

# Postgraduate Certificate Cyclist Nutrition

Endorsed by the NBA





## Postgraduate Certificate Cyclist Nutrition

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

Website: [www.techtute.com/us/sports-science/postgraduate-certificate/cyclist-nutrition](http://www.techtute.com/us/sports-science/postgraduate-certificate/cyclist-nutrition)

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# 01

# Introduction

Nutrition is essential for success in cycling. It is no secret that cyclists need a balanced and adequate diet to maintain energy levels, recover after exercise, adapt to training or resist illness and injury. This is why it is important that these professionals have a continuous update on the nutritional properties of food, and this is what they will achieve with this program. Thus, the program is intended to be a valuable tool through which the student will calculate metabolic expenditure and delve into the sweat rate of cyclists or their body composition. All this with an integral approach and from home for greater comfort.



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*The perfect opportunity to reach your cycling goals through the latest nutritional plans”*

Cyclists need a diet rich in carbohydrates to have the necessary energy for long distance cycling. Since these biomolecules are stored in the body in the form of glycogen, you need to consume enough carbohydrates to keep glycogen levels high before a race or workout. In addition, these athletes also require protein to repair muscles after exercise and to promote recovery. Fats are also postulated to be important for providing long-lasting energy and for the sake of contributing to the absorption of fat-soluble vitamins.

Undoubtedly, managing nutritional issues such as these is a complex task and subject to continuous advances as scientific evidence evolves, which is why cyclists should take advantage of any opportunity to update their knowledge. And with TECH they have a perfect one, through which they will have the opportunity to boost their performance through the nutritional plans that have proven to be the most effective today.

Thus, students will analyze at length the implications of nutrition in their sports activity, obtaining the most appropriate tools to calculate metabolic expenditure. In addition, the program will take you into the periodization of macro and micronutrients, sports supplementation or stomach training, among other topics of special interest.

With this specialization, the cyclist will be in a position to boost his or her professional activity, for which he or she will not have to attend on-site training centers or be subject to specific schedules. In addition, you will benefit from enjoying an academic experience with the largest online university in the world, becoming part of a prestigious community where you will be able to establish contact with great experts in this area.

This **Postgraduate Certificate in Cyclist Nutrition** 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 Nutrition
- ◆ The graphic, schematic and eminently practical contents of the book provide sporting 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 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



*Get updated on all the implications of Nutrition in your cycling activity, calculating the metabolic expenditure of your workouts"*

“

*You will undergo advanced case studies on hydration needs in training and competition, analyzing sweat rate”*

The program’s teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. This will be done with the help of an innovative system of interactive videos made by renowned experts.

*If you want to be up to date with the latest trends in nutrition for cycling, with this program you will learn more about each and every one of them.*

*You will gain valuable expertise in determining which ergonutritional inputs are useful and which should be avoided.*



# 02 Objectives

Since specializations in nutritional plans adapted to specific sports disciplines is an increasingly common requirement, TECH has meticulously designed this program to provide you with all the keys. Thus, the objective is none other than to provide students with the latest nutritional strategies to enhance their performance so that they can achieve any sporting goal they set for themselves.





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*The objectives of the program will allow you to master each and every aspect of Nutrition periodization, both in macro and microcycles”*



## General Objectives

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





## Specific Objectives

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- ◆ Deepen in the concept of nutrition
- ◆ Understand and apply nutrition periodization
- ◆ Know which ergogenic aids are useful, which are not and which are considered prohibited methods
- ◆ Getting to know new trends in nutrition



*You will benefit from a highly comprehensive academic experience that includes all the latest news on the use of Nutrition Management Software"*

03

# Course Management

The teaching team that TECH has incorporated to teach this program and supervise the academic progress of the students is a statement of the university's intentions. Coaches, physical trainers and experts in Sports Nutrition come together in the program so that the student can draw on their Know-How and have the keys that will allow them to make a difference. In addition, students will have a valuable digital meeting point with the teaching staff through the Online Campus, where they will be available for any questions.





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*Coaches, physical trainers and experts in sports nutrition come together in the program to provide you with the keys that will make the difference"*

## Management



### Mr. Sola, Javier

- ◆ CEO of Training4ll
- ◆ WT UAE Team Coach
- ◆ Massi Tactic UCI Womens Team Performance Manager
- ◆ Specialist in the biomechanical area of Jumbo Visma UCI WT
- ◆ WKO advisor to World Tour cycling teams
- ◆ Trainer at Coaches4coaches
- ◆ Associate Professor at Loyola University
- ◆ Degree in Physical Activity and Sports Sciences from the University of Seville
- ◆ Postgraduate Degree in High Performance Cycling Sports from the University of Murcia
- ◆ Sports Director Level III
- ◆ Numerous Olympic medals and medals at European championships, World Cups and national championships

## Professors

### Mr. Celdrán, Raúl

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

### Mr. Arguedas Lozano, Chema

- ◆ CEO of Plan Your Rides
- ◆ Cycling in Depth Training and Nutrition Expert
- ◆ Trainer, fitness trainer and sports nutrition expert
- ◆ Lecturer in Sports Nutrition at the University of Leioa
- ◆ Author of titles related to cycling: Plan your pedaling, Feed your pedaling, Plan your MTB pedaling, Power your pedaling



# 04

# Structure and Content

The syllabus has been designed to offer the most complete vision on this subject. To this end, the teaching team has closely supervised all topics to ensure that the contents are in line with the latest scientific advances in nutrition. In addition, students will be supported by the technological innovations that TECH has implemented in its Online Campus. In this sense, your educational cycle will be boosted thanks to dynamic study resources that go far beyond memorizing subjects.







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*A curriculum that places special emphasis on the need to train the stomach and digestive system to improve performance in competition”*

## Module 1. Nutrition in the cyclists

- 1.1. Concept of sports nutrition
  - 1.1.1. What is sports nutrition?
  - 1.1.2. Clinical vs. sports nutrition
  - 1.1.3. Food and supplements
- 1.2. MB calculation
  - 1.2.1. Components of Energy Expenditure
  - 1.2.2. Factors influencing energy expenditure at rest
  - 1.2.3. Energy consumption measurement
- 1.3. Body composition
  - 1.3.1. BMI and traditional ideal weight. Is there such a thing as an ideal weight?
  - 1.3.2. Subcutaneous fat and thickness of skin folds
  - 1.3.3. Other methods for determining body composition
- 1.4. Macro and micronutrients
  - 1.4.1. Definition of macro and micronutrients
  - 1.4.2. Macronutrient requirements
  - 1.4.3. Micronutrient requirements
- 1.5. Macro and micro periodization
  - 1.5.1. Nutritional periodization
  - 1.5.2. Periodization in macrocycles
  - 1.5.3. Periodization in microcycles
- 1.6. Sweating rate and hydration
  - 1.6.1. Sweat rate measurement
  - 1.6.2. Hydration needs
  - 1.6.3. Electrolytes





- 1.7. Stomach and digestive system training
  - 1.7.1. Need to train the stomach and digestive system
  - 1.7.2. EEySD Phases
  - 1.7.3. Application in training and racing
- 1.8. Supplementation
  - 1.8.1. Supplementation and ergonutritional aids
  - 1.8.2. ABCD system of supplements and ergonutritional aids
  - 1.8.3. Individual supplementation needs
- 1.9. Trends in sports nutrition
  - 1.9.1. Trends
  - 1.9.2. Low Carb-High Fat
  - 1.9.3. High carbohydrate diet
- 1.10. Software and applications
  - 1.10.1. Methods for macronutrients control
  - 1.10.2. Softwares for nutrition control
  - 1.10.3. Applications for the athlete

“*TECH provides you with the most innovative academic materials on Cycling Nutrition through interactive outlines, case studies, videos and much more*”

# 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.





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

### Case Study to contextualize all content

Our program offers a revolutionary 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.*



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

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 Certificate in Cyclist Nutrition guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological 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 Cyclist Nutrition** contains the most complete and up-to-date 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 Cyclist Nutrition**

Official N° of hours: **150 h.**



\*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  
development language  
virtual classroom



## Postgraduate Certificate Cyclist Nutrition

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

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Endorsed by the NBA



**tech** technological  
university

