





Sports Nutrition in Adverse Conditions for Nutritionists

» Modality: Online

» Duration: 6 weeks

» Certificate: TECH Global University

» Accreditation: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/nutrition/postgraduate-certificate/sports-nutrition-adverse-conditions-nutritionists

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tech 06 | Introduction to the Program

Sports nutrition faces even more complex challenges when athletes are required to perform in Adverse Conditions, such as extreme climates, high-altitude environments, high humidity, or prolonged physical exertion. In these scenarios, energy requirements and the demand for micronutrients significantly increase, making it necessary to design specific strategies to ensure endurance, optimize strength, promote recovery, and minimize the incidence of injuries.

To address these needs, the academic proposal is based on a rigorous approach that combines theory and practice, enabling the immediate application of knowledge. Through the analysis of scientific evidence and the study of real cases from both elite and recreational athletes, a solid and adaptable learning process is created. Students will work with tools designed to assess nutritional status, identify risks arising from activity in adverse environments, and implement individualized meal plans.

The curriculum covers key topics such as energy metabolism in extreme conditions, the influence of hydration in adverse climates, the role of macronutrients and micronutrients in injury prevention, as well as specific supplementation strategies. Furthermore, the program includes content related to nutritional recovery and immune system strengthening, both essential for sustained performance. All of this is complemented by the Relearning methodology, which, through intelligent and contextual repetition, ensures deep and practical assimilation of knowledge. Additionally, a renowned International Guest Director will conduct a rigorous complementary Masterclass.

Additionally, thanks to the membership in **The Chartered Association of Sport and Exercise Sciences (CASES)**, students will gain access to exclusive educational resources, discounts on events and specialized publications, and practical benefits such as professional insurance. Additionally, you will be able to integrate into an active community, participate in committees, and obtain accreditations that will boost your development, visibility, and professional projection in the fields of sports and exercise science.

This Postgraduate Certificate in Sports Nutrition in Adverse Conditions for Nutritionists contains the most complete and up-to-date university program on the market. Its most notable features are:

- Development of practical cases presented by experts in Nutrition
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where the self-assessment process can be carried out 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



Access an exclusive and complementary Masterclass led by a distinguished International Guest Director, who will share the latest scientific advancements in Sports Nutrition"



Discover cutting-edge nutritional strategies to optimize performance in extreme conditions"

The course includes instructors from the field of Nutrition, who contribute their professional experience, along with recognized specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will provide professionals with situated and contextualized learning—offering a simulated environment designed for immersive study and training for real-world situations.

This program is designed around Problem-Based Learning, whereby the student must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

Learn to design fully tailored meal plans for extreme climates and high altitudes.

Analyze in detail energy metabolism and its influence on prolonged physical endurance.







tech 10 | Why Study at TECH?

The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistuba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.



The most complete syllabus





World's
No.1
The World's largest
online university

The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.



Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.

The top-rated university by its students

Students have positioned TECH as the world's toprated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.





Master the precise planning of hydration and supplementation for athletes in challenging environments"



tech 14 Syllabus

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 VO2 Max.
- 1.7. Nutrition and Hydration in Cold Climates
 - 1.7.1. Hydration
 - 1.7.2. Carbohydrates







Deeply understand the relationship between nutrition, recovery, and prevention of recurrent injuries"





tech 18 | Teaching Objectives



General Objectives

- Design nutrition plans adapted to different levels of physical effort and specific physiological conditions
- Apply principles of exercise physiology to optimize performance in populations with special needs
- Evaluate common nutritional imbalances in athletes with physical limitations or health conditions
- Integrate the latest scientific evidence to promote safe and efficient dietary interventions in specialized sports environments
- Develop a critical and proactive view of the inclusion and adaptation of nutritional strategies in the field of adapted sports
- Incorporate innovative technological tools for continuous monitoring and adjustment of dietary pathways in established sports groups





Teaching Objectives | 19 tech

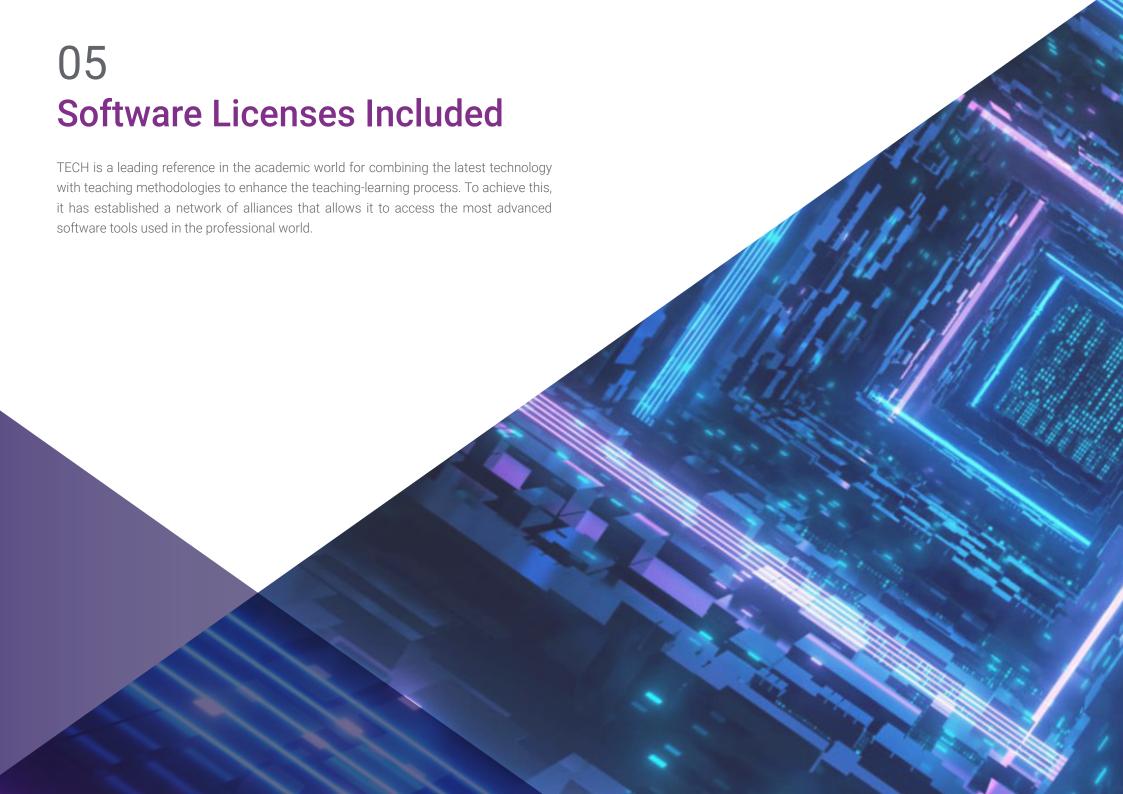


Specific Objectives

- Analyze how extreme climatic conditions affect sports performance and the physiological responses of the body
- Design nutritional and hydration strategies adapted to hot and cold climates, with an emphasis on preventing fatigue and dehydration



Develop specialized competencies in immune system strengthening for high-performance athletes"





tech 22 | Software Licenses Included

TECH has established a network of professional alliances with the leading providers of software applied to various professional fields. These alliances allow TECH to access hundreds of software applications and licenses, making them available to its students.

The software licenses for academic use will allow students to utilize the most advanced applications in their professional field, enabling them to become familiar with and master these tools without incurring any costs. TECH will handle the licensing process so that students can use them indefinitely during the time they are enrolled in the Postgraduate Certificate in Sports Nutrition in Adverse Conditions for Nutritionists, and they will be able to do so completely free of charge.

TECH will provide free access to the following software applications:





Nutrium

Accessing **Nutrium**, a professional platform valued at **200 euros**, is a unique opportunity to optimize patient management. This advanced system allows users to record medical histories, schedule appointments, send reminders, and conduct online consultations, facilitating communication through its mobile app.

Additionally, this exclusive and **free-access** license provides tools for tracking nutritional goals, enabling clients to update their progress in real time. This enhances treatment adherence and improves the effectiveness of dietary recommendations.

Key Features:

- Complete Client Management: Detailed records, appointment scheduling, and automatic reminders
- Continuous Communication: Online consultations and a mobile app for patients
- Nutritional Goal Monitoring: Tools to set and track specific objectives
- Real-Time Updates: Patients can directly report their progress
- Treatment Efficiency: Improved adherence and better outcomes for dietary plans

This platform, available **at no cost** during the program, will allow students to apply their knowledge practically, supporting a comprehensive and efficient approach to nutrition.



DietoPro

As part of our commitment to comprehensive and applied training, all students enrolled in this program will receive **free access** to the **DietoPro** license, specialized in nutrition and valued at approximately **30 euros**. This platform will be available throughout the course. Its use enriches the learning process, facilitating the immediate implementation of the knowledge acquired.

It is an advanced solution that allows users to create personalized plans, record and analyze daily intake, and receive recommendations tailored to each individual. Its intuitive interface and solid technological foundation provide a practical experience aligned with current standards of well-being and digital health.

Key Features:

- Personalized Nutrition Planning: Design meal plans tailored to specific goals, preferences, and requirements
- **Diet Tracking and Monitoring:** Facilitate nutritional control through dynamic reports and detailed nutrient analysis
- Intelligent Suggestions: Use artificial intelligence to propose adjustments and personalized recommendations
- Integration with Health Devices: Compatible with wearables and fitness apps for a comprehensive view of physical health
- Educational Resources: Access to content, guides, and expert advice to reinforce healthy
 habits and promote continuous learning

This **free license** offers a unique opportunity to explore professional tools, solidify theoretical knowledge, and make the most of a high-value practical experience.

i-Diet

Another exclusive benefit of this university program is **free access** to **i-Diet**, a nutritional assessment tool valued at **180 euros**. This flexible platform allows users to modify food and recipe databases, as well as add new elements intuitively.

i-Diet is designed to adapt to different professional needs, enabling the customization of nutritional plans from the first day of the course. The tool incorporates artificial intelligence in its calculations, developed with the support of the Department of Mathematical Modeling at ETSIMO, ensuring precision and scientific rigor in every assessment.

Key Features:

- Editable Database: Access to food and recipes with full customization options
- Al-Powered Calculations: Optimized algorithms for precise and efficient evaluations
- Over 1,000 Supervised Recipes: Content developed by dietitian-nutritionist Cristina Rodríguez Bernardo
- Multiple Body Measurements: Compatible with BIA, ultrasounds, infrared, skinfold calipers, and circumferences
- Intuitive Interface: Easy to use both in consultations and for clinical follow-up

Free **access to i-Diet** during the course provides an invaluable opportunity to apply theoretical knowledge, improve nutritional decision-making, and strengthen the technical skills of professionals.



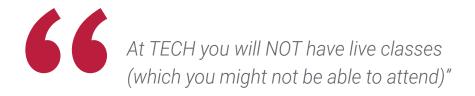


The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.









TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.



TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want"



tech 28 | Study Methodology

Case Studies or Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Method

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

Relearning will allow you to learn with less effort and more performance, involving you more in your specialization, developing a critical spirit, defending arguments and contrasting opinions: a direct equation to success.



tech 30 | Study Methodology

A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

The effectiveness of the method is justified by four fundamental achievements:

- 1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
- 2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- 4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

satisfaction levels of TECH graduates. The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to

the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



tech 32 | Study Methodology

As such, the best educational materials, thoroughly prepared, will be available in this program:



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.



Practicing Skills and Abilities

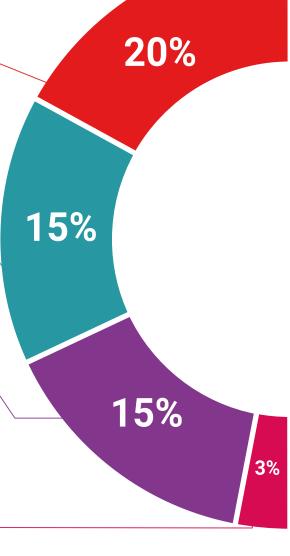
You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



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".





Additional Reading

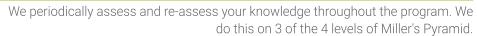
Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.

Students will complete a selection of the best case studies in the field.

Cases that are presented, analyzed, and supervised by the best specialists in the world.



Testing & Retesting





Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

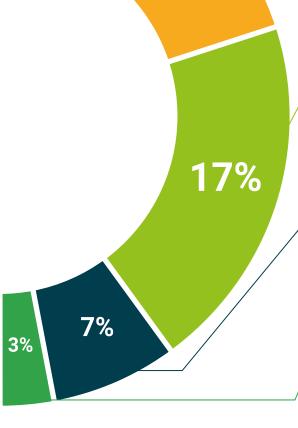


Learning from an expert strengthens knowledge and memory, and generates confidence for future difficult decisions.

Quick Action Guides



TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.







International Guest Director

Jamie Meeks has demonstrated throughout her career her dedication to **Sports Nutrition**. After graduating from Louisiana State University with a degree in Sports Nutrition, she 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 earn 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
- Sports Nutrition Coordinator at Louisiana State University
- Registered Dietitian by the Academy of Nutrition and Dietetics
- Certified Specialist in Sports Dietetics
- Master's Degree in Kinesiology with specialization in Exercise Physiology from the Louisiana State University
- Degree in Dietetics from Louisiana State University
- Member of: Louisiana Dietetic Association, Association of Dietitians Collegiate and Professional, and Dietetic Practice Group of Cardiovascular Sports Nutrition and Wellness



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

tech 38 | Teaching Staff

Management



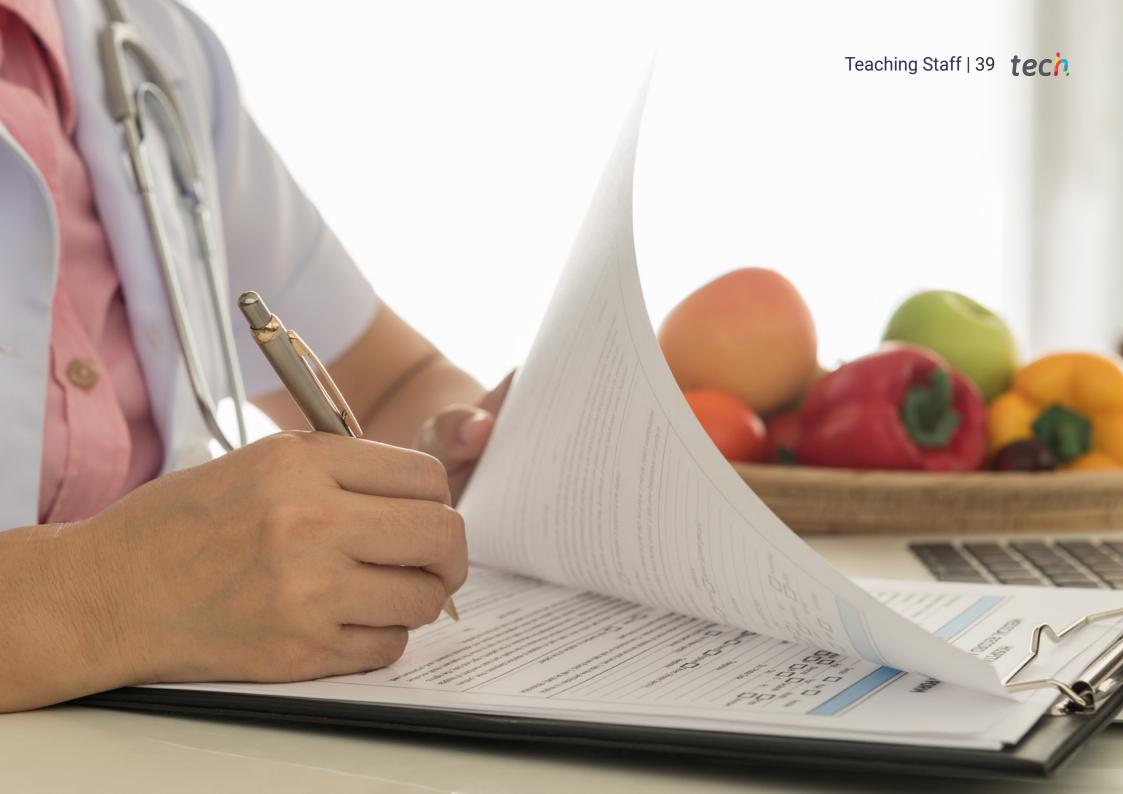
Dr. Marhuenda Hernández, Javier

- Nutritionist in Professional Soccer Clubs
- Head of Sports Nutrition. Club Albacete Balompie SAD
- Head of Sports Nutrition. Catholic University of Murcia, UCAM Murcia Football Club.
- Scientific Advisor. Nutrium
- Nutritional Advisor. Impulse Center
- Teacher and Coordinator of Postgraduate Studies.
- Doctorate in Nutrition and Food Safety. San Antonio Catholic University of Murcia
- Degree in Human Nutrition and Dietetics. San Antonio Catholic University of Murcia
- Master's Degree in Clinical Nutrition. San Antonio Catholic University of Murcia
- Academic. Spanish Academy of Nutrition and Dietetics (AEND)

Faculty

Dr. Arcusa Saura, Raúl

- Nutritionist. Sport Club Castellón
- Nutritionist in several semi-professional clubs in Castellón.
- Researcher. San Antonio Catholic University of Murcia
- Undergraduate and Graduate Faculty
- Graduate in Human Nutrition and Dietetics
- Master's Degree in Nutrition in Physical Activity and Sport







tech 42 | Certificate

This private qualification will allow you to obtain a diploma for the **Postgraduate Certificate in Sports Nutrition in Adverse Conditions for Nutritionists** 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 private qualification from **TECH Global University** is a European continuing education and professional development program that guarantees the acquisition of competencies in its area of expertise, providing significant curricular value to the student who successfully completes the program.

TECH is a member of the distinguished professional organization **The Chartered Association of Sport and Exercise Sciences (CASES)**. This membership reaffirms its commitment to excellence in management and specialized training in the sports field.

Accreditation/Membership



Title: Postgraduate Certificate in Sports Nutrition in Adverse Conditions for Nutritionists

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



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

Postgraduate Certificate in Sports Nutrition in Adverse Conditions for Nutritionists

This is a private qualification of 180 hours of duration equivalent to 6 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



^{*}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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Postgraduate Certificate

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- » Exams: online

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Sports Nutrition in Adverse Conditions for Nutritionists



