Postgraduate Diploma
Professional Cycling

Endorsed by the NBA

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Postgraduate Diploma
Professional Cycling

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **24 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/sports-science/postgraduate-diploma/postgraduate-diploma-professional-cycling

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01

Introduction

Cycling is one of the most demanding sports. Major competitions such as the Tour de France or the Giro d'Italia take place for weeks, requiring a high level of perseverance, effort and dedication not only from the cyclist himself, but from the entire team that surrounds him. Organizing and managing a Professional Cycling team is not a trivial task, so it is necessary to deepen the organization and even careful nutritional and training planning to the millimeter. This program delves into all these issues , projecting the trainer's career towards the leadership of his own Professional Cycling project. All of this 100% online, without face-to-face classes or pre-set schedules.

He brilliantly plans all areas of Professional Cycling, from the organization of the technical staff to the global training sessions and the diets of the athletes"

To lead a sports project related to Professional Cycling, you must have particularly high organizational and technical skills. These work groups are usually made up of multidisciplinary teams, so it is not just a matter of management, but one must know the technical aspects of areas such as nutrition or training in order to correctly assign roles and tasks.

In this way, trainers who wish to embark on a project as team leaders must perfect their skills in fields such as team planning, management of staff functions, cycling modalities that can be played at a professional level and the development of short-term and long-term cyclists with a vision of the future.

This Postgraduate Diploma in Professional Cycling was born with the purpose of delving into all these issues, from the prism of a teaching staff made up of experts and analysts of high prestige in the cycling world. In addition, their experience also as managers and leaders brings a distinguished vision to all the content, contextualizing each topic covered with examples and analysis of real cyclists and teams.

To all this we must add the format of the program itself, since it is completely online. This implies that both face-to-face classes and pre-set schedules have been eliminated, favoring total adaptation for the student. All the contents are available on the Virtual Campus, being accessible from any device with an internet connection.

This **Postgraduate Diploma in Professional Cycling** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of case studies presented by experts in Cycling and of high-level sport
- The graphic, schematic and practical contents with which it is designed provide advanced and practical information on those disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions for 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

Access the Virtual Campus at any time of the day, giving you the freedom you need to combine this degree with your work or personal responsibilities"

Do not miss the opportunity to become a team leader and take advantage of the experience of cycling professionals at the highest level"

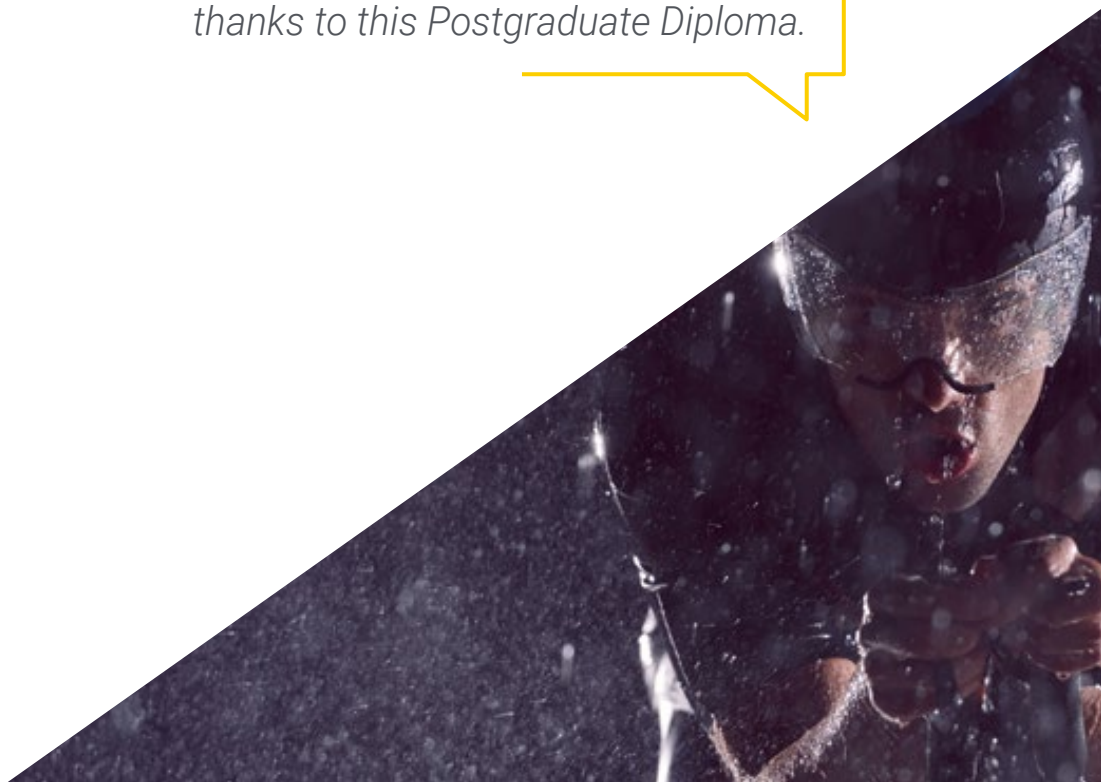
The program includes a team of professionals from the sector in its teaching staff , who pour the experience of their work into this training, as well as recognized specialists from leading societies and prestigious universities.

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 designed 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 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.

It delves into the most effective organization techniques to delegate the appropriate tasks to assistants, physiotherapists, mechanics and directors.

Delve into the nutritional and sports planning of your own cycling team thanks to this Postgraduate Diploma.



02

Objectives

Since Professional Cycling is one of the most demanding sports, the objective of this program could not be other than to delve into the organization and internal management of a high-level team through the prism of professionals with extensive experience. In this way, students perfects their skills based on the highest competitive level, adding distinguished value to their own proposal to lead and be the spearhead of the most ambitious projects.

This Postgraduate Diploma will open your own pathway for you to expand your career into the highest level of sports"

General Objectives

- Understand the performance factors of sport and, therefore, learn to assess the specific needs of each athlete
- Being able to plan, periodize and develop training programs for cyclists, train students to practice the profession of coach
- Acquire specific knowledge related to the biomechanics of cycling
- Understand the operation of the new applications used in the quantification of loads and training prescription
- Understand the benefits of strength training and be able to apply them to concurrent training
- Acquire a specialization in cycling-oriented nutrition
- Understand the functioning of the cycling structures, as well as the modalities and categories of the competitions

Become the indispensable pillar when setting up a Professional Cycling project thanks to your advanced knowledge in management, nutrition, planning and scheduling of all roles and functions"

Specific Objectives

Module 1. Cycling Modalities

- Learn about the different Modalities of Cycling and what are their characteristics, their idiosyncrasies and their performance limitations

Module 2. Structure and Functions of a Cyclist Team

- Understand first-hand the structure and operation of professional teams
- Differentiate the roles and functions of the different team members
- Know how the day to day of a cycling structure develops

Module 3. Cycling training planning and scheduling

- Know and apply different Education methods
- Learn to distribute volumes and intensities, in short, periodize
- Being able to design training sessions
- Study the training loads from lower categories, amateur, professional and master

Module 4. Nutrition in the cyclist

- Study the Concept of nutrition in depth
- Understand and apply periodization of nutrition
- Know which ergogenic aids are useful, which are not, and which are considered prohibited methods
- Delve into new trends in nutrition

03

Course Management

In order to lead a successful Professional Cycling team, it is necessary to have the necessary support and advice to succeed, since it is a joint effort. For this same reason, the teachers who will accompany the student throughout the tour are renowned professionals in the field of cycling, developing their careers in prestigious teams and with numerous awards behind them. Thus, all the educational content is nourished by its own advice, experiences and strategies to succeed in the field of sports management.

You will be able to consult all your doubts directly with the teaching staff through the Virtual Campus, having an educational experience personalized to your needs"

Management

Dr. Sola, Javier

- CEO of Training4ll
- WT UAE team coach
- Head of Performance Massi Tactic UCI Womens Team
- Specialist in the biomechanical area of Jumbo Visma UCI WT
- WKO adviser to World Tour cycling teams
- Trainer at Coaches4coaches
- Associate Professor at Loyola University
- Bachelor of Science in Physical Activity and Sport from the University of Seville
- Postgraduate in High Performance of Cyclic Sports from the University of Murcia
- Sports Director Level III
- Numerous Olympic medals and medals at European Championships, World Cups and National Championships

Professors

Dr. Artetxe Gezuraga, Xabier

- Head of Performance of the WT Ineos Grenadier team
- Professor and director of events of the company Fundación Ciclista Euskadi
- Coach of the WT Movistar, SKY and Ineos Grenadier team
- Sports director and coach of Seguros Bilbao, Caja Rural, Euskaltel Development Team
- Coach of winners of Grand Tours, World Championships, Olympic medals and national championships
- Trainer at Coaches4coaches
- High Performance Master in Biomedicine
- Certificate World Tour Level Sports Director (UCI Sports Director)
- Sports Director Level III

D. Celdrán, Raúl

- CEO of Natur Training System
- Burgos BH ProConti Team Nutrition Manager
- Performance Manager of the professional MTB Klimatiza Team
- Trainer at Coaches4coaches
- Degree in Pharmacy from the University of Alcalá
- Master in Nutrition, Obesity and High Performance in Cyclic Sports from the University of Navarra

Dr. Moreno Morillo, Aner

- Performance Manager of the Kuwait National Cycling Team
- Assistant of the Euskaltel-Euskadi ProConti Team
- Graduated in Physical Activity and Sports Sciences from the Isabel I University
- Master's degree in CAFD research from the European University
- Master in High Performance of Cyclic Sports from the University of Murcia
- Sports Director National Level III

Dr. Arguedas Lozano, Chema

- CEO of Plan your Pedalades
- Training and nutrition expert at Enduro Cycling
- Trainer, physical trainer and expert in sports nutrition
- Professor of Sports Nutrition at the University of Leioa
- Author of titles related to cycling: Plan your pedal strokes, Feed your pedal strokes, Plan your BTT pedal strokes, Power your pedal strokes

04

Structure and Content

Following the Relearning pedagogical methodology, all the educational material found in this Postgraduate Diploma is prepared to guarantee a progressive and complete experience. Without having to invest excessive hours of study to assimilate the key concepts, the student will be able to delve into the most relevant topics independently, since learning is guided and natural, supported by a multitude of detailed videos, interactive summaries and more multimedia resources.

Download all the contents of this Postgraduate Diploma and consult them even once you have finished the degree, having access to a privileged reference guide"

Module 1. Cycling Modalities

1.1. Tracks
- 1.1.1. Definition
- 1.1.2. Track Tests
- 1.1.3. Competition Demands

1.2. Highway
- 1.2.1. Definition
- 1.2.2. Modalities and Categories
- 1.2.3. Competitive Demands

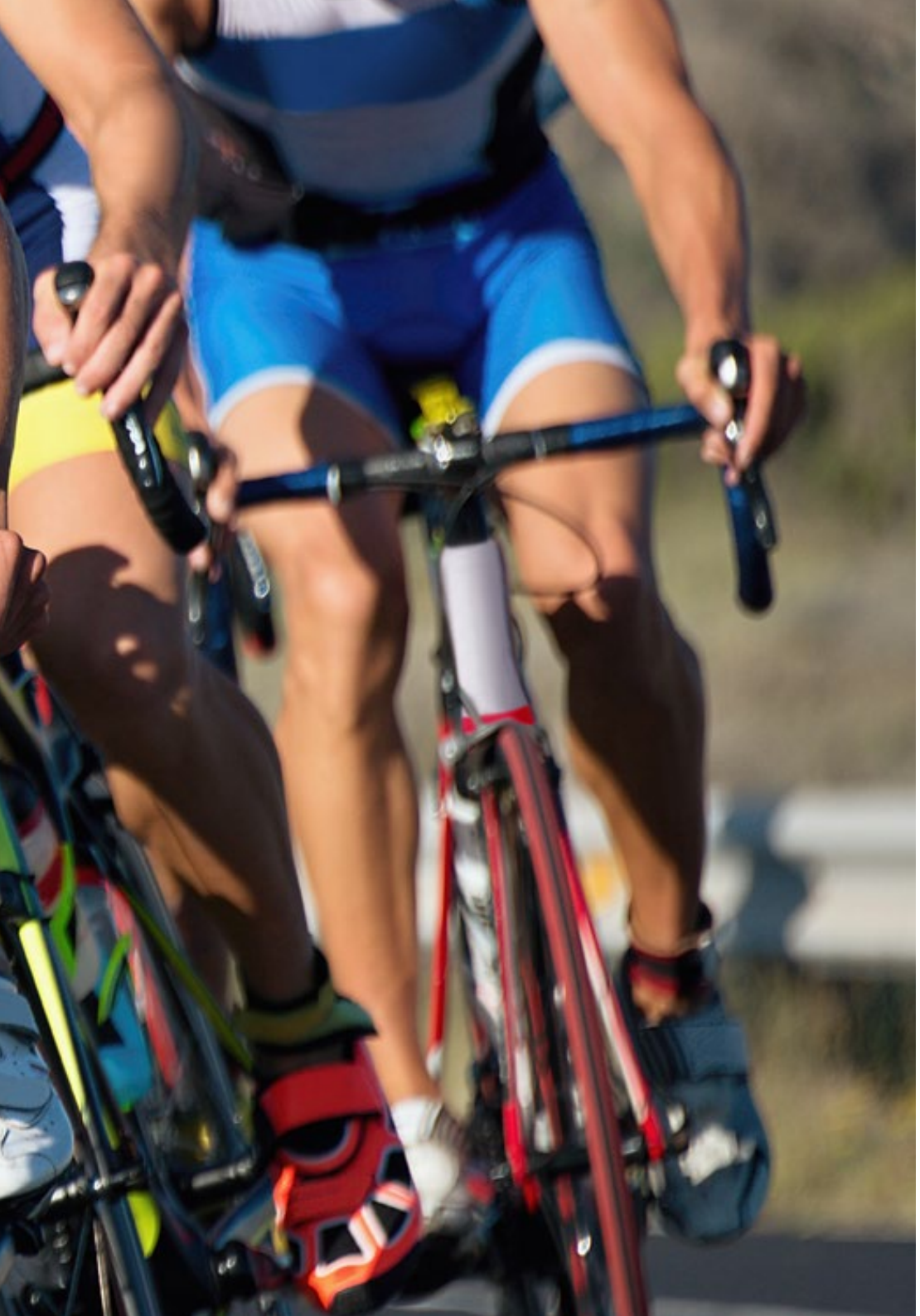
1.3. CX (cyclocross)
- 1.3.1. Definition
- 1.3.2. Competition Demands
- 1.3.3. CX Techniques

1.4. Time Trial
- 1.4.1. Definition
- 1.4.2. Individual Therapy
- 1.4.3. Equipment
- 1.4.4. Preparing a Time Trial

1.5. MTB (Mountain Bike) / BTT (All Terrain Bicycle)
- 1.5.1. Definition
- 1.5.2. MTB Tests
- 1.5.3. Competition Demands

1.6. Gravel
- 1.6.1. Definition
- 1.6.2. Competition Demands
- 1.6.3. Specific Materials

1.7. BMX
- 1.7.1. Definition
- 1.7.2. BMX Tests
- 1.7.3. BMX Demands



1.8. Adapted Cyclism
  1.8.1. Definition
  1.8.2. Eligibility Criteria
  1.8.3. Competition Demands
1.9. New Modalities Regulated by the UCI
  1.9.1. E-Bike
  1.9.2. E-Sports
  1.9.3. Artistic Cycling
1.10. Cycle Tourism
  1.10.1. Definition
  1.10.2. Bicycle Tourism Demands
  1.10.3. Strategies for Coping with Trials

Module 2. Structure and Functions of a Cyclist Team

2.1. Team Categories
  2.1.1. Professional Categories (WT and ProContinental)
  2.1.2. Continental Category
  2.1.3. Elite and Sub-23 Categories
2.2. Competition Categories
  2.2.1. Competition by Stages
  2.2.2. Classics
  2.2.3. Categories According to Participation Levels
2.3. Inferior Categories
  2.3.1. Schools
  2.3.2. Cadets
  2.3.3. Juvenile
2.4. Manager Role
  2.4.1. Manager of Cyclist Structure
  2.4.2. Sponsorships
  2.4.3. Manager/ Cyclist Representative
2.5. Director Role
  2.5.1. Function of Director as Coordinator
  2.5.2. Function of Director as Organizer
  2.5.3. Function of Director during Competition

2.6. Mechanics' Role
  2.6.1. Professional Equipment Material
  2.6.2. Ship Mechanic Role
  2.6.3. Highway Mechanic Role
2.7. Role of Assistants, Masseurs and Physiotherapists
  2.7.1. Auxiliaries
  2.7.2. Physiotherapist
  2.7.3. Masseurs
2.8. Role of the Rest of the Staff
  2.8.1. Office
  2.8.2. Ship
  2.8.3. Press
2.9. How to Structure Competition
  2.9.1. Competition Analysis
  2.9.2. Defining Competition Objectives
  2.9.3. Planning Development for Competition
2.10. Each Day of the Competition Within a Team
  2.10.1. Precompetition
  2.10.2. During Competition
  2.10.3. Post-Competition

Module 3. Planning and scheduling cyclist training

3.1. Cyclist Training Methods
  3.1.1. Continuous (Uniform and Variable)
  3.1.2. Interval Fractionator
  3.1.3. Split: Reps
3.2. Fashion Distribution
  3.2.1. Forms of Distribution
  3.2.2. Pyramidal
  3.2.3. Polarization
3.3. Periodization
  3.3.1. Traditional
  3.3.2. By Blocks
  3.3.3. Inverse
3.4. Recovery Strategies
  3.4.1. Activate
  3.4.2. Passive
  3.4.3. Recovery Media
3.5. Design of Training Sessions for Cyclist
  3.5.1. Heating
  3.5.2. Main Partt
  3.5.3. The Return to Calmness
3.6. Development of the Capabilities
  3.6.1. VT1 Improvements
  3.6.2. VT2 Improvements
  3.6.3. VT2 Max Improvements
  3.6.4. Improvement of PMax and Anaerobic Capacity
3.7. Development of Long-Term cyclist
  3.7.1. Learning How to Train
  3.7.2. Learning to Compete
  3.7.3. Training to Compete
3.8. Master Cyclist Training
  3.8.1. Competitive Demands of Master's Degrees
  3.8.2. Competitive Calendar
  3.8.3. Load Distribution
3.9. Under -23 Cyclist Training
  3.9.1. Competitive Demands
  3.9.2. Competitive Calendar
  3.9.3. Load Distribution
3.10. Communication Management Cyclist Training
  3.10.1. Competitive Demands
  3.10.2. Competitive Calendar
  3.10.3. Load Distribution

Module 4. Nutrition in the cyclist

4.1. Concept of Sports Nutrition
- 4.1.1. What is Sports Nutrition?
- 4.1.2. Clinical Nutrition vs Sports Nutritio
- 4.1.3. Nutrition and supplementation

4.2. MB Calculation
- 4.2.1. Components of Energy Expenditure
- 4.2.2. Factors Influencing Energy Expenditure in Childhood
- 4.2.3. Measuring Energy Consumption

4.3. Body composition
- 4.3.1. BMI and Traditional Ideal Weight Is There an Ideal Weight?
- 4.3.2. Subcutaneous Fat and Skinfold Thickness
- 4.3.3. Other Methods to Determine Body Composition

4.4. Macro and Micronutrients
- 4.4.1. Definition of Macro and Micronutrients
- 4.4.2. Macronutrient Needs
- 4.4.3. Micronutrient Needs

4.5. Macro and Micro Periodization
- 4.5.1. Nutritional Periodization
- 4.5.2. Periodization in Macrocycles
- 4.5.3. Periodization in Microcycle

4.6. Sweat Rate and Hydration
- 4.6.1. Sweating Rate Measurement
- 4.6.2. Hydration Needs
- 4.6.3. Electrolytes

4.7. Stomach and Digestive System Training
- 4.7.1. Necessity Stomach and Digestive System Training
- 4.7.2. EEySD Phases
- 4.7.3. Application in Training and Race

4.8. Supplementation and Prohibited Supplements
- 4.8.1. Supplementation and Ergonutritional Aids
- 4.8.2. ABCD System of Supplements and Ergonutritional Aids
- 4.8.3. Individual Supplementation Needs

4.9. Trends in Sports Nutrition
- 4.9.1. Trends
- 4.9.2. Low-Carb, High-Fat
- 4.9.3. High Carbohydrate Diet

4.10. Software and Applications
- 4.10.1. Macronutrients Control Methods
- 4.10.2. Nutrition Control Softwarel
- 4.10.3. Applications for the Athlete

All the complementary readings available for each topic will allow you to delve into those that generate the most interest for you”

06

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

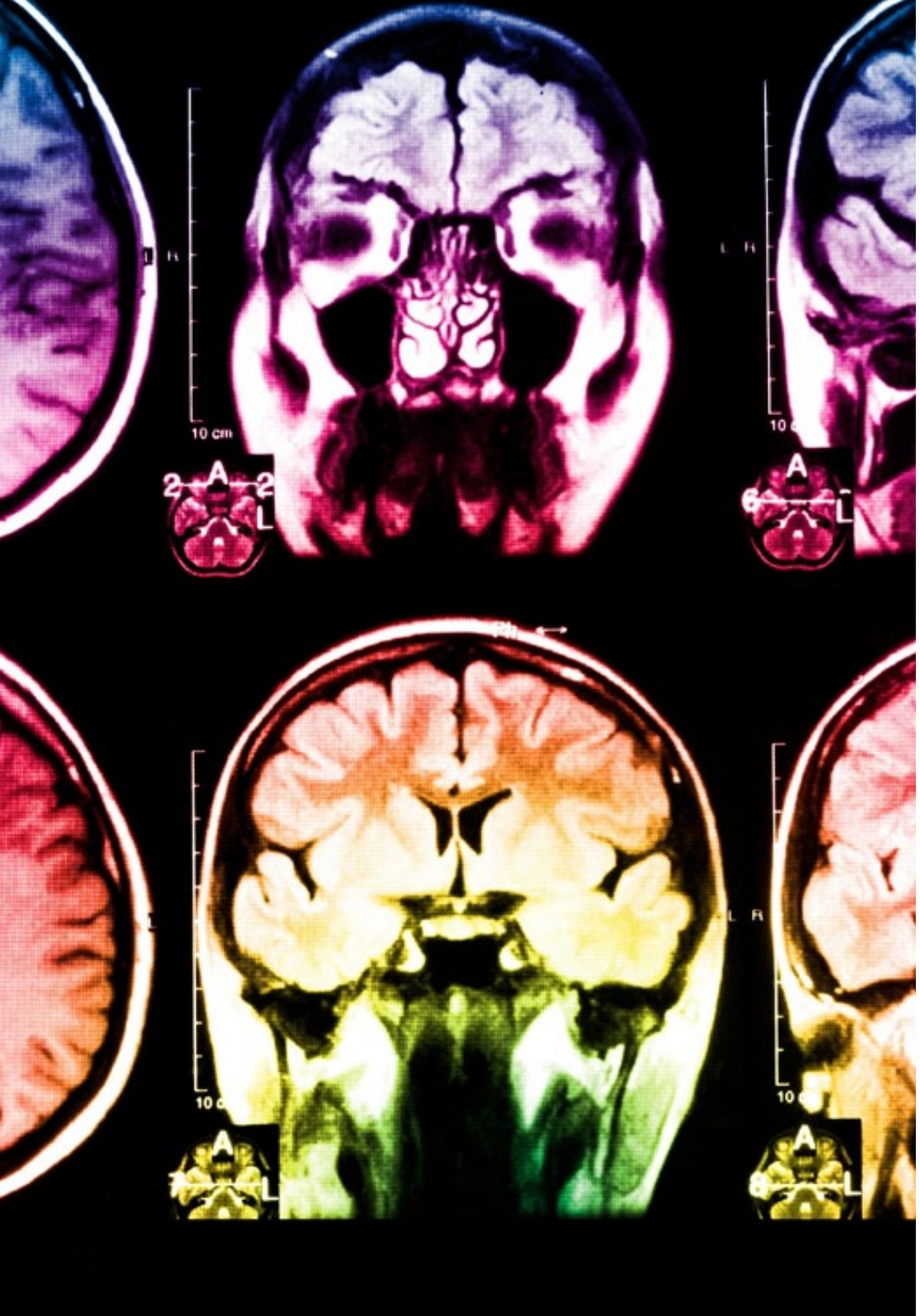
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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.

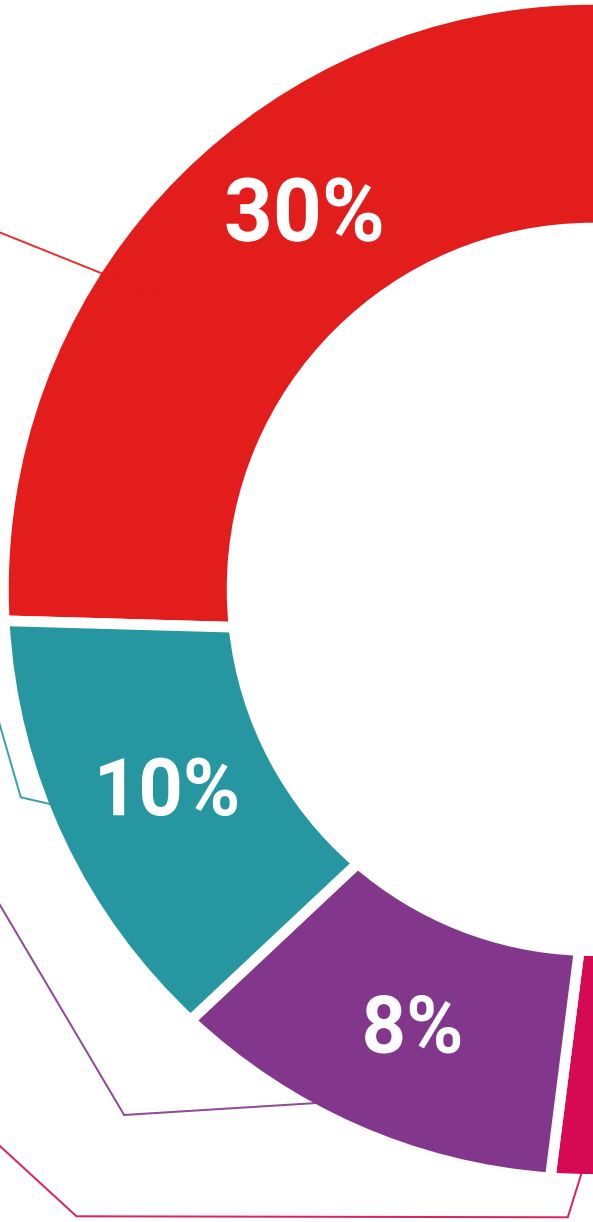
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

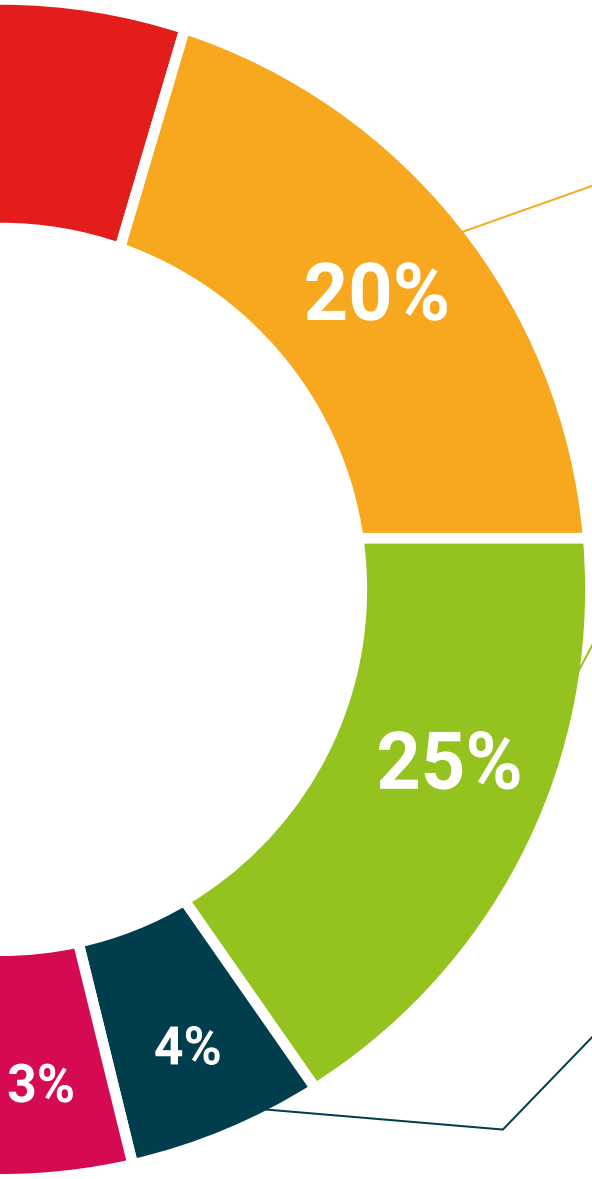
Practising Skills and Abilities

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

The Postgraduate Diploma in Professional Cycling guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.

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

This program will allow you to obtain your **Postgraduate Diploma in Professional Cycling** 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** title 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 Diploma in Professional Cycling**

Modality: **online**

Duration: **6 months**

Accreditation: **24 ECTS**


tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Diploma in Professional Cycling

This is a program of 600 hours of duration equivalent to 24 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

The Official Online University of the NBA

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.

Unique TECH Code: AFWORD23S techtitute.com/certificates

*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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