
 - 1.2.3. Priority Horizontal Movements
 - 1.2.3.1. Accelerating, Braking, Change of Direction With Inside Leg and Outside Leg, Maximum Absolute Speed and/or Sub-Maximum Speed Technique, Correction and Application According to the Specific Movements in Competition
 - 1.2.4. Priority Vertical Movements
 - 1.2.4.1. Jumps, Hops, Bounds Technique, Correction and Application in Function With the Specific Movements in the Skill Set
- 1.3. Technological Means for the Assessment of Strength Training and External Load Control
 - 1.3.1. Introduction to Technology and Sport
 - 1.3.2. Technology for Strength and Power Training Assessment and Control
 - 1.3.2.1. Rotary Encoder (Operation, Interpretation Variables, Intervention Protocols, Application)
 - 1.3.2.2. Load Cell (Operation, Interpretation Variables, Intervention Protocols, Application)



- 1.3.2.3. Strength Platforms (Operation, Interpretation Variables, Intervention Protocols, Application)
- 1.3.2.4. Electric Photocells (Operation, Interpretation Variables, Intervention Protocols, Application)
- 1.3.2.5. Contact Mat (Operation, Interpretation Variables, Intervention Protocols, Application)
- 1.3.2.6. Accelerometer (Operation, Interpretation Variables, Intervention Protocols, Application)
- 1.3.2.7. Application of Mobile Devices (Operation, Interpretation of Variables, Intervention Protocols, Application).
- 1.3.3. Intervention Protocols for Training Evaluation and Control
- 1.4. Internal Load Control
 - 1.4.1. Subjective Perception of the Load Through the Qualification of Perceived Effort
 - 1.4.1.1. Subjective Perception of Load to Estimate Relative Load (% 1MR)
 - 1.4.2. Scope
 - 1.4.2.1. As Exercise Control
 - 1.4.2.1.1. Repetitions and PRE
 - 1.4.2.1.2. Repetitions in Reserve
 - 1.4.2.1.3. Scale of Speed
 - 1.4.2.2. Controlling the Overall Effect of a Session
 - 1.4.2.3. As a Tool for Periodization
 - 1.4.2.3.1. Use of (APRE) Self-Regulated Progressive Resistance Exercise, Interpretation of the Data and its Relation to the Correct Dosage of the Load in the Session
 - 1.4.3. Recovery Quality Scale, Interpretation and Practical Application in the Session (TQR 0-10)
 - 1.4.4. As a Tool for Daily Practice
 - 1.4.5. Application
 - 1.4.6. Recommendations
- 1.5. Means for Strength Training
 - 1.5.1. Role of the Mean in Designing a Method
 - 1.5.2. Means at the Service of a Method and in Function of a Central Sporting Objective
 - 1.5.3. Types of Means
 - 1.5.4. Patterns of Movement and Activations as a Central Axis for the Selection of Resources and Implementation of a Method

- 1.6. Building a Method
 - 1.6.1. Defining the Types of Exercises
 - 1.6.1.1. Cross-Connectors as a Guide to the Movement Target
 - 1.6.2. Exercise Evolution
 - 1.6.2.1. Modification of the Rotational Component and the Number of Supports According to the Plane of Motion
 - 1.6.3. Exercise Organization
 - 1.6.3.1. Relationship With Priority Horizontal and Vertical Movements (2.3 and 2.4)
- 1.7. Practical Implementation of a Method (Programming)
 - 1.7.1. Logical Implementation of the Plan
 - 1.7.2. Implementation of a Group Session
 - 1.7.3. Individual Programming in a Group Context
 - 1.7.4. Strength in Context Applied to the Game
 - 1.7.5. Periodization Proposal
- 1.8. ITU 1 (Integrating Thematic Unit)
 - 1.8.1. Training Construction for Functional and Structural Adaptations and Recruitment Order
 - 1.8.2. Constructing a Training Monitoring and/or Assessment System
 - 1.8.3. Movement-Based Training Construction for the Implementation of Fundamentals, Means and External and Internal Load Control
- 1.9. ITU 2 (Integrating Thematic Unit)
 - 1.9.1. Construction of a Group Training Session
 - 1.9.2. Construction of a Group Training Session in Context Applied to the Game
 - 1.9.3. Construction of a Periodization of Analytical and Specific Loads



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

05 Methodology

This program provides you with a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used 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".

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 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.



A learning method that is different and innovative.

This Sports Science program at TECH Global 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 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.

In a given situation, what should a professional 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. Students will have to combine all their knowledge, and research, argue, and defend their ideas and decisions.

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

Relearning 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: 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 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.



In our program, learning is not a linear process, but rather a spiral (we learn, unlearn, forget, and re-learn). Therefore, we balance each of these elements concentrically.

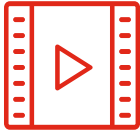
With this methodology, we have trained more than 650,000 university graduates with unprecedented success. In fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, markets, and financial instruments. 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 education, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

Based on the latest evidence in the field of 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.



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.



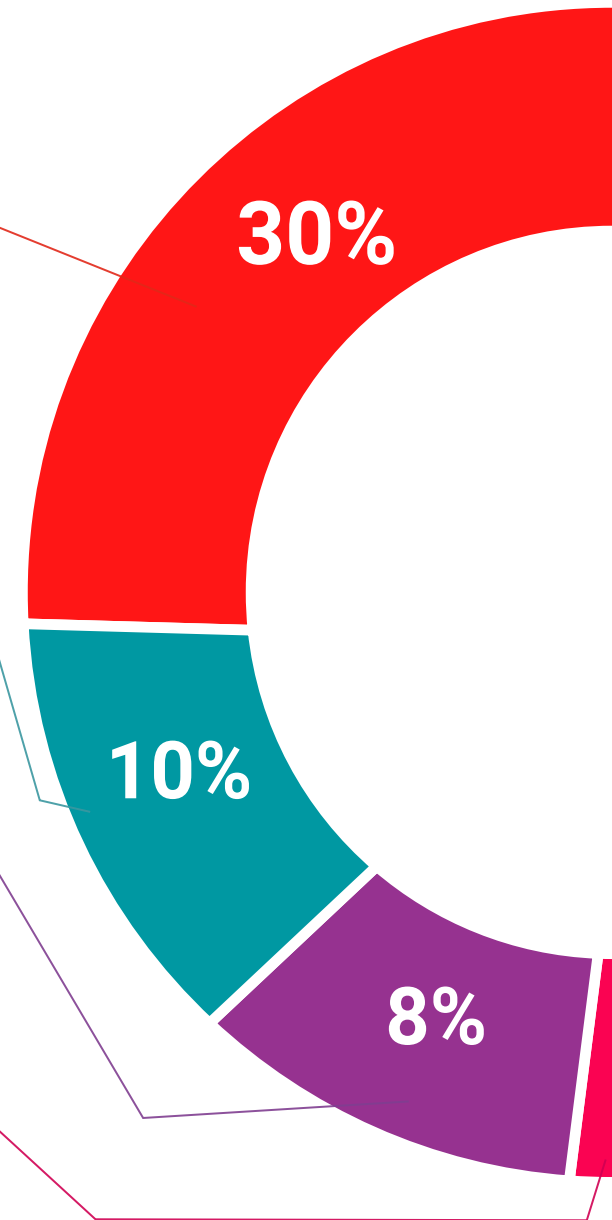
Practicing Skills and Abilities

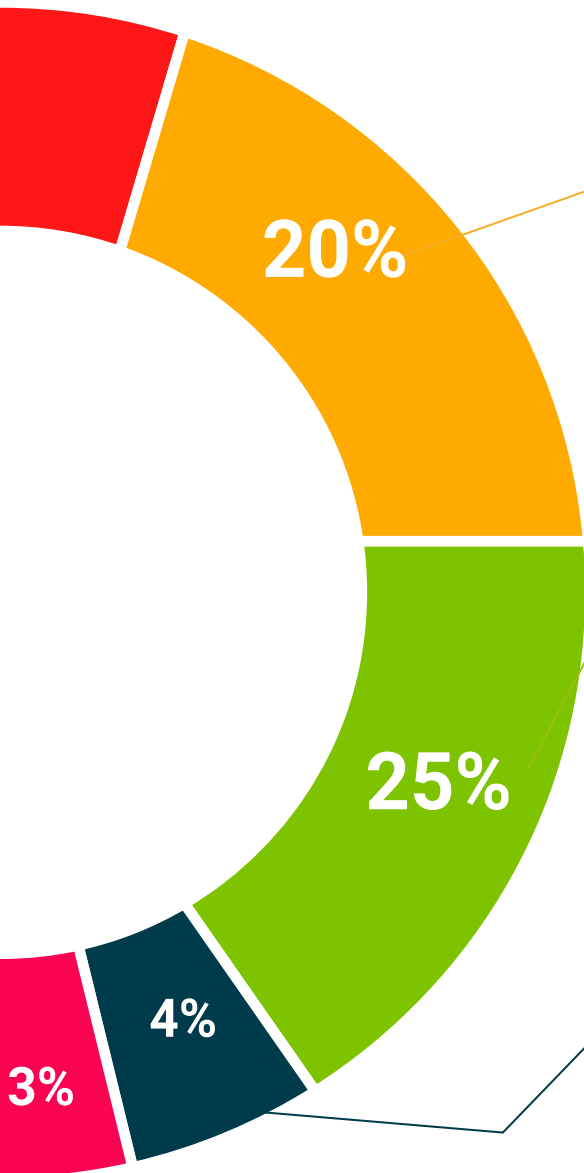
Students will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



Additional Reading

Recent articles, consensus documents, international guides... in our virtual library, students will have access to everything they need to complete their course.





Case Studies

You 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 specialists in the world.



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



Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.



06 Certificate

This Postgraduate Certificate in Strength Training in Situational Sports 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 **Postgraduate Certificate in Strength Training in Situational Sports** 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 Global University** via tracked delivery.

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

Title: **Postgraduate Certificate in Strength Training in Situational Sports**

Official Number of Hours: **150**

Endorsed by the NBA





Postgraduate Certificate

Strength Training
in Situational Sports

- » Modality: Online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Postgraduate Certificate

Strength Training in Situational Sports

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university