

# Postgraduate Certificate

## Sports Nutrition in Adverse Conditions

Endorsed by the NBA



**tech** global  
university



## Postgraduate Certificate Sports Nutrition in Adverse Conditions

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

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

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Certificate

---

*p. 28*

# 01

# Introduction

With this intensive training you will specialize in Sports Nutrition in Adverse Conditions, either extreme heat or cold, from the hand of professionals with extensive experience in the sector, who have deposited all their knowledge and experience in the development of this program.

This Postgraduate Certificate focuses on the aspects less studied during the university career, allowing to broaden the knowledge necessary to cover a wide spectrum of potential athletes, as well as to meet their nutritional needs.



“

*Immerse yourself in the study of this complete Postgraduate Certificate and improve your skills in nutritional counseling for athletes”*

Athletes sometimes compete in situations that are very different and much more adverse than those in which they usually train. This may be the case for a European team competing in the summer World Cup in South America. In these cases the requirements for fluids and certain nutrients will be increased and will vary depending on whether the conditions are extremely hot or cold. In addition, another factor to take into account will be the altitude, where certain physiological adaptations will occur, largely due to hypoxia.

Within this program we can find a teaching staff of the highest level, made up of professionals closely related to Sports Nutrition, outstanding in their field and who lead lines of research and field work, as well as recognized specialists from leading societies and prestigious universities. As it is an online Postgraduate Certificate, 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 Sports Nutrition in Adverse Conditions** contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- The graphic, schematic and eminently 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.
- An algorithm-based interactive learning system, designed for decision making for patients with nutritional challenges.
- 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



*Learn the most suitable diets for each type of athlete and you will be able to give more personalized advice"*

“

*This Postgraduate Certificate is the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in Sports Nutrition, you will obtain a certificate from the leading online university in spanish: TECH”*

Its teaching staff includes professionals belonging to the field of nutrition, who contribute their work experience to this training, as well as renowned specialists from reference societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive 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. The professional will be assisted by an innovative interactive video system created by renowned and experienced experts in sports nutrition.

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



# 02 Objectives

The main objective of the program is the development of theoretical and practical learning, so that the sports science professional can master in a practical and rigorous way the study of Sports Nutrition in Adverse Conditions.







“

*This refresher program will generate a sense of confidence in the performance of your daily practice, which will help you grow personally and professionally”*



## General Objectives

---

- ♦ Broaden the traditional osteopathic integrative vision for the approach of non-conventional pathologies.
- ♦ Have an in-depth knowledge of those tests and validated techniques, thus moving away from not very rigorous clinical interventions. Handle advanced knowledge on nutritional planning in professional and non-professional athletes for the healthy performance of physical exercise.
- ♦ Manage advanced knowledge on nutritional planning in professional athletes of different disciplines to achieve maximum sports performance.
- ♦ Manage advanced knowledge on nutritional planning in professional athletes of team disciplines to achieve maximum sports performance.
- ♦ Manage and consolidate the initiative and entrepreneurial spirit to implement projects related to nutrition in physical activity and sport.
- ♦ Know how to incorporate the different scientific advances to one's own professional field.
- ♦ Ability to work in a multidisciplinary environment.
- ♦ Advanced understanding of the context in which the area of their specialty is developed.
- ♦ Manage advanced skills to detect possible signs of nutritional alteration associated with sports practice.
- ♦ Manage the necessary skills through the teaching-learning process that will allow them to continue training and learning in the field of Sports Nutrition, both through the contacts established with teachers and professionals of this training, as well as in an autonomous way.
- ♦ Specialize in the structure of muscle tissue and its implication in sport.
- ♦ Know the energy and nutritional needs of athletes in different pathophysiological situations.
- ♦ Specialize in the energy and nutritional needs of athletes in different age and gender specific situations.
- ♦ Specialize in dietary strategies for the prevention and treatment of the injured athlete.
- ♦ Specialize in the energy and nutritional needs of children athletes.
- ♦ Specialize in the energy and nutritional needs of Paralympic athletes.
- ♦ Recover concepts of the scientific basis of disciplines such as anatomy, physiology and histology that will facilitate the classic osteopathic integrative diagnosis.
- ♦ Value the personal search for classical osteopathic concepts and the integration of the personal approach in the clinical practice with patients.



## Specific Objectives

---

- ◆ Differentiate between the main performance limiting factors caused by climate.
- ◆ Develop an acclimatization plan according to the given situation.
- ◆ Delve into the physiological adaptations due to altitude.
- ◆ Establish the correct individual hydration guidelines according to the climate.

“

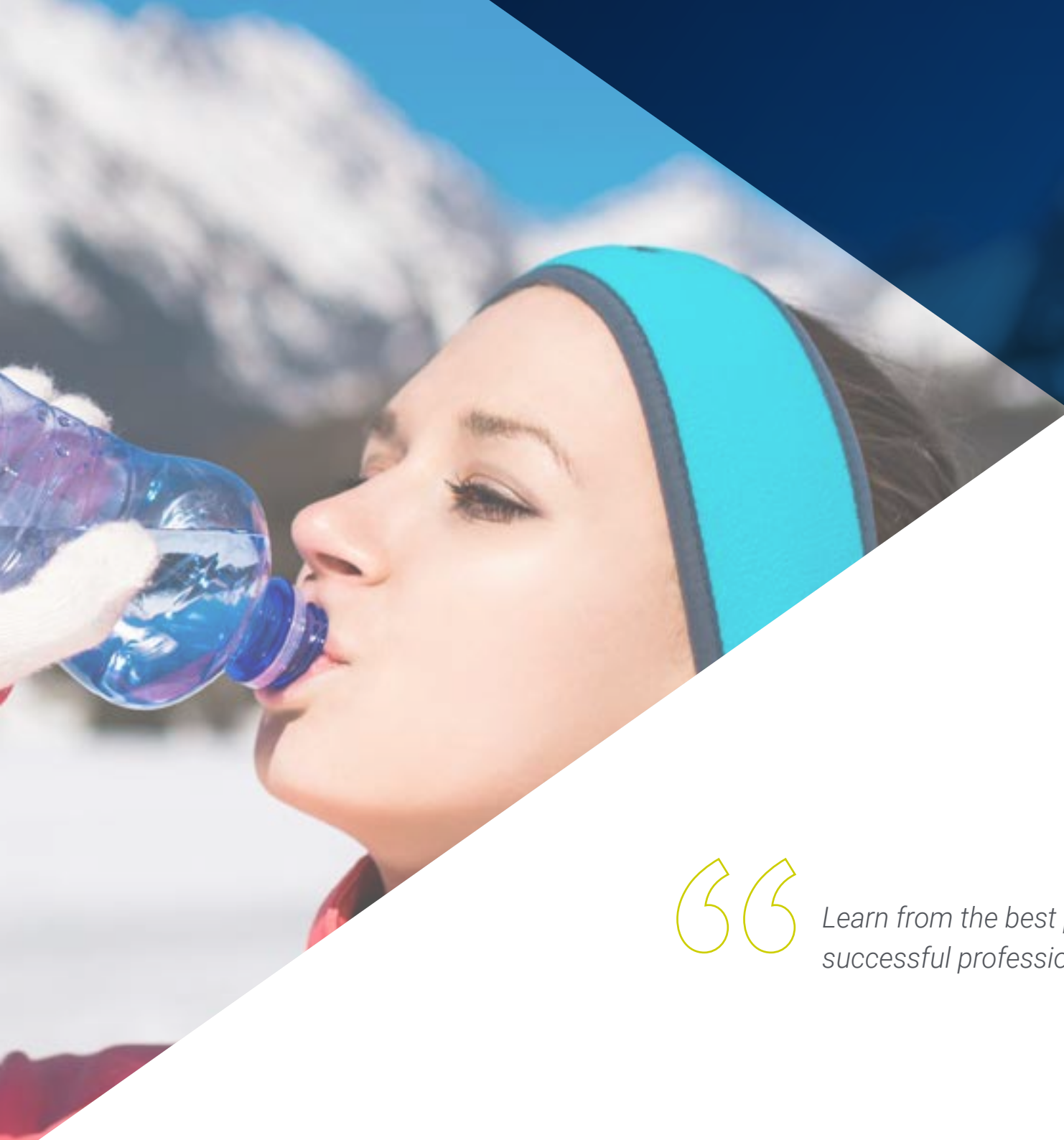
*Our goal is to achieve  
academic excellence and  
to help you achieve it too”*

# 03

# Course Management

Our teachers, made up of experts in Sports Nutrition, are well known in the profession and are professionals with years of teaching experience who have come together to help you boost your career. To this end, they have developed this Postgraduate Certificate with recent updates on the subject that will allow you to train and increase your skills in this sector.





“

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

## International Guest Director

Jamie Meeks has proven throughout her career her dedication to Sports Nutrition. After graduating from Louisiana State University with a degree in Sports Nutrition, he quickly rose to prominence. Her talent and commitment were recognized when she received the prestigious Young Dietitian of the Year award from the Louisiana Dietetic Association, an achievement that marked the beginning of a successful career.

After completing her bachelor's degree, Jamie Meeks continued her education at the University of Arkansas, where she completed her internship in Dietetics. She then went on to obtain a Master's Degree in Kinesiology with a specialization in Exercise Physiology from Louisiana State University. Her passion for helping athletes reach their full potential and her tireless commitment to excellence make her a leading figure in the sports and nutrition community.

Her deep knowledge in this area led her to become the first Director of Sports Nutrition in the history of Louisiana State University's athletic department. There, she developed innovative programs to meet the dietary needs of athletes and educate them on the importance of proper nutrition for optimal performance.

Subsequently, she has held the position of Director of Sports Nutrition for the NFL's New Orleans Saints. In this role, she is dedicated to ensuring that professional players receive the best nutritional care possible, working closely with coaches, trainers, physical trainers and medical staff to optimize individual performance and health.

As such, Jamie Meeks is considered a true leader in her field, being an active member of several professional associations and participating in the advancement of Sports Nutrition on a national level. In this regard, she is also a member of the Academy of Nutrition and Dietetics and the Association of Collegiate and Professional Sports Dietitians.



## Ms. Meeks, Jamie

---

- Director of Sports Nutrition for the New Orleans Saints of the NFL, Louisiana, United States
  - Coordinator of Sports Nutrition at Louisiana State University
  - Registered Dietitian by the Academy of Nutrition and Dietetics
  - Certified Specialist in Sports Dietetics
  - Master's Degree in Kinesiology with a specialization in Exercise Physiology from Louisiana State University
  - Graduate in Dietetics from Louisiana State University
- Member of:
- Louisiana Dietetic Association
  - Association of Collegiate and Professional Sports Dietitians
  - Cardiovascular and Wellness Sports Nutrition Dietetic Practice Group

“

*Thanks to TECH, you will be able to learn with the best professionals in the world”*

## Management



### Dr. Marhuenda Hernández, Javier

- ♦ Full Member of the Spanish Academy of Human Nutrition and Dietetics. Professor and researcher at UCAM.
- ♦ Ph.D. in Nutrition.
- ♦ Master's Degree in Clinical Nutrition.
- ♦ Graduate in Nutrition.

## Professors

### Arcusa, Raúl

- ♦ Graduate in Human Nutrition and Dietetics
- ♦ Master's Degree in Nutrition in Physical Activity and Sport.
- ♦ Anthropometrist ISAK level 1.
- ♦ Currently a Doctoral student in the Department of Pharmacy of the UCAM, researching Nutrition and Oxidative Stress, in addition to his work as a Nutritionist in the Youth Team of C.D. Castellón.
- ♦ Experience in different soccer teams in the Valencian community, as well as extensive experience in consultation in face-to-face clinic.





# 04

# Structure and Content

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



Dir  
• 1.3  
• 1.2

*Breakfast (264 calories)*

- 1 cup nonfat plain Greek yogurt
- 1/4 cup muesli
- 1/4 cup blueberries

*A.M. Snack (84 calories)*

- 5 dried apricots

*Lunch (335 calories)*

*Chickpea & Veggie Salad*

- 2 cups mixed greens
- 3/4 cup veggies of your choice (try cucumbers and tomatoes)
- 1/2 cup chickpeas, rinsed
- 1/2 Tbsp. chopped walnuts

*Combine ingredients and top salad with 1 Tbsp. vinegar and olive oil*

*P.M. Snack (70 calories)*

- 2 clementines

*Dinner (434 calories)*

- 1/4 cup Squash & Red Lettuce
- 1/2 cup brown rice

“

This Postgraduate Certificate in Sports Nutrition in Adverse Conditions contains the most complete and up-to-date scientific program on the market”

## Module 1. Adverse Conditions

- 1.1. The History of Sport in Extreme Conditions
  - 1.1.1. Winter Competitions throughout History
  - 1.1.2. Competitions in Hot Environments Today
- 1.2. Performance Limitations in Hot Climates
  - 1.2.1. Dehydration
  - 1.2.2. Fatigue
- 1.3. Basic Characteristics in Hot Climates
  - 1.3.1. High Temperature and Humidity
  - 1.3.2. Acclimatization
- 1.4. Nutrition and Hydration in Hot Climates
  - 1.4.1. Hydration and Electrolytes
  - 1.4.2. Carbohydrates
- 1.5. Performance Limitations in Cold Climates
  - 1.5.1. Fatigue
  - 1.5.2. Bulky Clothing
- 1.6. Basic Characteristics in Cold Climates
  - 1.6.1. Extreme Cold
  - 1.6.2. Reduced VOmax
- 1.7. Nutrition and Hydration in Cold Climates
  - 1.7.1. Hydration
  - 1.7.2. Carbohydrates





“

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

05

# Methodology

This training provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

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.





“

*Discover Re-learning, 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 your 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 student will learn, through collaborative activities and real cases, how to solve complex situations in real business environments.*

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.

In a given situation, what would you 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. You will have to combine all your knowledge, and research, argue, and defend your 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 Spanish-language 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 one in Spanish-speaking countries 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 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 to success.*

Based on the latest evidence in 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.



### Practising Skills and Abilities

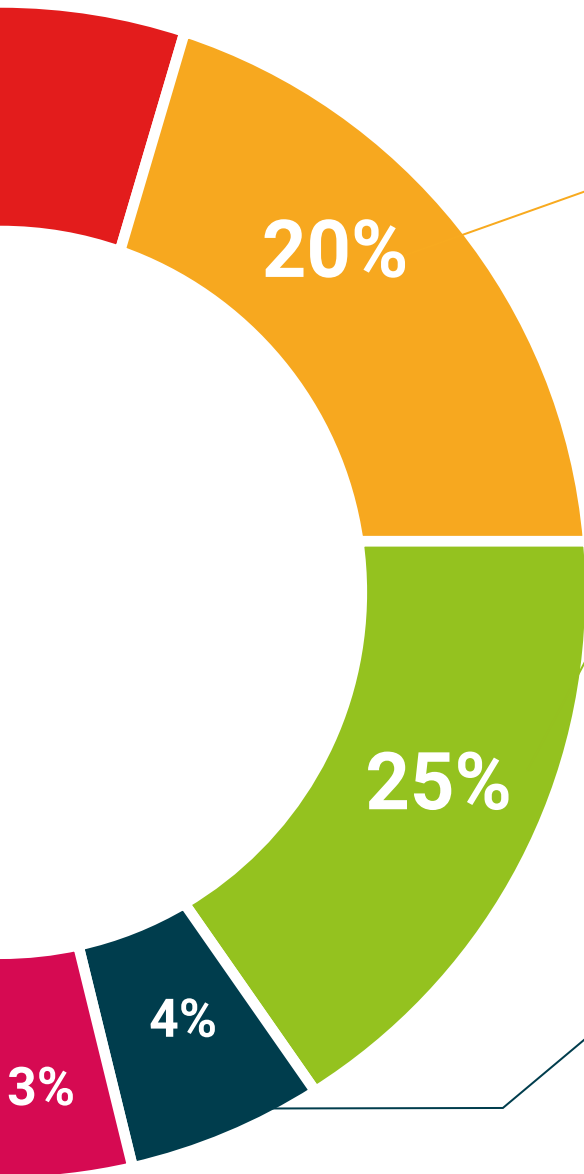
You will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization we live in.



### Additional Reading

Recent articles, consensus documents, international guides. In our virtual library you will have access to everything you need to complete your training.





#### 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 senior management specialists in Latin America.



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



#### Testing & Re-testing

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



# 06 Certificate

The **Postgraduate Certificate in Sports Nutrition in Adverse Conditions** guarantees you, in addition to the most accurate and up-to-date training, access to a Postgraduate Certificate qualification issued by **TECH Global University**.



“

*Successfully complete this training  
and receive your university certificate  
without travel or laborious paperwork”*

This program will allow you to obtain your **Postgraduate Certificate in Sports Nutrition in Adverse Conditions** 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 Certificate in Sports Nutrition in Adverse Conditions**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



\*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.



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

### Sports Nutrition in Adverse Conditions

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams:

# Postgraduate Certificate

## Sports Nutrition in Adverse Conditions

Endorsed by the NBA



**tech** global  
university

