

Master's Degree Sports Nutrition

The Chartered
Association for Sports
and Exercise Science



Endorsed by the NBA



tech global
university





Master's Degree Sports Nutrition

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Accreditation: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/sports-science/master-degree/master-sports-nutrition

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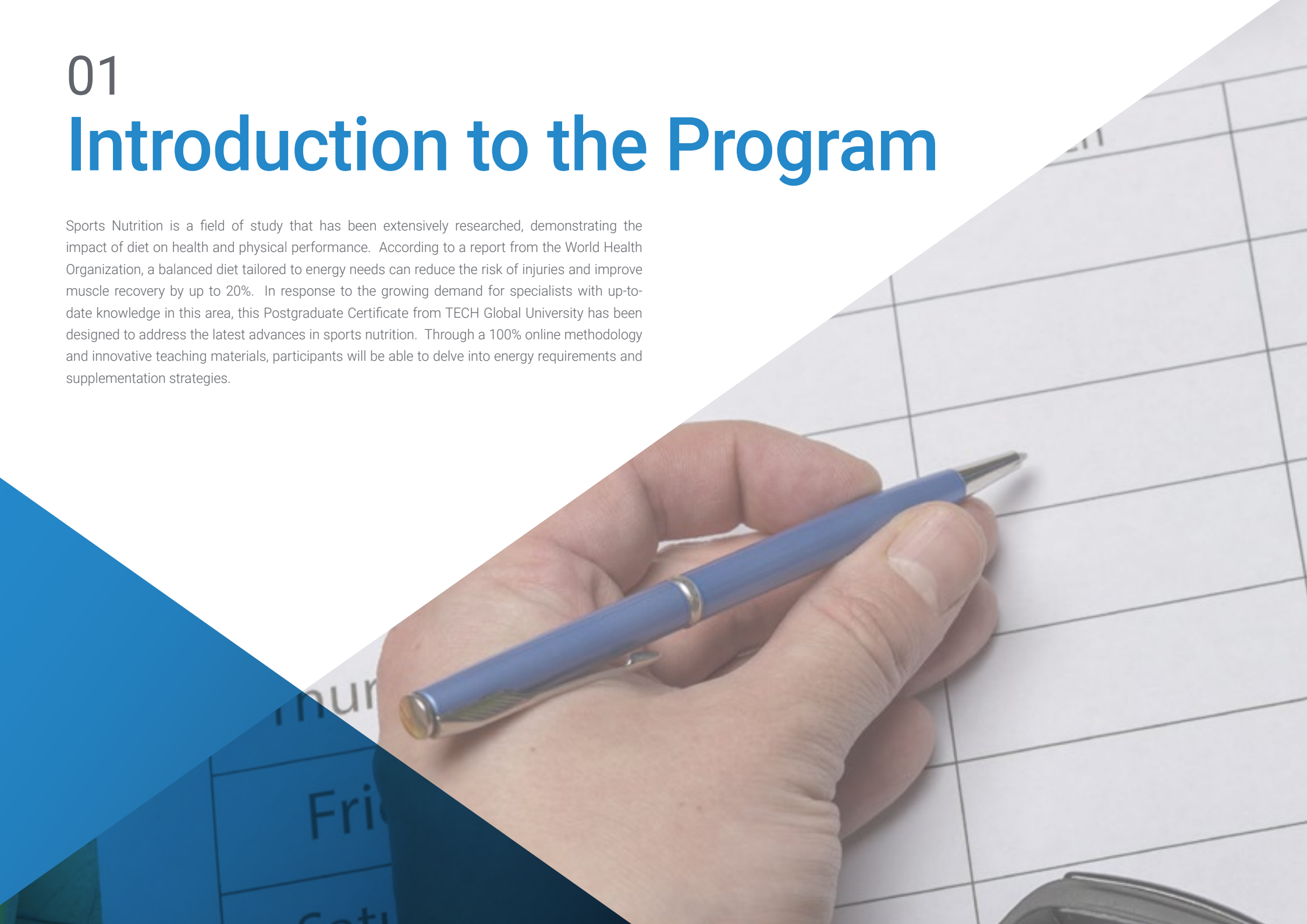
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01

Introduction to the Program

Sports Nutrition is a field of study that has been extensively researched, demonstrating the impact of diet on health and physical performance. According to a report from the World Health Organization, a balanced diet tailored to energy needs can reduce the risk of injuries and improve muscle recovery by up to 20%. In response to the growing demand for specialists with up-to-date knowledge in this area, this Postgraduate Certificate from TECH Global University has been designed to address the latest advances in sports nutrition. Through a 100% online methodology and innovative teaching materials, participants will be able to delve into energy requirements and supplementation strategies.



Dinner

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A comprehensive and 100% online program, exclusive to TECH, with an international perspective supported by our membership with The Chartered Association of Sport and Exercise Sciences”

In a context where the science of nutrition is constantly advancing, the personalization of dietary strategies according to the needs of each sport and athlete has become an essential pillar for achieving peak performance.

Therefore, TECH Global University will address, with scientific rigor and a practical approach, the particularities of nutrition in sports practice, adapting to the needs of each discipline and level of physical demand. Additionally, it will incorporate updated content such as vegetarianism applied to sports, analyzing the planning of balanced diets that ensure optimal performance without compromising the athlete's health.

Furthermore, this university program will provide professionals with the necessary tools to design nutritional strategies tailored to the individual demands of each athlete. Through a practical, research-based approach, skills will be strengthened to assess nutritional status, develop optimal meal plans, and implement specific protocols that enhance performance and recovery.

Subsequently, TECH has developed an innovative methodology that allows flexible access to high-quality content without time restrictions. Thanks to its 100% online system, available 24 hours a day, 7 days a week, it is possible to train from any device with an internet connection. Moreover, the Relearning method will facilitate a progressive assimilation of knowledge, optimizing the retention of key information. As a significant added value, this university program will feature a prestigious global guest who will deliver 10 exclusive Masterclasses.

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. They will also be able to join an active community, participate in committees, and obtain accreditations that enhance their development, visibility, and professional prospects in the field of sports and exercise science.

This **Master's Degree in Sports Nutrition** contains the most complete and up-to-date university program on the market. Its most notable features are:

- ◆ The development of case studies presented by experts in Sports 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 self-assessment can be used to improve learning
- ◆ Its special emphasis on innovative methodologies
- ◆ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ◆ Content that is accessible from any fixed or portable device with an internet connection



You will incorporate the latest advancements in sports nutrition into your professional practice"

“

You will plan specific diets tailored to the needs of each sports discipline”

The teaching staff includes professionals from the field of Sports Nutrition, who bring their work experience to this program, as well as recognized specialists from leading 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 an immersive learning experience designed to prepare for real-life 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.

You will incorporate the latest advancements in sports nutrition into your professional practice.

You will plan specific diets tailored to the needs of each sports discipline.



02

Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs, available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it has a huge faculty of more than 6,000 professors of the highest international prestige.



“

Study at the largest online university in the world and ensure your professional success. The future begins 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".

Forbes

The best online university in the world

The most complete syllabus

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.

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.

TOP
international faculty



The most effective methodology

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 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.

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

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 official online university of the NBA

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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.



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.

03 Syllabus

The concepts covered by the academic pathway of this university program constitute fundamental aspects of Sports Nutrition. In fact, there will be an in-depth exploration of muscular and metabolic physiology related to exercise. Furthermore, the program will delve into nutrition for reconditioning and functional recovery, addressing dietary strategies that promote muscle regeneration and optimize training. Through an evidence-based approach, advanced methodologies for planning diets adapted to various sports demands will be analyzed, ensuring students acquire updated knowledge that can be applied in professional practice across different areas of physical performance.





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Get up to date with this rigorous syllabus and discover the most advanced approaches to Nutrition for functional recovery”

Module 1. New Developments in Nutrition

- 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. Fundamentals
 - 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. Assessment of Nutritional Status
 - 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. Analysis Methods for 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
- 4.3. 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
 - 4.6.3. Post-Competition
- 4.7. Hydration
 - 4.7.1. Regulation and Needs
 - 4.7.2. Drink Types
- 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 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. Ammonia 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 Different Energy Sources 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. The Vegan Athlete
 - 6.2.2. The Vegetarian Athlete
- 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
- 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
 - 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



With high-quality multimedia materials, you will delve into the principles of the Mediterranean and sustainable diet"

04

Teaching Objectives

The main goal of this university program is to provide professionals with a comprehensive range of knowledge in Sports Nutrition, enhancing their skills to design dietary strategies tailored to various physiological and metabolic demands. Through an evidence-based approach, the program will optimize the ability to interpret and apply nutritional information accurately, fostering informed decision-making. Furthermore, the development of innovative interventions integrating scientific and technological advancements in the nutritional field will be promoted. All of this will contribute to improving performance and functional recovery, solidifying a specialized profile in Sports Nutrition counseling.





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You will be equipped to design high-level dietary strategies tailored to diverse physiological and metabolic demands”



General Objectives

- ♦ Provide updated knowledge on advancements in nutrition and their impact on health and athletic performance
- ♦ Explore current trends in nutrition, analyzing their applicability in various professional contexts
- ♦ Develop competencies in assessing nutritional status and diet, facilitating their application in clinical and sports practice
- ♦ Delve into nutrition in sports practice, optimizing physical performance through evidence-based nutritional strategies
- ♦ Examine vegetarianism and veganism, addressing their benefits and considerations in sports and clinical settings
- ♦ Adapt nutritional strategies to different life stages and specific populations, ensuring personalized interventions
- ♦ Implement nutrition plans for reconditioning and functional recovery, promoting regeneration and injury prevention
- ♦ Apply nutritional assessment tools to design personalized plans, optimizing recommendations and nutritional follow-up





Specific Objectives

Module 1. New Developments in Nutrition

- ◆ Understand the molecular foundations of nutrition and its impact on the body
- ◆ Analyze the composition of foods and their application in nutrition
- ◆ Assess food safety risks in the consumption chain
- ◆ Interpret new food labeling and its influence on consumers

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 regulating appetite and satiety
- ◆ Examine new evidence on the Mediterranean diet and its health benefits

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

- ◆ Assess energy requirements and methods for evaluating energy expenditure in different populations
- ◆ Apply nutritional status assessment techniques through body composition analysis and biochemical methods
- ◆ Analyze food and nutrient intake using direct and indirect methods for accurate diet assessment
- ◆ Update nutritional requirements and adapt dietary guidelines to various life stages, including menopause and aging



Module 4. Nutrition in Sports Practice

- ♦ Delve into the energy needs and nutritional status of athletes to optimize their performance
- ♦ Plan specific dietary strategies for different phases of sports practice, from pre-competition to post-competition
- ♦ Analyze sports hydration, including the regulation of needs and selection of appropriate beverages
- ♦ Apply knowledge of ergogenic aids and anti-doping regulations to ensure optimal performance within sports regulations

Module 5. Muscle and Metabolic Physiology Associated with Exercise

- ♦ Evaluate cardiovascular and ventilatory adaptations related to 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 use
- ♦ Understand the concept of the lactate threshold and its relation to mixed bioenergetics in muscle fibers, improving metabolic efficiency during exercise

Module 6. Vegetarianism and Veganism

- ♦ Analyze the impact of vegetarianism and veganism on sports, highlighting its evolution and adoption by athletes
- ♦ Differentiate types of plant-based diets, focusing on 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 and omnivorous diets, considering sustainability and athletic 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, with emphasis on the luteal and follicular phases
- ♦ Explore the female athlete triad, addressing conditions such as amenorrhea and osteoporosis in the sports context
- ♦ Examine appropriate nutrition for pregnant female athletes, emphasizing micronutrient needs and energy requirements

Module 8. Nutrition for Rehabilitation and Functional Recovery

- ♦ Assess the impact of comprehensive nutrition on injury prevention and recovery
- ♦ Determine the effects of carbohydrates, proteins, and fats on functional reconditioning
- ♦ Analyze the role of vitamins and minerals in optimizing post-injury recovery
- ♦ Investigate the role of phytochemicals in muscle regeneration after injury

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

- ♦ Assess current eating habits and their relation to 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 recommendations for macronutrients and micronutrients
- ♦ Plan and distribute daily meals, adjusting quantities and frequency according to individual needs
- ♦ Develop diet planning models, such as weekly menus and exchange methodologies
- ♦ Apply decision algorithms in hospital nutrition to adapt diets to patient needs
- ♦ Implement educational strategies for maintaining healthy eating habits and psychological support upon discharge



You will address the specific nutritional requirements of female athletes, optimizing their health through appropriate nutrition”

05

Career Opportunities

This Master's Degree will broaden the professional's career perspective, enabling them to access new opportunities in the field of physical performance, both in sports teams and high-performance organizations. As a result, thanks to the skills acquired, the professional will be able to successfully perform roles such as sports nutritionist, high-performance advisor, or specialized consultant. These opportunities will allow them to influence the continuous improvement of athletes, optimizing their performance and providing strategic approaches based on nutrition.





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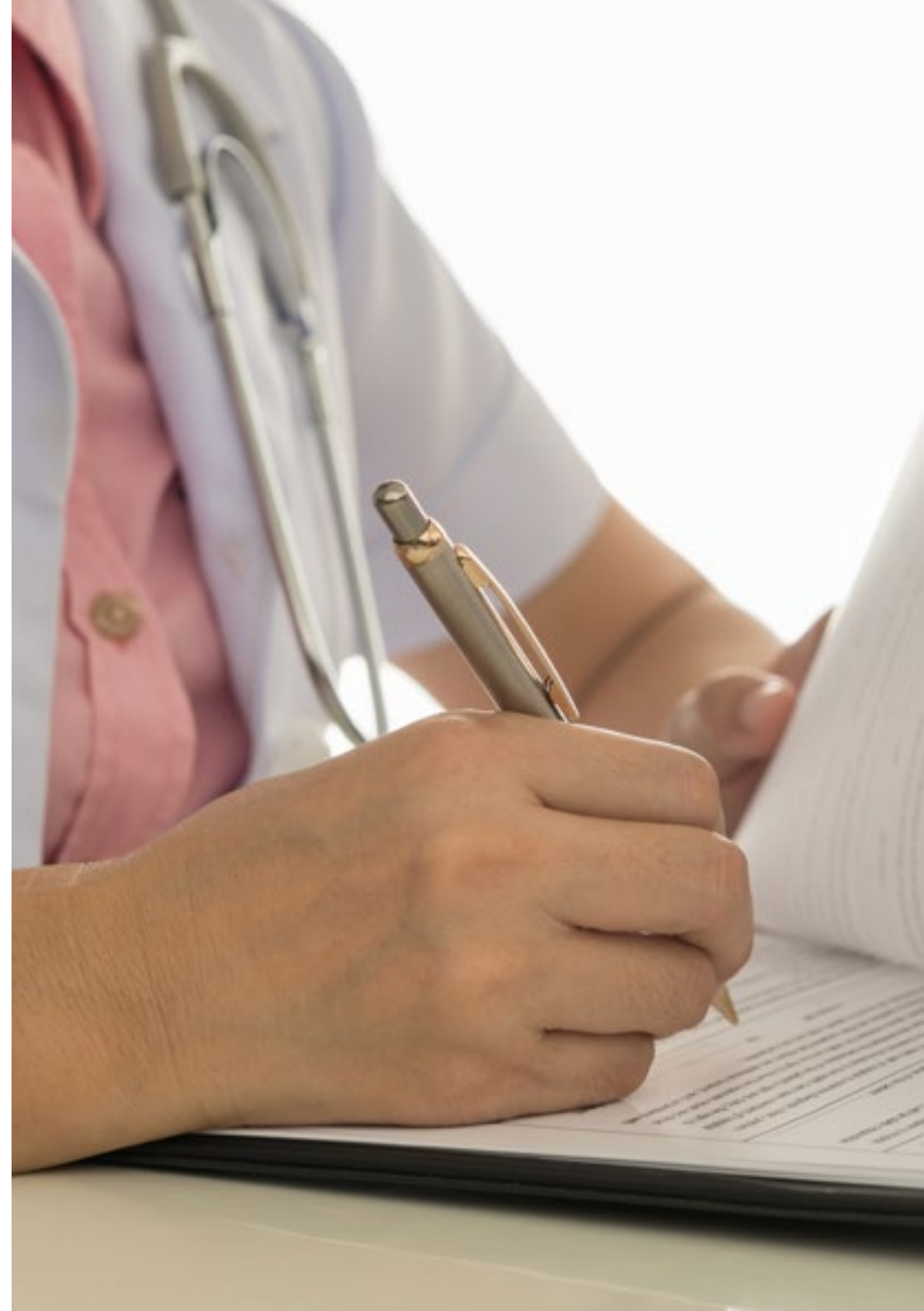
You will be capable of gathering innovative resources to provide specialized and up-to-date nutritional advice”

Graduate Profile

The graduate of this university program will develop a deep understanding of nutritional needs in sports contexts, being able to design personalized meal plans tailored to each discipline. Furthermore, they will acquire skills to work effectively with multidisciplinary teams, managing nutrition as a key factor in performance enhancement. In the future, they will be able to lead projects that integrate nutrition and physical well-being, contributing to the preparation and recovery of elite athletes. As a result, they will be equipped to advise on performance, facing the challenges presented by advancements in nutritional science.

You will design personalized meal plans, applying precise nutritional strategies tailored to individual needs.

- ♦ **Effective communication:** Clearly and accurately convey nutritional recommendations in both individual and group settings, facilitating understanding and application of proposed strategies
- ♦ **Critical thinking:** Analyze and evaluate nutritional information, adapting it to the specific needs of each athlete and situation
- ♦ **Multidisciplinary teamwork:** Collaborate efficiently with other professionals, such as coaches, doctors, and physiotherapists, to provide comprehensive care to the athlete
- ♦ **Time management:** Organize efficiently to meet demands and deadlines in the development of personalized nutrition plans and follow-up



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

1. **Sports Nutritionist:** Responsible for designing and overseeing nutritional plans tailored to the needs of athletes, optimizing their performance and recovery. Their role includes assessing food intake and advising on healthy eating habits to maintain an appropriate physical condition.
2. **High-Performance Advisor:** In charge of guiding athletes and sports teams in developing strategies to maximize their physical and mental capacity. Provides recommendations to enhance performance through training, nutrition, and sports psychology.
3. **Sports Nutrition Consultant:** Focused on providing expert advice on diet and supplementation to optimize athletes' performance. Works closely with coaches and other specialists to design integrated health and performance programs.
4. **Sports Nutrition Program Coordinator:** Responsible for coordinating and overseeing all aspects of Sports Nutrition within an organization or team, developing strategies for the implementation of nutrition plans and training athletes and coaches.
5. **Sports Nutrition Science Researcher:** Dedicated to analyzing the impact of nutrition on physical performance, conducting research to better understand how nutrients affect the human body in sports situations and improving practices based on scientific evidence.
6. **Sports Health and Well-being Manager:** Manages wellness and health programs within sports organizations, ensuring that athletes follow nutrition and exercise plans that maximize performance and minimize the risk of injury.
7. **Sports Nutrition and Supplementation Technician:** Responsible for advising and managing the proper use of nutritional supplements to enhance athletes' performance. Assesses each athlete's needs and recommends the most suitable products for their sports goals.
8. **Nutrition Supervisor in High-Performance Centers:** In charge of supervising and managing nutrition services in elite sports centers, ensuring that athletes receive the appropriate care for their specific dietary needs.

06

Software Licenses Included

TECH is a leading reference in the academic world for combining the latest technology with teaching methodologies to enhance the teaching-learning process. To achieve this, it has established a network of alliances that allows it to access the most advanced software tools used in the professional world.



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Upon enrolling, you will receive, completely free of charge, academic credentials for the following professional software applications”

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 academic software licenses will allow students to use the most advanced applications in their professional field, so they can become familiar with them and master their use without incurring additional costs. TECH will manage the process of acquiring the licenses so that students can use the software without limitations for the entire duration of the Master's Degree in Sports Nutrition. Moreover, they will be able to do so completely free of charge.

TECH will provide free access to the following software applications:

DIETOPRO.COM
software de gestión dietético-nutricional

i-Diet



The Nutrium logo features a stylized white icon of a person or a shield-like shape on the left, followed by the word "nutrium" in a lowercase, white, sans-serif font on a teal background.

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
- ♦ **AI-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 of Nutrium:

- ♦ **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.

07

Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



“

TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”

The student: the priority of all TECH programs

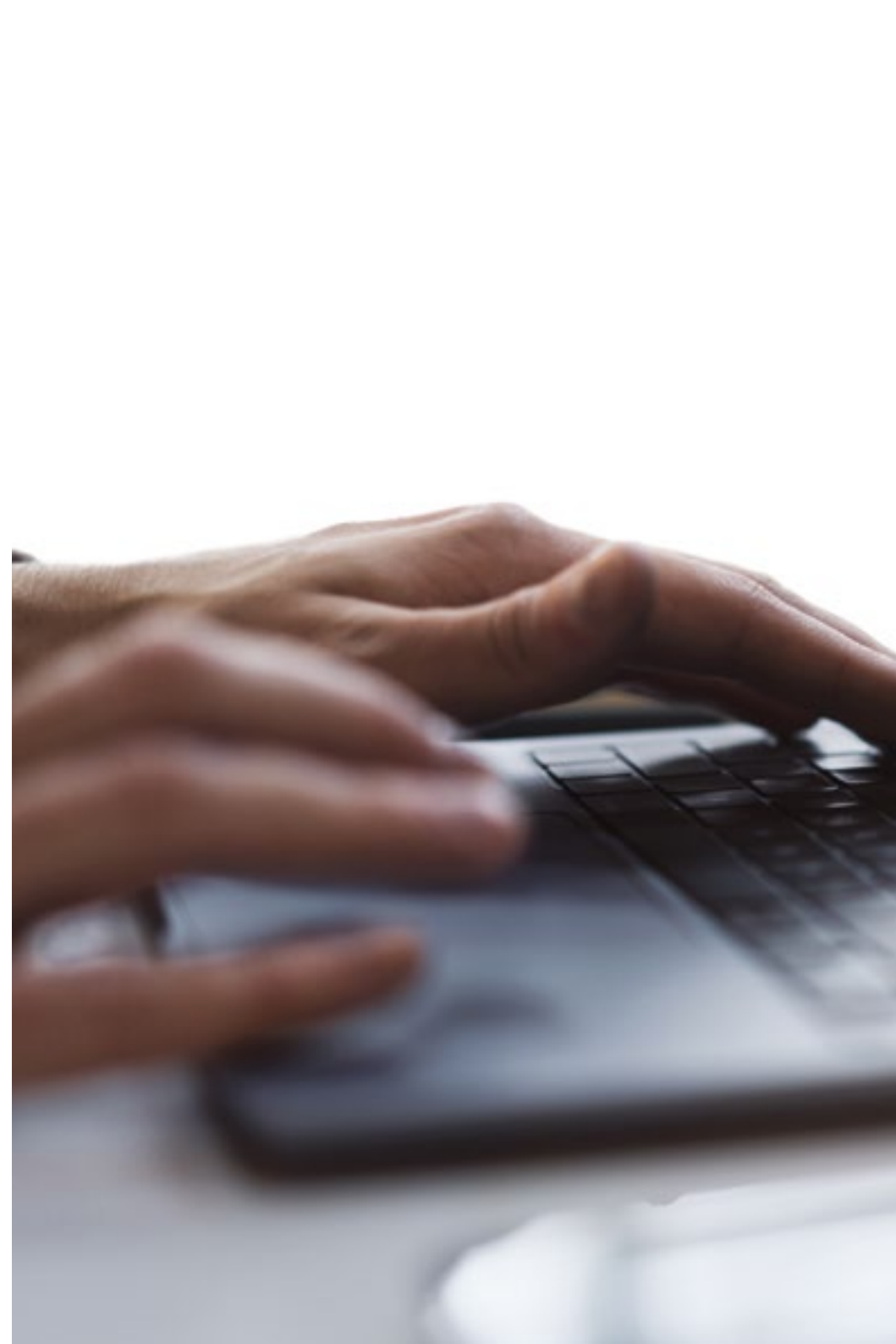
In TECH's study methodology, the student is the main protagonist.

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.

“

*At TECH you will NOT have live classes
(which you might not be able to attend)”*



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”

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.

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

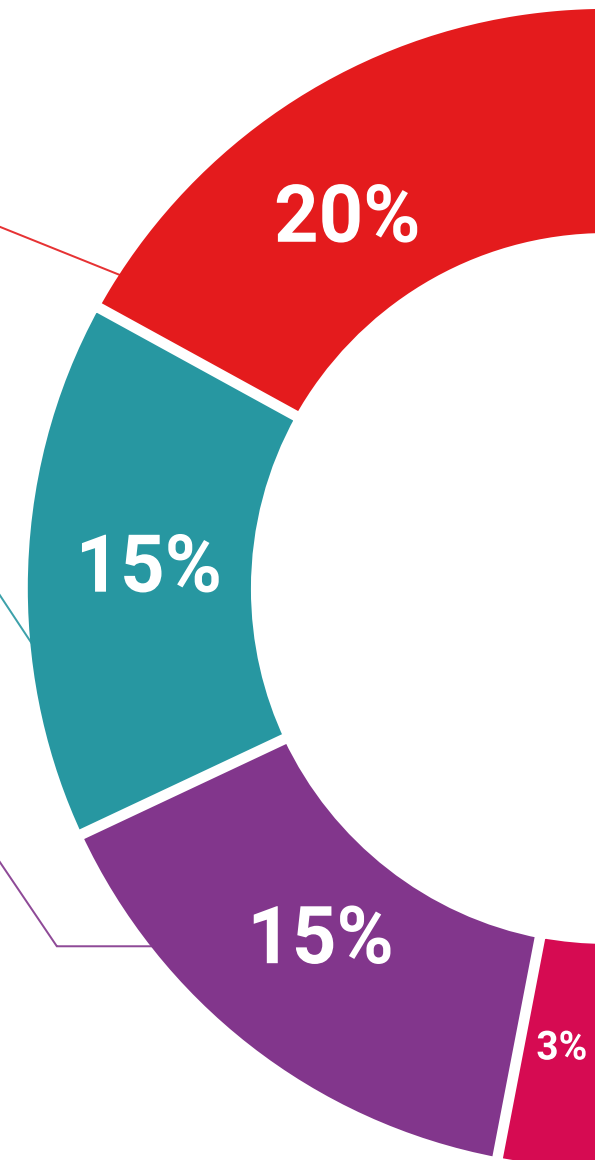
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

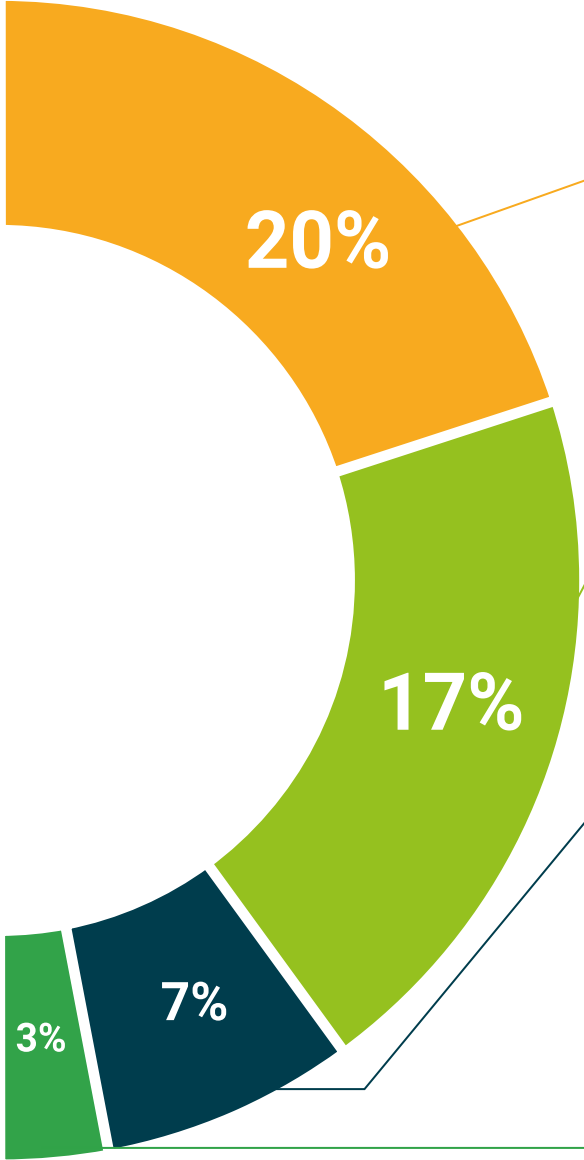
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

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





Case Studies

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.



08

Teaching Staff

The teaching team, composed of renowned experts in Sports Nutrition, will bring years of practical and academic experience. Furthermore, their extensive prestige in the field will ensure that, through their updated and specialized knowledge, students will have access to innovative strategies and cutting-edge approaches. In fact, this university program has been designed to enhance the competencies of professionals, providing resources that will enable them to stand out in the professional field. Thanks to the experience and vision of the instructors, students will have the opportunity to delve into the most relevant aspects of Sports Nutrition.





“

The teaching team, specialized in Sports Nutrition, has designed exclusive material and additional content to allow students to explore each topic in a personalized manner”

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

“

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

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

Teachers

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 in Microbiota by Regenera
- ♦ Certificate in Anthropometry ISAK Level 1 by The International Society for the Advancement of Kinanthropometry (ISAK)

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.



09

Certificate

The Master's Degree in Sports Nutrition guarantees students, in addition to the most rigorous and up-to-date education, access to a Master's Degree issued by TECH Global University.



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

This private qualification will allow you to obtain a **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.

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.

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

TECH is a member of:



Endorsed by the NBA

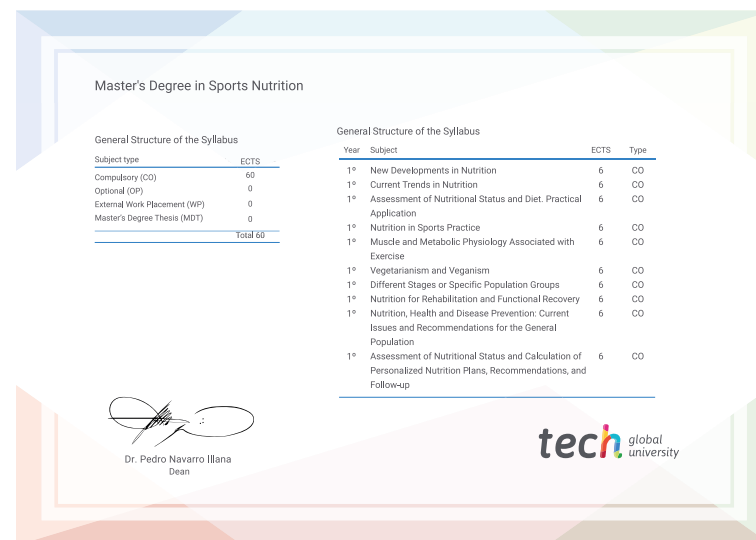


Title: **Master's Degree in Sports Nutrition**

Modality: **online**

Duration: **12 months**

Accreditation: **60 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.



Master's Degree Sports Nutrition

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Accreditation: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Master's Degree Sports Nutrition

The Chartered
Association for Sports
and Exercise Science



Endorsed by the NBA

A background image showing a person in a blue shirt pouring a light-colored smoothie from a clear plastic bottle into a clear plastic cup. In the foreground, there is a small blue bowl filled with fresh raspberries. The scene is set on a white countertop with a glass of water and a knife nearby.

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university