





# Hybrid Master's Degree

Sports Nutrition

Modality: Hybrid (Online + Internship)

Duration: 12 months

Certificate: TECH Global University

Credits: 60 + 4 ECTS

We bsite: www.techtitute.com/us/sports-science/hybrid-mater-degree/hybrid-mater-degree-sports-nutrition

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# tech 06 | Introduction to the Program

By directly impacting physical performance, specialized nutritional approaches have become a pillar in modern sports. In fact, this discipline focuses on meal planning to improve body composition, enhance recovery, and prevent injuries. Today, its importance lies in the scientific evidence that supports how individualized nutrition plans contribute to maintaining the athlete's health, offering significant competitive advantages over those who do not receive such guidance. Thanks to these contributions, professionals in the field are seeking to update their knowledge through rigorous programs that incorporate the latest trends in the sector.

Therefore, this curriculum developed by TECH Global University introduces content related to key topics in the field, such as current trends in Nutrition, nutritional status assessment, and nutrition applied to sports practice. With this approach, the program aims to reinforce applied clinical judgment, analyzing diagnostic tools, technological resources, and dietary strategies based on the physiological characteristics of the athlete.

Additionally, this university program guarantees professionals a forward-looking perspective based on scientific content and real-world scenarios, where they will be able to strengthen data-driven decision-making and optimize dietary planning for different types of athletes. It also broadens perspectives toward areas such as comprehensive advisory services, specialized consulting, and intervention in populations with specific needs.

The methodology employed by TECH Global University is distinguished by its dynamism, initially integrating an online phase with high-level educational resources that allow for immersive content exploration. Subsequently, a practical stage is developed at a prestigious institution, where learning is directly transferred to the professional field. As an exclusive element, the program will feature a world-renowned guest who will deliver 10 exclusive Masterclasses.

This **Hybrid Master's Degree in Sports Nutrition** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of over 100 practical cases presented by leading professionals in Sports Nutrition and instructors with extensive experience in managing high-performance athletes
- Its graphic, schematic and practical contents provide essential information on those disciplines that are indispensable for professional practice
- With a special focus on scientific evidence and research methodologies applied to Sports Nutrition
- All of this will be complemented by 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
- Additionally, you will have the opportunity to complete an internship at one of the best companies



You will have the chance to strengthen your professional update through clinical practice at a prestigious center of your choice"



A renowned International Guest Director will provide you with 10 intensive Masterclasses focused on the latest innovations within the field of Sports Nutrition"

In this training proposal, each activity is designed to strengthen and refine the key competencies required for specialized practice in the field of Sports Nutrition, who require a high level of technical and scientific qualification. In this way, the professional profile will be enhanced, driving a strong, efficient, and highly competitive performance. The content is based on the latest scientific evidence and is taught in a way that integrates theoretical knowledge into professional practice, with both theoretical and practical elements facilitating knowledge updates and supporting decision-making in athlete management.

Thanks to its multimedia content developed with the latest educational technology, it will allow sports professionals to engage in situated and contextualized learning. In other words, a simulated environment that provides immersive learning designed to train professionals in real-world situations. The design of this program is based on Problem-Based Learning, by means of which the student must try to solve the different professional practice situations that arise during the program. For this purpose, students will be assisted by an innovative interactive video system created by renowned experts.

Are you interested in leading interventions in Sports Nutrition? With this university program, you will deepen your understanding of the guidelines to act effectively within specialized teams.

You will enhance your skills to provide precise and effective nutrition guidance for athletes during their practice.







## 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 Wistumba, 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.











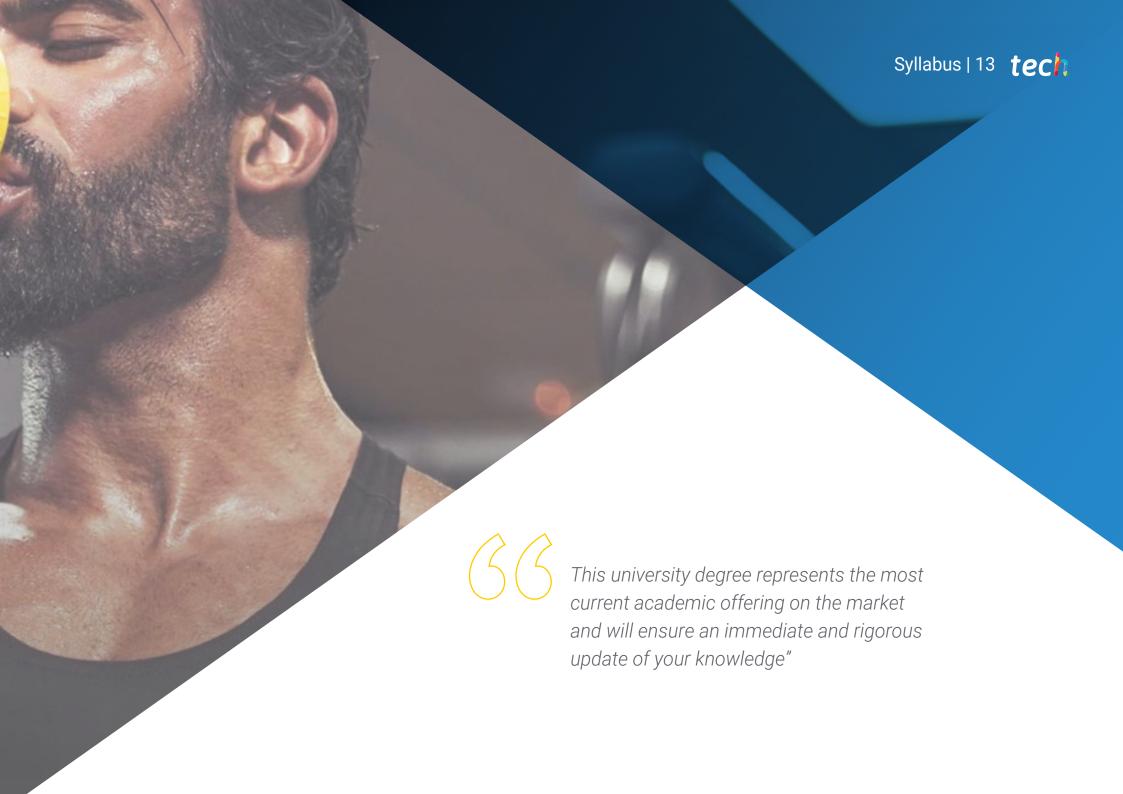
#### **Google Premier Partner**

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 top-rated 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.





## tech 14 | Syllabus

### Module 1. New Developments in Food

- 1.1. Molecular Foundations of Nutrition
- 1.2. Update on Food Composition
- 1.3. Food Composition Tables and Nutritional Databases
- 1.4. Phytochemicals and Non-Nutritive Compounds
- 1.5. New Food
  - 1.5.1. Functional Nutrients and Bioactive Compounds
  - 1.5.2. Probiotics, Prebiotics, and Synbiotics
  - 1.5.3. Quality and Design
- 1.6. Organic Food
- 1.7. Genetically Modified Foods
- 1.8. Water as a Nutrient
- 1.9. Food Safety
  - 1.9.1. Physical Hazards
  - 1.9.2. Chemical Hazards
  - 1.9.3. Microbiological Hazards
- 1.10. New Food Labeling and Consumer Information
- 1.11. Phytotherapy Applied to Nutritional Pathologies

### Module 2. Current Trends in Nutrition

- 2.1. Nutrigenetics
- 2.2. Nutrigenomics
  - 2.2.1. Foundations
  - 2.2.2. Methods
- 2.3. Immunonutrition
  - 2.3.1. Nutrition-Immunity Interactions
  - 2.3.2. Antioxidants and Immune Function
- 2.4. Physiological Regulation of Eating. Appetite and Satiety
- 2.5. Psychology and Nutrition
- 2.6. Nutrition and Sleep
- 2.7. Update on Nutritional Objectives and Recommended Intakes
- 2.8. New Evidence on the Mediterranean Diet

### Module 3. Assessment of Nutritional Status and Diet. Practical Application

- 3.1. Bioenergy and Nutrition
  - 3.1.1. Energy Needs
  - 3.1.2. Methods of Assessing Energy Expenditure
- 3.2. Nutritional Status Assessment
  - 3.2.1. Body Composition Analysis
  - 3.2.2. Clinical Diagnosis. Symptoms and Signs
  - 3.2.3. Biochemical, Hematological and Immunological Methods
- 3.3. Intake Assessment
  - 3.3.1. Methods for Analyzing Food and Nutrient Intake
  - 3.3.2. Direct and Indirect Methods
- 3.4. Update on Nutritional Requirements and Recommended Intakes
- 3.5. Nutrition in a Healthy Adult. Objectives and Guidelines. The Mediterranean Diet
- 3.6. Nutrition in Menopause
- 3.7. Nutrition in the Elderly

### Module 4. Nutrition in Sports Practice

- 4.1. Physiology of Exercise
- 4.2. Physiological Adaptation to Different Types of Exercise
- 1.3. Metabolic Adaptation to Exercise. Regulation and Control
- 4.4. Assessing Athletes' Energy Needs and Nutritional Status
- 4.5. Assessing Athletes' Physical Ability
- 4.6. Nutrition in the Different Phases of Sports Practice
  - 4.6.1. Pre-Competition
  - 4.6.2. During Competition
  - 4.6.3. Post-Competition
- 4.7. Hydration
  - 4.7.1. Regulation and Needs
  - 4.7.2. Types of Beverages
- 4.8. Dietary Planning Adapted to Different Sports
- 4.9. Ergogenic Aids
  - 4.9.1. American Medical Association Recommendations

- 4.10. Nutrition in Sports Injury Recovery
- 4.11. Psychological Disorders Related to Practicing Sport
  - 4.11.1. Eating Disorders: Bigorexia, Orthorexia, Anorexia
  - 4.11.2. Fatigue Caused by Overtraining
  - 4.11.3. The Female Athlete Triad
- 4.12. The Role of the Coach in Sports Performance

### Module 5. Muscular and Metabolic Physiology Related to Exercise

- 5.1. Cardiovascular Adaptations Related to Exercise
  - 5.1.1. Increased Systolic Volume
  - 5.1.2. Decreased Heart Rate
- 5.2. Ventilatory Adaptations Related to Exercise
  - 5.2.1. Changes in the Ventilatory Volume
  - 5.2.2. Changes in Oxygen Consumption
- 5.3. Hormonal Adaptations Related to Exercise
  - 5.3.1. Cortisol
  - 5.3.2. Testosterone
- 5.4. Muscle Structure and Types of Muscle Fibers
  - 5.4.1. Muscle Fiber
  - 5.4.2. Type I Muscle Fiber
  - 5.4.3. Type II Muscle Fibers
- 5.5. The Concept of Lactic Threshold
- 5.6. ATP and Phosphagen Metabolism
  - 5.6.1. Metabolic Pathways for ATP Resynthesis during Exercise
  - 5.6.2. Phosphagen Metabolism
- 5.7. Carbohydrate Metabolism
  - 5.7.1. Carbohydrate Mobilization during Exercise
  - 5.7.2. Types of Glycolysis
- 5.8. Lipid Metabolism
  - 5.8.1. Lipolysis
  - 5.8.2. Fat Oxidation during Exercise
  - 5.8.3. Ketone Bodies

- 5.9. Protein Metabolism
  - 5.9.1. Ammonium Metabolism
  - 5.9.2. Amino Acid Oxidation
- 5.10. Mixed Bioenergetics of Muscle Fibers
  - 5.10.1. Energy Sources and their Relation to Exercise
  - 5.10.2. Factors Determining the Use of One or Another Energy Source during Exercise

### Module 6. Vegetarianism and Veganism

- 6.1. Vegetarianism and Veganism in the History of Sport
  - 6.1.1. The Beginnings of Veganism in Sport
  - 6.1.2. Vegetarian Athletes Today
- 6.2. Different Types of Vegetarian Food
  - 6.2.1. New Trends in Vegetarianism
    - 6.2.1.1. Veganism and Health
  - 6.2.2. Types of Vegetarian Athletes
    - 6.2.2.1. Raw Vegans (Crudivegans)
    - 6.2.2.2. Reasons for Being Vegan: Health
- 6.3. Common Errors in the Vegan Athlete
  - 6.3.1. Energy Balance
  - 6.3.2. Protein Consumption
- 6.4. Vitamin B12
  - 6.4.1. B12 Supplementation
  - 6.4.2. Bioavailability of Spirulina Algae
- 6.5. Protein Sources in the Vegan/Vegetarian Diet
  - 6.5.1. Protein Quality
  - 6.5.2. Environmental Sustainability
- 6.6. Other Key Nutrients in Vegans
  - 6.6.1. Conversion of ALA to EPA/DHA
  - 6.6.2. Fe, Ca, Vit-D and Zn
- 6.7. Biochemical Evaluation/Nutritional Shortcomings
  - 6.7.1. Anemia
  - 6.7.2. Sarcopenia

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- 6.8. Vegan Diet vs. Omnivorous Diet
  - 6.8.1. Evolutionary Diet
  - 6.8.2. Current Diet
- 6.9. Ergogenic Aids
  - 6.9.1. Creatine
  - 6.9.2. Plant-Based Protein
- 6.10. Factors that Decrease Nutrient Absorption
  - 6.10.1. High Fiber Intake
  - 6.10.2. Oxalates

### Module 7. Different Stages or Specific Population Groups

- 7.1. Nutrition in the Female Athlete
  - 7.1.1. Limiting Factors
  - 7.1.2. Requirements
- 7.2. Menstrual Cycle
  - 7.2.1. Luteal Phase
  - 7.2.2. Follicular Phase
- 7.3. Triad
  - 7.3.1. Amenorrhea
  - 7.3.2. Osteoporosis
- 7.4. Nutrition in the Pregnant Female Athlete
  - 7.4.1. Energy Requirements
  - 7.4.2. Micronutrients
- 7.5. The Effects of Physical Exercise on the Child Athlete
  - 7.5.1. Strength Training
  - 7.5.2. Endurance Training
- 7.6. Nutritional Education in the Child Athlete
  - 7.6.1. Sugar
  - 7.6.2. Eating Disorders
- 7.7. Nutritional Requirements in the Child Athlete
  - 7.7.1. Carbohydrates
  - 7.7.2. Proteins

- 7.8. Changes Associated with Aging
  - 7.8.1. Body Fat Percentage
  - 7.8.2. Muscle Mass
- 7.9. Main Problems in the Older Athlete
  - 7.9.1. Joints
  - 7.9.2. Cardiovascular Health
- 7.10. Interesting Supplements for Older Athletes
  - 7.10.1. Whey Protein
  - 7.10.2. Creatine

### Module 8. Nutrition for Rehabilitation and Functional Recovery

- 8.1. Comprehensive Nutrition as a Key Element in Injury Prevention and Recovery
- 8.2. Carbohydrates
- 8.3. Proteins
- 8.4. Fats
  - 8.4.1. Saturated
  - 8.4.2. Unsaturated
    - 8.4.2.1. Monounsaturated
    - 8.4.2.2. Polyunsaturated
- 8.5. Vitamins
  - 8.5.1. Water Soluble
  - 8.5.2. Fat Soluble
- 8.6. Minerals
  - 8.6.1. Macrominerals
  - 8.6.2. Microminerals
- 8.7. Fiber
- 8.8. Water
- 8.9. Phytochemicals
  - 8.9.1. Phenols
  - 8.9.2. Thiols
  - 8.9.3. Terpenes
- 8.10. Food Supplements for Prevention and Functional Recovery

# **Module 9.** Food, Health and Disease Prevention: Current Issues and Recommendations for the General Population

- 9.1. Eating Habits in the Current Population and Health Risks
- 9.2. Mediterranean and Sustainable Diet
  - 9.2.1. Recommended Dietary Pattern
- 9.3. Comparison of Dietary Patterns or Diets
- 9.4. Nutrition in Vegetarians
- 9.5. Childhood and Adolescence
  - 9.5.1. Nutrition, Growth and Development
- 9.6. Adults
  - 9.6.1. Nutrition for the Improvement of Quality of Life
  - 9.6.2. Prevention
  - 9.6.3. Disease Treatment
- 9.7. Pregnancy and Lactation Recommendations
- 9.8. Recommendations in Menopause
- 9.9. Advanced Age
  - 9.9.1. Nutrition in Aging
  - 9.9.2. Changes in Body Composition
  - 9.9.3. Abnormalities
  - 9.9.4. Malnutrition
- 9.10. Nutrition in Athletes

# **Module 10.** Assessment of Nutritional Status and Calculation of Personalized Nutrition Plans, Recommendations, and Follow-up

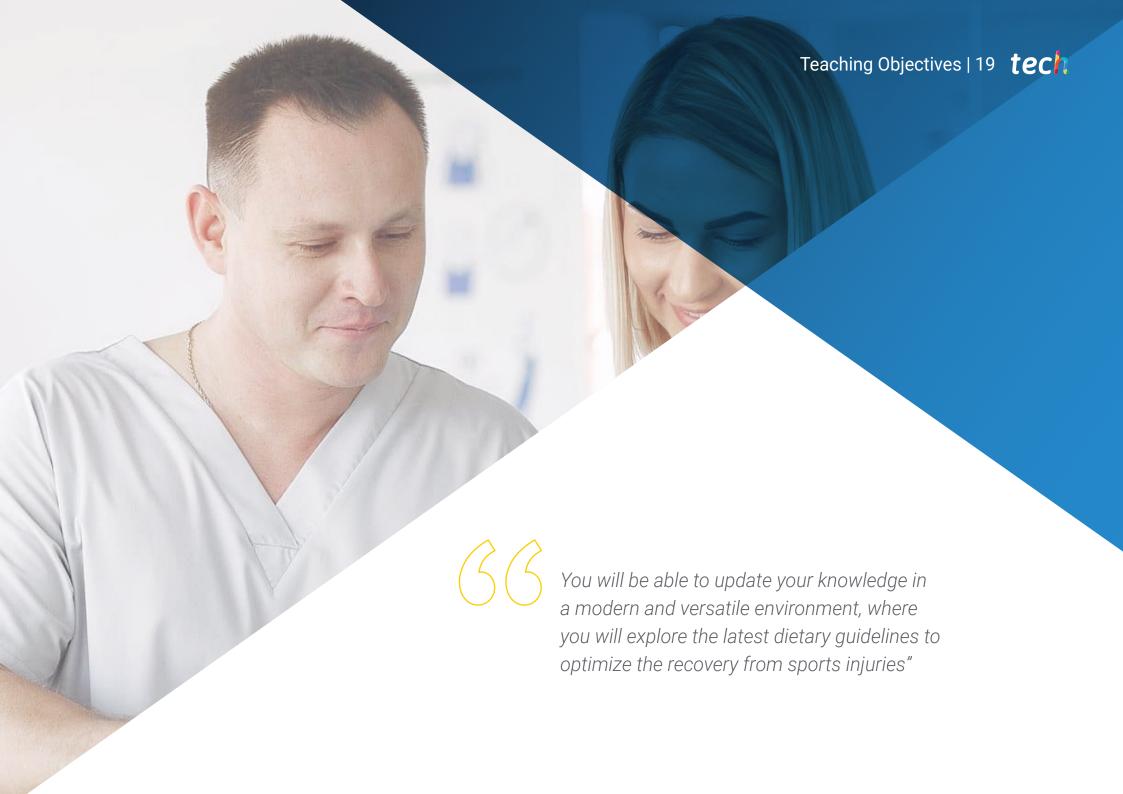
- 10.1. Medical History and Background
  - 10.1.1. Individual Variables Affecting Nutritional Plan Response
- 10.2. Anthropometry and Body Composition
- 10.3. Assessment of Eating Habits
  - 10.3.1. Nutritional Assessment of Food Consumption
- 10.4. Interdisciplinary Team and Therapeutic Circuits
- 10.5. Calculation of Energy Intake
- 10.6. Calculation of Recommended Macro- and Micronutrient Intakes

- 10.7. Quantity and Frequency of Food Consumption Recommendations
  - 10.7.1. Dietary Patterns
  - 10.7.2. Planning
  - 10.7.3. Distribution of Daily Meals
- 10.8. Diet Planning Models
  - 10.8.1. Weekly Menus
  - 10.8.2. Daily Intake
  - 10.8.3. Methodology by Food Exchanges
- 10.9. Hospital Nutrition
  - 10.9.1. Dietary Models
  - 10.9.2. Decision Algorithms
- 10.10. Education
  - 10.10.1. Psychological Aspects
  - 10.10.2. Maintenance of Eating Habits
  - 10.10.3. Discharge Recommendations



TECH Global University will provide you with a distinctive methodology that will foster the development of key competencies in a field characterized by its constant evolution"





# tech 20 | Teaching Objectives



## **General Objective**

• The main goal of this Hybrid Master's Degree in Sports Nutrition is to provide students with the necessary tools to apply effective nutritional interventions in senior athletes, incorporating supplementation strategies adapted to the physiological changes of aging. It also promotes the development of skills to optimize recovery from sports injuries through dietary guidelines aimed at accelerating tissue regeneration and controlling inflammatory processes. Thanks to an evidence-based approach, it enhances competencies that allow for the design of personalized proposals, improving musculoskeletal functionality and maintaining performance over time



This innovative curriculum will provide you with the scientific and applied foundations necessary to design personalized nutritional plans with rigor and effectiveness"





### Module 1. New Developments in Food

- Understand the molecular foundations of nutrition and its influence on the body
- Analyze the composition of foods and their application in dietetics
- Evaluate food safety risks present in the food consumption chain
- · Interpret new food labeling and its impact on the consumer

#### Module 2. Current Trends in Nutrition

- Explore nutrigenetics and nutrigenomics to understand their impact on personalized nutrition
- Analyze the relationship between nutrition and immunity, highlighting the role of antioxidants
- Evaluate the physiological and psychological factors that regulate appetite and satiety
- Examine new evidence on the Mediterranean diet and its health benefits

### Module 3. Assessment of Nutritional Status and Diet. Practical Application

- Evaluate energy needs and methods for assessing energy expenditure in different populations
- Apply nutritional status assessment techniques through body composition analysis and biochemical methods
- Analyze food and nutrient intake through direct and indirect methods, ensuring an accurate diet evaluation
- Update nutritional requirements and adapt dietary guidelines to different life stages, including menopause and old age

### Module 4. Nutrition in Sports Practice

- Examine the energy needs and nutritional status of athletes to optimize performance
- Plan dietary strategies specific to each sports phase, from preparation to post-competition recovery
- Analyze sports hydration, regulating needs and selecting appropriate beverages
- Apply knowledge of ergogenic aids and anti-doping regulations, ensuring optimal performance within the regulatory framework

### Module 5. Muscular and Metabolic Physiology Related to Exercise

- Evaluate cardiovascular and ventilatory adaptations associated with exercise, optimizing physical performance
- Analyze hormonal adaptations to exercise, understanding the impact of cortisol and testosterone on metabolism
- Explore the metabolism of carbohydrates, lipids, and proteins during exercise, focusing on their mobilization and energy utilization
- Understand the concept of lactate threshold and its relation to mixed bioenergetics in muscle fibers, improving metabolic efficiency

# tech 22 | Teaching Objectives

### Module 6. Vegetarianism and Veganism

- Analyze the impact of vegetarianism and veganism in sports, considering its evolution and adoption by athletes
- Differentiate types of plant-based diets, highlighting their benefits for vegan and vegetarian athletes
- Identify common errors in vegan diets for athletes, such as energy balance and adequate protein intake
- Evaluate key nutrients in plant-based diets, including vitamin B12, iron, calcium, vitamin D, and zinc
- Compare the effects of vegan versus omnivorous diets, considering sustainability and sports performance
- Explore ergogenic aids such as creatine and plant-based protein to optimize performance in vegan diets

### Module 7. Different Stages or Specific Population Groups

- Evaluate the specific nutritional needs of female athletes, considering limiting factors and energy requirements
- Analyze the impact of the menstrual cycle on sports performance, focusing on the luteal and follicular phases
- Examine the female athlete triad, addressing conditions such as amenorrhea and osteoporosis in the sports context
- Explore appropriate nutrition for pregnant female athletes, highlighting the importance of micronutrients and energy requirements





#### Module 8. Nutrition for Readaptation and Functional Recovery

- Evaluate the impact of a comprehensive diet on injury prevention and recovery
- Determine the effect of carbohydrates, proteins, and fats in functional reconditioning
- Analyze the role of vitamins and minerals in optimizing post-injury recovery
- Investigate the function of phytochemicals in muscle regeneration after an injury

# Module 9. Food, Health and Disease Prevention: Current Issues and Recommendations for the General Population

- Evaluate current eating habits and their relationship with health risks
- Compare dietary models and their impact on disease prevention
- Analyze nutritional recommendations for different life stages: childhood, adolescence, adulthood, and aging
- Examine the Mediterranean diet as a sustainable model and its health benefits

# Module 10. Assessment of Nutritional Status and Calculation of Personalized Nutrition Plans, Recommendations, and Follow-up

- Investigate individual variables in medical history that impact the nutrition plan
- Calculate energy intake and recommend macronutrients and micronutrients
- Plan and distribute daily meals, adjusting quantities and frequency according to individual needs
- Develop dietary planning models, such as weekly menus and exchange schemes
- Apply decision algorithms in hospital nutrition to adapt diets to patient needs
- Implement educational strategies to maintain healthy eating habits and provide psychological support upon discharge





# tech 26 | Internship

The practical training period of this university program in Sports Nutrition includes an intensive stay at a leading institution, always accompanied by a specialized tutor. This experience will allow the graduate to apply the knowledge acquired in a real-world environment, interacting with renowned professionals in the field and consolidating the implementation of evidence-based nutritional strategies.

In this training proposal, each activity is designed to strengthen and refine the key competencies required for specialized practice in this field. In this way, the professional profile will be enhanced, driving a strong, efficient, and highly competitive performance.

In this way, the university program represents a unique opportunity to deepen the practice of Sports Nutrition in a modern and technologically advanced environment. Additionally, it will allow the integration of nutritional procedures into real professional scenarios, promoting the optimization of competencies in dynamic and practical contexts.

The practical component will involve the active participation of the student, performing the activities and procedures of each area of competence (learning to learn and learning to do), with the support and guidance of instructors and fellow trainees, facilitating teamwork and the multidisciplinary integration of transversal competencies for the practice of Sports Nutrition (learning to be and learning to relate).

The procedures described below will be the basis of the practical part of the Internship Program, and its realization will be subject to the center's own availability and workload, being the proposed activities the following:





# Internship | 27 tech

Module	Practical Activity
Approach to Recent Innovations in Nutrition	Understand the molecular foundations of Nutrition
	Update knowledge on food composition
	Evaluate physical, chemical, and microbiological hazards in food safety
	Interpret new food labeling and consumer information
Nutritional Status Analysis and Diet Design	Calculate energy needs and apply methods for assessing energy expenditure
	Analyze body composition and perform clinical diagnosis through signs and symptoms
	Evaluate food and nutrient intake using direct and indirect methods
	Update nutritional requirements and recommended intakes for different life stages
Nutritional Strategies Applied to Sports Performance	Analyze physiological and metabolic adaptation to exercise in different sports modalities
	Evaluate the energy needs, nutritional status, and physical capacity of athletes
	Plan nutrition and hydration strategies for pre-, during-, and post-competition phases
	Apply recovery nutrition strategies and manage eating disorders and psychological issues related to sports practice
Nutrition Techniques for Specific Age Groups and Populations	Analyze the nutritional needs and limiting factors for female and pregnant athletes
	Evaluate the effects of physical exercise on child athletes, including strength and endurance
	Monitor body changes associated with aging and their impact on muscle and fat composition
	Design supplementation strategies tailored to the needs of senior athletes



## **Civil Liability Insurance**

The university's main concern is to guarantee the safety of the interns, other collaborating professionals involved in the internship process at the center. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, the university commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the Internship Program period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



# **General Conditions of the Internship Program**

The general terms and conditions of the internship agreement for the program are as follows:

- 1. TUTOR: During the Hybrid Master's Degree, students will be assigned two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.
- **2. DURATION:** The internship program will have a duration of three continuous weeks, in 8-hour days, five days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.
- 3. ABSENCE: If the student does not show up on the start date of the Hybrid Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

- **4. CERTIFICATION:** Professionals who complete the Hybrid Master's Degree will receive a diploma accrediting their attendance at the institution.
- **5. EMPLOYMENT RELATIONSHIP:** The Hybrid Master's Degree shall not constitute an employment relationship of any kind.
- **6. PRIOR EDUCATION:** Some centers may require a certificate of prior education for the completion of the Hybrid Master's Degree. In these cases, it will be necessary to submit it to the internship department at TECH so that the assignment of the chosen center can be confirmed.
- 7. DOES NOT INCLUDE: The Hybrid Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.





# tech 32 | Internship Centers

The student will be able to complete the practical part of this Hybrid Master's Degree at the following centers:



### Centro Sano San Pedro

Country City
Spain Burgos

Address: San Pedro y San Felices n°15-n°17. 09001. Burgos

Business management consultant in Madrid

#### Related internship programs:

- Therapeutic Personal Training - Sports Nutrition





# Internship Centers | 33 tech



### Centro Sano López Bravo

Country City
Spain Burgos

Address: C/ López Bravo 1, Puerta 4, módulo 4. 09001. Villalonquejar

Business management consultant in Madrid

#### Related internship programs:

- Therapeutic Personal Training - Sports Nutrition



#### Centro Sano Paseo de la Isla

Country City
Spain Burgos

Address: Paseo la Isla, 7. 09003. Burgos

Business management consultant in Madrid

#### Related internship programs:

- Therapeutic Personal Training - Sports Nutrition



### **Olympus Center**

Country City
Spain Madrid

Address: Calle de Palos de la Frontera, 16, 28012 Madrid

Olympus Center specializes in meeting the objectives of the person, according to their physical condition

#### Related internship programs:

- High Performance in Sports
  - Fitness Instructor





# tech 36 | Career Opportunities

#### **Graduate Profile**

Graduates of this university qualification in Sports Nutrition will acquire the ability to assess and design personalized nutrition plans, integrating physiological, metabolic, and biochemical aspects unique to each athlete. Furthermore, they will develop skills to analyze current food trends, taking into account social and cultural factors that influence nutritional habits. They will also be prepared to implement strategies for injury prevention and recovery through evidence-based dietary interventions. As a result, they will be able to advise on high-performance programs, optimize body composition, and promote healthy habits, establishing themselves as professionals capable of making a tangible impact in the sports field.

You will ensure the proper application of personalized nutrition plans, integrating physiological, metabolic, and biochemical aspects unique to each athlete.

- **Critical Thinking:** The ability to evaluate scientific information, interpret body composition and dietary data, and make informed decisions to design personalized nutrition plans
- Effective Communication: The responsibility to clearly convey nutritional recommendations to athletes, coaches, and multidisciplinary teams, ensuring understanding and adherence to dietary strategies
- Teamwork: The ability to collaborate with professionals from various fields, such
  as sports medicine or physiotherapy, to integrate nutrition plans within training and
  recovery programs
- Time Management and Planning: The responsibility to organize assessments, follow-ups, and dietary adjustments, ensuring efficiency and the achievement of nutritional goals within established timelines



After completing the university program, you will be able to apply your knowledge and skills in the following positions:

- 1. Sports Nutritionist: Supervisor of personalized dietary plans for athletes, optimizing their performance, recovery, and body composition according to their discipline and individual needs. Sports Supplementation Advisor: Responsible for assessing and recommending the safe and effective use of nutritional supplements, ensuring they align with the athlete's goals and requirements.
- **2. Performance Program Coordinator:** Supervisor of integrated nutritional strategies within training and high-performance plans, working alongside coaches and health professionals.
- **3. Functional Nutrition Consultant:** Responsible for developing preventive nutrition programs to improve the overall health of athletes, incorporating functional foods and injury prevention strategies.
- **4. Applied Sports Nutrition Researcher:** Dedicated to conducting studies on metabolism, supplementation, and dietary habits of athletes, providing data for the improvement of professional practices.
- **5. Sports Nutrition Program Manager:** Responsible for managing nutritional projects in sports clubs or centers, ensuring the implementation of evidence-based strategies.
- **6. Performance and Nutrition Analyst:** Responsible for monitoring nutritional and body composition indicators, evaluating the effectiveness of dietary plans, and suggesting adjustments to optimize results.



By graduating from the world's largest digital university, you will gain access to multiple career opportunities that will drive the growth of your professional career"





# tech 40 | Software Licenses Included

TECH Global University 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 Global University will manage the licensing process, enabling students to use the software without limitations throughout their studies in the Hybrid Master's Degree in Sports Nutrition, and they will be able to do so entirely free of charge.

TECH Global University will provide free access to the following software applications:







#### **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: Uses 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.

#### 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.



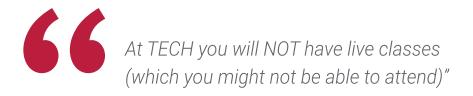


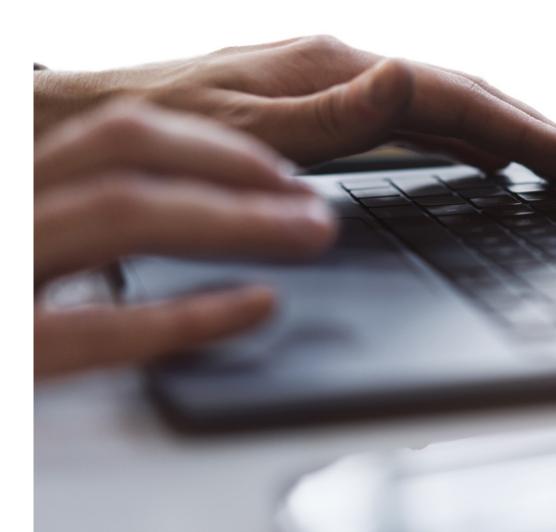
## The student: the priority of all TECH programs

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.









# The most comprehensive study plans at the international level

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 46 | Study Methodology

#### Case Studies and 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.



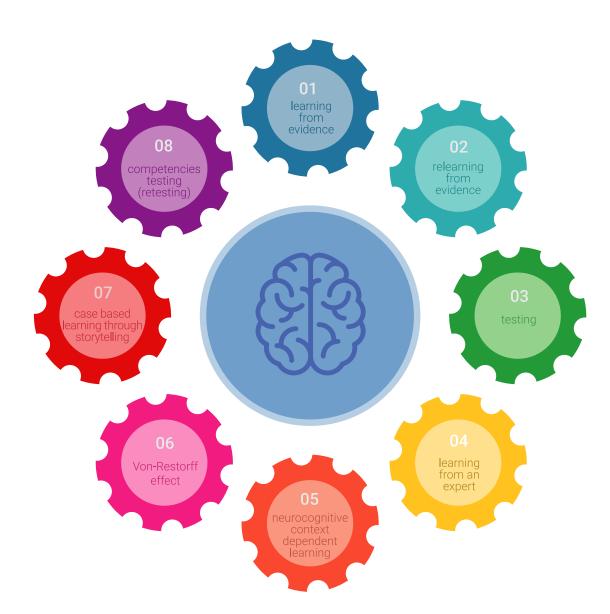
# Relearning Methodology

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 better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.





# 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.

# Study Methodology | 49 tech

# The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall 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.

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**

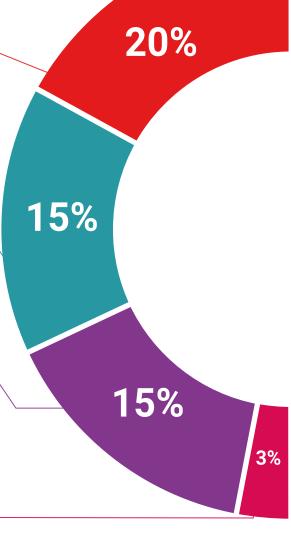
You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



#### **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.

# Study Methodology | 51 tech



eld.

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**



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

#### Classes



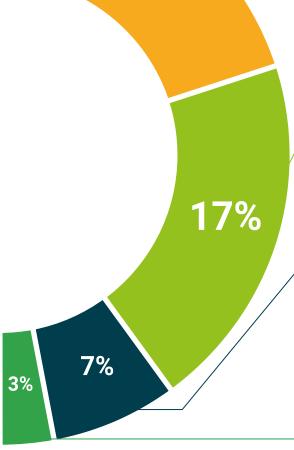
There is scientific evidence suggesting that observing third-party experts can be useful.

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**

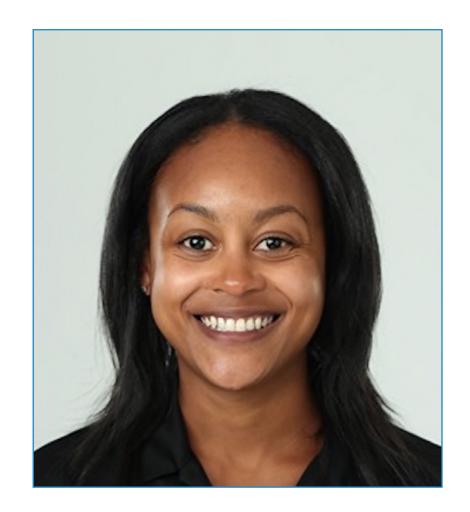
Shelby Johnson has a distinguished career as a Sports Nutritionist, specializing in college sports in the United States. In fact, her experience and specific knowledge in this area have been key in her goal of contributing to the best performance of high performance athletes.

As Director of Sports Nutrition at Duke University, she has provided nutritional and health assistance to student athletes. In addition, she has served on the nutritionist staff at the University of Missouri and on the University of Florida football, lacrosse and women's basketball teams.

Likewise, her commitment to offer young athletes the best nutritional advice during their training and competitions has led her to perform a remarkable work in this professional field. In this way, to guarantee the best attention to athletes, she has been in charge of performing body composition analysis and building personalized plans, according to each person's objective. She has also guided athletes on the most appropriate diets for their physical efforts, in order to contribute to their full performance and avoid health problems.

During her professional career, Shelby Johnson has worked in **sports nutrition**, and her ability to adapt to different disciplines has allowed her to broaden her areas of expertise and offer much more precise attention.

Thanks to her skills and experience, she has created a Food Sensitivity Policy for Sports Health, seeking to highlight the importance of proper nutrition for health. Therefore, its goal has always been to disseminate all information that helps athletes to become aware of the best nutrients, vitamins and foods to achieve their goals.



# Ms. Johnson, Shelby

- Director of Sports Nutrition at Duke University, Durham, United States
- Nutrition Consultant
- Nutritionist for the soccer, lacrosse and women's basketball teams at the University of Florida
- Specialist in Sports Nutrition
- Master's Degree in Applied Physiology and Kinesiology from the University of Florida
- Bachelor's Degree in Dietetics from Lipscomb University



# Management



# Dr. Pérez de Ayala, Enrique

- Head of the Sports Medicine Department at Gipuzkoa Polyclinic
- Degree in Medicine from the Autonomous University of Barcelona
- Master's Degree in Evaluation of Bodily Injury
- Expert in Biology and Sports Medicine from the Pierre et Marie Curie University
- Former Head of the Sports Medicine Section of the Real Sociedad de Fútbol
- Member of: Spanish Association of Football Team Doctors, Spanish Federation of Sports Medicine and Spanish Society of Aerospace Medicine

## **Faculty**

## Ms. Aldalur Mancisidor, Ane

- Dietitian Specializing in Plant-Based Diets
- Degree in Nursing
- Higher Technical Degree in Dietetics and Nutrition by Cebanc
- Expert in Eating Disorders and Sports Nutrition
- Member of the Dietetics Office of the Basque Health Service

### Ms. Urbeltz, Uxue

- BPX Instructor, Patronato de Deportes de San Sebastian
- Dietician in Policlínica Gipuzkoa
- Diploma in Dietetics and Nutrition
- Degree in Innovation Engineering in Food Processes and Products by the Public University of Navarra
- Online Postgraduate Course in Microbiota by Regenera
- Certificate in Anthropometry ISAK Level 1 by The International Society for the Advancement of Kinanthropometry (ISAK)





Boost your career path with holistic teaching, allowing you to advance both theoretically and practically"





# tech 60 | Certificate

This private qualification will allow you to obtain a diploma for the **Hybrid Master's Degree in Sports Nutrition** 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.

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

Hybrid Master's Degree in Sports Nutrition

This is a private qualification of 1,920 hours of duration equivalent to 64 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

The Official Online University of the NBA

The coullboard of the NBA is companied by the competent surborty to particle professionally is each country.

This **TECH Global University** private qualification, 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: Hybrid Master's Degree in Sports Nutrition

Modality: online

Duration: 12 months

Accreditation: 60 + 4 ECTS



<sup>\*</sup>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.



# **Hybrid Master's Degree**Sports Nutrition

Modality: Hybrid (Online + Internship)

Duration: 12 months

Certificate: TECH Global University

Credits: 60 + 4 ECTS

