Professional Master's Degree

Food Safety

tech technological university

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Professional Master's Degree

Food Safety

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/pk/nutrition/professional-master-degree/master-food-safety-nutritionists**

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01

Introduction

The ultimate objective of this Professional Master's Degree in Food Safety is to provide the professional with specialist knowledge in order to guarantee the safety of foods from primary production, their processes and products, supporting environmental sustainability and the development of the food sector as a whole from a global point of view of quality, food safety and the management of R&D projects.

Become a successful nutritionist with transversal skills which allow you to, in addition to designing nutrition plans, guarantee the safety of these diets"

The Professional Master's Degree in Food Safety is the most complete among those Master's Degrees currently offered at universities because it is geared towards integral food safety management. Therefore, it covers all the necessary aspects to achieve a complete specialization, demanded by professionals in the food sector.

The teachers of this Professional Master's Degree are university professors and professionals from various disciplines in primary production, the use of analytical and instrumental techniques for quality control, the prevention of accidental and intentional contamination and fraud, traceability, and regulatory certification schemes in Food Safety.

The Professional Master's Degree in Food Safety is based on a triple thematic structure: Quality, food safety and Research and Development (R&D). In other words, it contains a scientific-technical part, a quality and safety management part and a third part, focused on research and development of innovation projects, supported by the guarantee of food safety, quality assurance and sustainability in its production and the necessary food safety at a global level.

This program has been designed to respond to the demand of diverse professional profiles and professional disciplines such as basic sciences, experimental sciences and engineering, social sciences and the field of new technologies. In addition, it is focused on understanding and learning technical, management and project execution competencies, as well as the development of skills required by a competitive, innovative and modern food sector.

Students of the Professional Master's Degree in Food Safety will complete their specialization with a comprehensive perspective and training, both in product processes and, globally, in the certification of food safety in the food sector. We will start from primary production and food processing, applicable legislation and regulations, quality management to ensure food safety, through to integration into research projects, in the development of new products, their coordination and implementation.

It is an educational project committed to training high quality professionals. A program devised by professionals specialized in each specific field who encounter new challenges every day.

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

- Practical cases studies are presented by experts in Food Safety
- The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Latest information on food safety
- Practical exercises where self-assessment can be used to improve learning
- Special emphasis on innovative methodologies in Food Safety
- 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 be supported by teachers who are experts in food legislation and quality and safety regulations who will guide you through the entire process"

This complete Professional Master's Degree is the perfect opportunity to advance in your professional career and start to position yourself as a prestigious nutritionist"

This specialization course will provide you with the necessary personal and professional skills to become an expert in Food Safety.

Given that the course is online, you will be able to train wherever and whenever you want, balancing your personal and professional life.

The teaching staff includes professionals from the field of Food Safety, who bring their experience to this training program, as well as renowned 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 immersive training programmed to train in real situations.

This program is designed around Problem-Based Learning, where the specialist must try to solve the different professional practice situations that arise during the course. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in food safety with extensive experience.

02

Objectives

The Professional Master's Degree in Food Safety is aimed at facilitating the professional's performance with the latest advances in the sector.

TECH offers you this Professional Master's Degree with the aim of helping you become a prestigious nutritionist on both a national and international level"

General bjectives

- Develop the basis for good hygiene and traceability practices in the production of raw materials
- Specify the applicable regulations concerning primary animal production, as well as the internal audit and certification systems
- Recognize the consumer's right to purchase safe, healthy and wholesome food
- Define the sustainable development goals
- Examine the regulations and standards for food laboratories and define their role in food safety
- Analyze food safety regulations and standards applicable to raw materials and products in food laboratories
- Determine the requirements to be met by food analysis laboratories (ISO IEC 17025 Standard, applicable to the accreditation and certification of quality systems in laboratories)
- Analyze the fundamentals, requirements, regulations and main tools used in the traceability of the different points of the food chain
- Analyze the system for establishing a relationship between the food product and the origin of its components, the manufacturing process and distribution
- Evaluate food industry processes to identify those items that do not meet specific requirements to ensure food safety and consumer health
- Develop the basis for the application of the different phases of the traceability system in food sector companies
- Analyze the principles of food legislation, at national and international level, and its evolution up to the present day
- Analyze the competencies in food legislation to develop the corresponding functions in the food industry
- Evaluating food industry procedures and mechanisms of action
- Develop the basis for applying legislation to the development of food industry products
- Know the fundamentals of the most important food safety concepts
- Define the concept of risk and risk assessment
- Apply these principles to the development of a safety management plan
- Clarify the principles of the HACCP plan
- Define the principles of a certification process
- Develop the concept of best practice certification
- Analyze the main international certification models for food safety management in the food industry
- Analyze the advantages of digitalization in the currently established food safety and quality management processes
- Develop specialized knowledge of the different commercial platforms and internal IT tools for process management
- Define the importance of a migration process from a traditional to a digital system in Food Safety and Quality Management
- Establish strategies for the digitalization of protocols and documents related to the management of different Food Quality and Safety processes

- Determine the critical control points
- make the tools for the validation of CCPs available
- Analyze the concepts of process monitoring, verification and validation
- Improve the management of incidents, complaints and internal audits
- Establish R&D&I systems that enable the development of new foods and ingredients, especially in food safety issues, so that they can be addressed research, development and innovation in this field
- Develop knowledge that provides a basis or opportunity for the development and/or application of ideas, in a research context, including reflections on the responsibilities linked to the application of their developments
- Determine the functioning of R+D+I systems in the development of new products and processes in the food environment
- Analyze the R&D&I system and the use of tools for planning, management, evaluation, protection of results and dissemination of food R&D&I
- Develop knowledge that provides a basis or opportunity for the development and/or application of ideas, in a research context, including reflections on the responsibilities linked to the application of their developments

Specific objectives

Module 1. Traceability of Raw Materials and Consumables

- Establish the basic principles of food safety
- Compile the reference databases on applicable food safety regulations
- Develop relevant aspects in the production of food of animal origin and its derivatives
- Establish the basis for animal welfare from breeding to slaughter
- Examine the types of vegetable crops and the regulations applicable to each of them
- Specify the mechanisms for internal auditing and certification of primary production
- Analyze foods of differentiated quality and the certification system for these products
- Assess the impact of the agri-food industry on the environment
- Examine the contribution of this industry to the sustainable development goals

Module 2. Analytical and Instrumental Techniques in the Quality Control of Processes and Products

- Establish the quality characteristics to be met by raw materials, intermediate and finished products according to their origin, prior to their laboratory analysis
- Develop the relevant methodology for product conformity, taking into account the applicable requirements considered by the regulations and standards
- Define the most appropriate methodology for food quality assessment: Integrity analysis and characterization, including the detection of biotic or abiotic food contaminants that may pose a health risk to consumers
- Describe food sampling depending on source, use and characteristics or specifications

- Identify and recognize the analytical techniques used in food and carry out adequate quality control
- Describe the main agri-food contaminants and learn about the application of analytical techniques by observing the sector to which they belong
- Outline the process for identifying and ensuring the safety of raw materials, processed foods and the suitability of water in the production of safe products for food and feed

Module 3. Logistics and Batch Traceability

- Define the background of logistics and traceability
- Examine the different types of traceability and scope of application
- Analyze the principles, requirements and measures of food legislation in the context of traceability
- Establish the scope of application of traceability in its mandatory nature
- Analyze the different traceability and batch identification systems
- Identify and define the responsibility of the different actors in the food chain in terms of traceability
- Describe the structure and implementation of a traceability plan
- Identify and discover the main tools for the identification of batches
- Establish procedures for locating, immobilizing and recalling products in case of incidents
- Identify, analyze and explain the logistics process at each point of the food chain

Module 4. Food Legislation and Quality and Safety Standards

- Define the fundamentals of the food law
- Describe and develop the main international, European and national organizations in the field of food safety, as well as determine their competencies
- Describe the principles, requirements and measures of food legislation
- Explain the European legislative framework regulating the food industry
- Identify and define the responsibility of the participants in the food chain
- Classify the types of liability and offenses in the field of food safety

Module 5. Food Safety Management

- Analyze the main types of hazards associated with food
- Evaluate and apply the principle of risk and risk analysis in food safety
- Identify the prerequisites and previous steps for the implementation of a safety management plan
- Establish the main hazards associated with food according to their physical, chemical or biological nature, and some of the methods used for their control
- Apply these principles to the development of a safety management plan
- Specify the methods to evaluate the efficiency of a critical point and of the safety management plan

Module 6. Safety Certifications in the Food Industry

- Establish the general requirements for certification
- Identify the different types of Good Practices (GxP) required in a food safety management system and their certification
- Develop the structure of the international ISO and ISO 17025 standards
- Define the characteristics, structure and scope of the main global food safety certification systems

Module 7. Digitalization of Quality Management Systems

- Examine the quality standards and food norms in force for the digitization of the different international reference bodies
- Identify the main commercial software and internal IT strategies that enable the management of specific food safety and quality processes
- Establish appropriate strategies for the transfer of traditional quality management processes to digital platforms
- Define the key points of the digitization process of a Hazard Analysis and Critical Control Point (HACCP) program
- Analyze alternatives for the implementation of prerequisite programs (PPR), HACCP plans and monitoring of standardized operating programs (SOP)
- Analyze the most appropriate protocols and strategies for digitization in risk communication
- Develop mechanisms for digitalizing the management of internal audits, recording corrective actions and monitoring continuous improvement programs

Module 8. Validation of New Methodologies and Processes

- Know the main differences between control points and critical control points
- Develop prerequisite programs and management charts to ensure food safety
- Apply internal audits, complaints or internal incidents as tools for the validation of control processes
- Review process validation methods
- Differentiate and specify the differences between monitoring, verification and validation activities within the HACCP system
- Demonstrate resolution capability with root cause analysis and implementation of corrective actions for complaint or nonconformity management
- Assess the management of internal audits as a tool for improving the HACCP plan

Module 9. R&D&i of New Food and Ingredients

- Establish new trends in food technologies that give rise to the development of a line of research and implementation of new products in the market
- Establish the fundamentals of the most innovative technologies that require research and development work to understand their potential for use in the production of new foods and ingredients
- Design research and development protocols for the incorporation of functional ingredients to a base food, taking into account its techno-functional properties, as well as the technological process involved in its elaboration
- Establish new trends in food technologies that give rise to the development of a line of research and implementation of new products in the market
- Apply research and development methodologies to evaluate the functionality, bioavailability and bioaccessibility of novel foods and ingredients

Module 10. Development, Coordination and Execution of R+D+I Projects

- Establish R+D+I systems that enable the development of new foods and ingredients, especially in food safety issues, so that they can be addressed in research, development and innovation in this field of new foods and ingredients
- Compile the sources of financing for R&D&I activities in the development of new food products that allow different innovation strategies in the food industry to be addressed
- Analyze the forms of access to public and private sources of information in the scientific-technical, economic and legal fields for the planning of an R+D+I project
- Develop methodologies for project planning and management, control reporting and results monitoring
- Evaluate the technology transfer systems that allow the transfer of R&D&I results to the productive environment
- Analyze the implementation of projects once their documentation stage has been completed

A unique specialization program that will allow you to acquire advanced training in this field"

03

Skills

After passing the assessments on the Professional Master's Degree in Food Safety, the professional will have acquired the necessary skills for a quality and up-to-date practice based on the most innovative teaching methodology.

This program will help you to acquire the skills you need to excel in your daily work"

General skills

- Use good hygiene practices in food production
- Know the current regulations to be used by food laboratories
- Take control ensuring that the foodstuffs produced meet all the food guarantees
- Ensure the safety of all processes involved in food production
- Controlling food industry procedures

Make the most of this opportunity to learn about the latest advances in this subject to apply it to your daily practice"

Specific Skills

- Know the applicable food safety regulations and apply them in each production process
- Protecting animal welfare, from breeding to slaughter
- Understand the impact of the food industry on the environment and promoting sustainable development
- Know the quality characteristics that all foods must meet prior to laboratory analysis
- Apply the appropriate techniques for quality control, following the most accurate methodologies
- Ensure the quality of products to be consumed by humans and animals
- Identify all the processes related to the traceability of a product and analyze the different systems related to this field
- Locate and recall all products that have issues
- Know the logistic process at each point of the food chain
- Know the fundamentals of food law and food safety policy
- Know the types of responsibility of the people involved in the food chain and the types of crime that can occur
- Identify hazards associated with food and analyze them
- Control this type of hazards
- Knowledge of the different food safety certification systems
- Perform the work according to safety certificates
- Identify food quality standards, commercial software and IT strategies to make food as safe as possible
- Digitize risk communication processes
- Control the whole process of elaboration of the products, taking into account the control points
- Monitor, verify and validate the entire production process
- Do internal audits
- Research the creation of new products
- Design research protocols, using new technologies
- Using R&D&I systems to develop novel foods
- Access scientific, economic and legal information sources to develop new products

04

Course Management

The program's teaching staff includes leading experts in research and health, who bring the experience of their work to this training.

Leading nutritionists and professionals in the field have come together to teach you the latest advances in food safety"

Management

Dr. Limón Garduza, Rocío Ivonne

- PhD in Agricultural Chemistry and Bromatology from the Autonomous University of Madrid
- Master's Degree in Food Biotechnology (MBTA), University of Oviedo
- Food Engineer, Bachelor's Degree in Food Science, and Technology (CYTA)
- Expert in Food Quality Management ISO 22000 (2017)
- Specialist Teacher in Food Quality and Safety, Mercamadrid Training Center (CFM)(2018- 2021)

Professors

Ms. Andrés Castillo, Alcira Rosa

- Researcher. GenObIACM Project Group UCM
- IRYCIS Ramón & Cajal Institute for Health Research Endothelial and Cardiometabolic Medicine Unit (MCM)
- Coordinator with Pharmaceuticals and Foodstuffs
- Data Manager of Clinical Trials with Drugs for the Type 2 Diabetes Mellitus
- Degree in Marketing UADE
- Postgraduate Diploma in Nutrition and Dietetics with Risk Factors of Diabetes Mellitus and Cardiovascular Disease UNED
- Food Traceability Course USAL Foundation

Dr. Colina Coca, Clara

- PhD in Nutrition and Food Science and Technology
- Master's Degree in Food Quality and Safety: APPCC Systems
- Postgraduate Degree in Sports Nutrition
- Collaborating Professor at the UOC. Since 2018

Ms. Escandell Clapés, Erica

- Phd in Food Science and Technology. (University of Vic)
- Master's Degree in Food Development and Innovation
- Diploma in Human Nutrition and Dietetics
- Head of Department of Food Quality and Safety of the Meat Industry SUBIRATS Group (2015-present)

Ms. Montes Luna, María Fe

- Agricultural engineer specializing in the food industry - University of Córdoba (1998-2003)
- Consultant and food safety auditor, with international experience in consulting and audits of first, second- and third-party audits under the protocols of BRC, IFS, FSSC 22000 and ISO 22.000

Mr. Velderrain Rodríguez, Gustavo Rubén

- PhD in Science Center for Research in Food and Development, A.C. (CIAD)
- Member of the National System of Researchers of the National Council of Science and Technology (CONACyT) in Mexico

Dr. Moreno Fernández, Silvia

- PhD in Food Science from the Autonomous University of Madrid
- Degree in Biology from the Complutense University Madrid. Specilaist in the development of new foods an in the treatment of by-products from the food industry
- Postdoctoral Researcher Autonomous University of Madrid. Since 2019

Dr. Rendueles de la Vega, Manuel

- PhD in Chemical Engineering, Professor of Chemical Engineering (University of Oviedo)
- Coordinator of the Master's Degree in Food Biotechnology at the University of Oviedo since 2013
- Head researcher in three projects of the National R+D Plan. Since 2004

Ms. Aranda Rodrigo, Eloísa

- Degree in Food Science and Technology
- Experience in the food production environment, with laboratory analysis of water and food
- Training in Quality Management Systems, BRC, IFS and Food Safety ISO22000
- Experience in audits under the protocols ISO9001 and ISO 17025

Dr. Martínez López, Sara

- PhD in Pharmacy from the Complutense University of Madrid
- Degree in Chemistry from the University of Murcia
- Associate Professor of Nutrition and Food Technology at the European University of Madrid
- Researcher in the research group "Microbiota, Nutrition and Health" European University of Madrid

05

Structure and Content

The structure of the content has been designed by the best professionals in the sector, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied, and diagnosed, and with extensive knowledge of new technologies applied to food safety. This team, aware of the relevance of training in this area, has designed the most complete and up-to-date compendium of contents and practical activities in the sector with the aim of providing nutritionists with the tools they need to carry out their daily practice successfully.

This Professional Master's Degree in Food Safety contains the most complete and up-to-date program on the market"

Module 1. Traceability of Raw Materials and Consumables

1.1. Basic Principles of Food Safety
- 1.1.1. Principle Objectives of Food Safety
- 1.1.2. Basic Concepts
- 1.1.3. Traceability Concept and Application in the Food Industry

1.2. General Hygiene Plan
- 1.2.1. Basic Concepts
- 1.2.2. Types of General Hygiene Plans

1.3. Primary Production of Foods of Animal Origin
- 1.3.1. Basic Aspects and Animal Welfare
- 1.3.2. Breeding and Nutrition
- 1.3.3. Transporting Living Animals
- 1.3.4. Animal Slaughter

1.4. Primary Production of Animal By-Products Distribution of Raw Materials
- 1.4.1. Dairy Production
- 1.4.2. Poultry Production
- 1.4.3. Distribution of Raw Materials of Animal Origin

1.5. Primary Production of Foods of Plant Origin
- 1.5.1. Basic Aspects
- 1.5.2. Types of Vegetable Crops
- 1.5.3. Other Agricultural Products

1.6. Good Practices in Vegetable Production Use of Pesticides
- 1.6.1. Sources of Contamination of Plant-Based Foods
- 1.6.2. Transport of Raw Materials of Plant-Based Origin and Risk Prevention
- 1.6.3. Use of Pesticides

1.7. Water in the Agricultural Industry
- 1.7.1. Livestock
- 1.7.2. Agriculture
- 1.7.3. Aquaculture
- 1.7.4. Human Water Consumption in the Industry

1.8. Audits and Certification of Primary Production
  1.8.1. Official Control Auditing Systems
  1.8.2. Food Certifications
1.9. Foods of Differentiated Quality
  1.9.1. Protected Designation of Origin (PDO)
  1.9.2. Protected Geographical Indication (PGI)
  1.9.3. Traditional Specialty Guaranteed (TSG)
  1.9.4. Optional Quality Terms
  1.9.5. Use of Plant Varieties and Animal Breeds
  1.9.6. Ecological Agriculture and Livestock
1.10. The Food Industry and the Environment
  1.10.1. Sustainable Development Goals (SDG)
  1.10.2. Solutions Proposed by the Agri-Food Industry
  1.10.3. Genetically Modified Organisms as a Pathway to Sustainable Development

Module 2. Analytical and Instrumental Techniques in the Quality Control of Processes and Products

2.1. Laboratory Types, Regulations and Standards
  2.1.1. Reference Laboratories
    2.1.1.1. European Reference Laboratories
    2.1.1.2. National Reference Laboratories
  2.1.2. Food Laboratories
  2.1.3. Applicable Regulations and Standards of Laboratories (ISO/IEC 17025 Regulations)
    2.1.3.1. General Requirements for the Competency of Laboratories
    2.1.3.2. Equipment Testing and Calibration
    2.1.3.3. Implementation and Validation of Analytical Methods

2.2. Official Control of the Agri-Food Chain
- 2.2.1. National Plan for the Official Control of the Food Chain
- 2.2.2. Competent Authorities
- 2.2.3. Legal Support for Official Control

2.3. Official Methods of Food Analysis
- 2.3.1. Methods for the Analysis of Food for Animals
- 2.3.2. Methods of Water Analysis
  - 2.3.2.1. Requirements for Analysis According to R.D. 140/2003
  - 2.3.2.2. Sample Collection Frequency According to the Industry Type
- 2.3.3. Methods of Grain/Cereal Analysis
- 2.3.4. Analysis Methods of Fertilizers, Residues of Phytosanitary and Veterinary Products
- 2.3.5. Food Product Analysis Methods
- 2.3.6. Meat Product Analysis Methods
- 2.3.7. Fatty Material Analysis Methods
- 2.3.8. Dairy Product Analysis Methods
- 2.3.9. Wine, Juice and Musts Analysis Methods
- 2.3.10. Fish Product Analysis Methods

2.4. On-site Analysis Techniques in Fresh Food Reception, Processing and Finished Product
- 2.4.1. In Food Handling
  - 2.4.1.1. Environment and Surfaces Analysis
  - 2.4.1.2. Analysis of the Handler
  - 2.4.1.3. Analysis of the Teams
- 2.4.2. Fresh Food and Final Product Analysis
  - 2.4.2.1. Product Data Sheet
  - 2.4.2.2. Visual Inspection
  - 2.4.2.3. Color Charts
  - 2.4.2.4. Organoleptic Evaluation According to Type of Food
- 2.4.3. Basic Physiochemical Analysis
  - 2.4.3.1. Determination of Ripening Index in Fruit
  - 2.4.3.2. Firmness
  - 2.4.3.3. Degrees Brix

2.5. Nutritional Analysis Techniques
- 2.5.1. Determination of Proteins
- 2.5.2. Determination of Carbohydrates
- 2.5.3. Determination of Fats
- 2.5.4. Determination of Organic Ash

2.6. Microbiological and Physicochemical Food Analysis Techniques
- 2.6.1. Preparation Techniques: Fundamentals, Instruments and Application in Foods
- 2.6.2. Microbiological Analysis
  - 2.6.1.2. Handling and Treatment of Samples for Microbiological Analysis
- 2.6.3. Physiochemical Analysis
  - 2.6.3.1. Handling and Treatment of Samples for Physiochemical Analysis

2.7. Instrumental Techniques in Food Analysis
- 2.7.1. Characterization, Quality Indices and Product Conformity
- 2.7.1.1. Food Safety / Food Integrity
- 2.7.2. Analysis of Residues of Prohibited Substances in Food
  - 2.7.2.1. Organic and Inorganic Residues
  - 2.7.2.2. Heavy Metals
  - 2.7.2.3. Additives
- 2.7.3. Analysis of Adulterant Substances in Food
  - 2.7.3.1. Milk
  - 2.7.3.2. Wine
  - 2.7.3.3. Honey

2.8. Analytical Techniques Used in GMO and New Foods
- 2.8.1. Concept
- 2.8.2. Detection Techniques

2.9. Emerging Analytical Techniques to Avoid Fraud in Foodstuffs
- 2.9.1. Food Fraud
- 2.9.2. Food Authenticity

2.10. Issuance of Certificates of Analysis

2.10.1. In the Food Industry
2.10.1.1. Internal Report
2.10.1.2. Report for Customers and Providers
2.10.1.3. Bromatological Expertise
2.10.2. In Reference Laboratories
2.10.3. In Food Laboratories
2.10.4. In Arbitration Laboratories
2.10.3. Reptiles

Module 3. Logistics and Batch Traceability

3.1. Introduction to Traceability
3.1.1. Background of the Traceability System
3.1.2. Concept of Traceability
3.1.3. Types of Traceability
3.1.4. Information Systems
3.1.5. Advantages of Traceability
3.2. Legal Framework for Traceability Part I
3.2.1. Introduction
3.2.2. Horizontal Legislation Related to Traceability
3.2.3. Vertical Legislation Related to Traceability
3.3. Legal Framework for Traceability Part II
3.3.1. Obligatory Application of Traceability System
3.3.2. Objectives of the Traceability System
3.3.3. Legal Responsibility
3.3.4. Sanction Regime
3.4. Implementation of Traceability Plan
3.4.1. Introduction
3.4.2. Previous Stages
3.4.3. Traceability Plan
3.4.4. Product Identification System
3.4.5. System Test Methods
3.5. Tools for Product Identification
3.5.1. Manual Tools
3.5.2. Automated Tools
3.5.1.1. EAN Barcodes
3.5.1.2. RFID// EPC
3.5.3. Records
3.5.3.1. Identification Records of Primary and Other Materials
3.5.3.2. Record of Food Processing
3.5.3.3. Record of Final Product Identification
3.5.3.4. Record of the Test Results
3.5.3.5. Record Keeping Period
3.6. Incident Management, Product Recall and Reclamation, and Customer Complaints
3.6.1. Incident Management Plan
3.6.2. Customer Complaint Management
3.7. Supply Chain
3.7.1. Definition
3.7.2. Stages of the Supply Chain
3.7.3. Trends in Supply Chains
3.8. Logistics
3.8.1. Logistical Processes
3.8.2. Supply Chain vs. Logistics
3.8.3. Containers
3.8.4. Packaging
3.9. Modes and Means of Transport
3.9.1. Concept of Transport
3.9.2. Modes of Transport, Advantages and Disadvantages
3.10. Logistics of Food Products
3.10.1. Cold Chain
3.10.2. Perishable Products
3.10.3. Non-Perishable Products

Module 4. Food Legislation and Quality and Safety Standards

4.1. Introduction
- 4.1.1. Legal Organization
- 4.1.2. Basic Concepts
  - 4.1.2.1. Law
  - 4.1.2.2. Legislation
  - 4.1.2.3. Food Legislation
  - 4.1.2.4. Standards
  - 4.1.2.5. Royal Decree
  - 4.1.2.6. Certifications etc.

4.2. International Food Legislation International Organizations
- 4.2.1. Food and Agriculture Organization of the United Nations (FAO)
- 4.2.2. World Health Organisation (WHO)
- 4.2.3. Codex Alimentarius Commission
- 4.2.4. World Trade Organization

4.3. European Food Legislation
- 4.3.1. European Food Legislation
- 4.3.2. White Book of Food Safety
- 4.3.3. Principles of Food Legislation
- 4.3.4. General Requirements of Food Legislation
- 4.3.5. Procedures
- 4.3.6. European Authority of Food Safety (EFSA)

4.4. Food Safety Management in a Company
- 4.4.1. Responsibilities
- 4.4.2. Authorization
- 4.4.3. Certifications

4.5. Horizontal Food Legislation Part 1
- 4.5.1. General Hygiene Regulations
- 4.5.2. Public Water Consumption
- 4.5.3. Official Control of Food Products

4.6. Horizontal Food Legislation Part 2
- 4.6.1. Storage, Conservation and Transport
- 4.6.2. Materials in Contact with Foodstuffs
- 4.6.3. Food Additives and Aromas
- 4.6.4. Contaminants in Food

4.7. Vertical Food Legislation: Plant-Based Products
- 4.7.1. Vegetables and By-Products
- 4.7.2. Fruit and By-Products
- 4.7.3. Grains/Cereals
- 4.7.4. Legumes
- 4.7.5. Edible Vegetable Oils
- 4.7.6. Edible Fats
- 4.7.7. Condiments and Spices

4.8. Vertical Food Legislation: Animal Products
- 4.8.1. Meat and Meat By-Products
- 4.8.2. Fish Products
- 4.8.3. Milk and Dairy Products
- 4.8.4. Eggs and By-Products

4.9. Vertical Food Legislation: Other Products
- 4.9.1. Stimulant Foods and Derivatives
- 4.9.2. Drinks
- 4.9.3. Ready Meals

Module 5. Food Safety Management

5.1. Food Safety Principles and Management
- 5.1.1. The Concept of Hazards
- 5.1.2. The Concept of Risk
- 5.1.3. Risk Evaluation
- 5.1.4. Food Safety and Management Based on Risk Assessment

5.2. Physical Hazards
- 5.2.1. Concepts and Considerations of Physical Hazards in Food
- 5.2.2. Physical Hazards Control Methods

5.3. Chemical Hazards
- 5.3.1. Concepts and Considerations of Chemical Hazards in Food
- 5.3.2. Chemical Hazards Naturally Present in Foods
- 5.3.3. Hazards Associated with Chemical Intentionally Added to Food
- 5.3.4. Chemical Hazards Incidentally or Unintentionally Added
- 5.3.5. Chemical Hazards Control Methods
- 5.3.6. Allergens in Food
- 5.3.7. Allergen Control in the Food Industry

5.4. Biological Hazards
- 5.4.1. Concepts and Considerations of Biological Hazards in Food
- 5.4.2. Microbial Hazards
- 5.4.3. Non-Microbial Biological Hazards
- 5.4.4. Biological Hazards Control Methods

5.5. Good Manufacturing Practices Program (GMP)
- 5.5.1. Good Manufacturing Practices (GMP)
- 5.5.2. Background of GMP
- 5.5.3. Scope of GMP
- 5.5.4. GMPs in a Food Safety Management System

5.6. Standard Operating Procedure for Sanitation (SSOP)
- 5.6.1. Health Systems in the Food Industry
- 5.6.2. Scope of SSOP
- 5.6.3. Structure of SSOP
- 5.6.4. SSOP in a Food Safety Management System

5.7. The Hazard Analysis and Critical Control Point (HACCP) plan
- 5.7.1. Hazard Analysis and Critical Control Point (HACCP)
- 5.7.2. Background of HACCP
- 5.7.3. Prerequisites of HACCP
- 5.7.4. The 5 Preliminary Steps to HACCP Implementation

5.8. The 7 Steps for the Implementation of HACCP Plan
- 5.8.1. Risk Analysis
- 5.8.2. Identification of the Critical Control Points
- 5.8.3. Establishing Critical Limits
- 5.8.4. Establish the Monitoring Procedures
- 5.8.5. Implementation of Corrective Actions
- 5.8.6. Establish the Verification Procedures
- 5.8.7. Record Keeping and Documentation System

5.9. Evaluation of the Efficiency of a HACCP Plan
- 5.9.1. Evaluation of the Efficiency of CCP
- 5.9.2. General Evaluation of the Efficiency of HACCP Plan
- 5.9.3. Use and Management of Record to Evaluate the Efficiency of the HACCP Plan

5.10. Hazard and Critical Control Point Plan (HACCP) System Variants Based on Risk Systems
- 5.10.1. VACCP or Vulnerability Assessment and Critical Control Points (VACCP) Plan
- 5.10.2. TACCP or Vulnerability Assessment and Critical Control Points (Threat Assessment Critical Control Points)
- 5.10.3. Hazard Analysis and Risk-Based Preventive Controls (HARPC)

Module 6. Safety Certifications in the Food Industry

6.1. Principles of Certification
- 6.1.1. The Concept of Certification
- 6.1.2. Certifying Organisms
- 6.1.3. General Scheme of a Certification Process
- 6.1.4. Management of a Certification and Re-Certification Program
- 6.1.5. Management System Before and After Certification

6.2. Good Practices Certifications
- 6.2.1. Good Manufacturing Practices Certification (GMP)
- 6.2.2. The Case of GMP for Food Supplements
- 6.2.3. Certification of Good Practices for Primary Production
- 6.2.4. Other Good Practice Programs

6.3. ISO 17025 Certification
- 6.3.1. The ISO Standards Scheme
- 6.3.2. General Aspects of the ISO 17025 System
- 6.3.3. ISO 17025 Certification
- 6.3.4. The Role of ISO 17025 Certification in Food Safety Management

6.4. ISO 22000 Certification
- 6.4.1. Medical History
- 6.4.2. The Structure of ISO 22000 Standards
- 6.4.3. Scope of ISO 22000 Certification

6.5. GFSI Initiative, Global GAP and Global Markets Program
- 6.5.1. Global Food Safety Initiative (GFSI)
- 6.5.2. Structure of the Global GAP Program
- 6.5.3. Scope of Global GAP Certification
- 6.5.4. Structure of the Global Markets Program
- 6.5.5. Scope of Global Markets Program Certification
- 6.5.6. Relationship of the GAP and Global Markets with Other Certifications

6.6. Safe Quality Food (SQF) Certification
- 6.6.1. Structure of the SQF Program
- 6.6.2. Scope of SQF Certification
- 6.6.3. SQF Relationship with Other Certifications

6.7. British Retail Consortium (BRC) Certification
- 6.7.1. Structure of the BRC Program
- 6.7.2. Scope of BRC Certification
- 6.7.3. BRC Relationship with Other Certifications

6.8. IFS Certification
- 6.8.1. Structure of the IFS Program
- 6.8.2. Scope of IFS Certification
- 6.8.3. IFS Relationship with Other Certifications

6.9. Food Safety System Certification 22000 (FSSC 22000)
- 6.9.1. Background of the FSSC 22000 Program
- 6.9.2. Structure of the FSSC 22000 Program
- 6.9.3. Scope of FSSC 22000 Certification

6.10. Food Defence Programs
- 6.10.1. Concept of Food Defence
- 6.10.2. Scope of Food Defence Programs
- 6.10.3. Tools and Programs to Implement a Food Defence Program

Module 7. Digitalization of Quality Management Systems

7.1. Quality Standards and Risk Assessment in the Food Industry
- 7.1.1. Current Quality Standards and Food Safety
- 7.1.2. Main Risk Factors in Food Products

7.2. The “Era of Digitalization” and its Influence in the Global Systems of Food Safety
- 7.2.1. Codex - Alimentarius Food Safety Global Initiative
- 7.2.2. Hazard Analysis and Critical Control Points (HACCP)
- 7.2.3. ISO 22000 Standards

7.3. Commercial Software for Food Safety Management
- 7.3.1. Use of Intelligent Devices
- 7.3.2. Commercial Software for Specific Management Processes

7.4. Establishing Digital Platforms for the Integration of a Team Responsible for the Development of the HACCP program
- 7.4.1. Stage 1. Preparation and Planning
- 7.4.2. Stage 2. Implementation of Prerequisite Programs for the HACCP Program
- 7.4.3. Stage 3. Execution of the Plan
- 7.4.4. Stage 4. Verification and Maintenance of the HACCP

7.5. Digitalization of Prerequisite Programs of the Food Industry - Migration from the Traditional System to the Digital
- 7.5.1. Primary Production Processes
  - 7.5.1.1. Good Hygiene Practices (GHP)
  - 7.5.1.2 Good Manufacturing Practices (GMP)
- 7.5.2. Strategic Processes
- 7.5.3. Operative Processes
- 7.5.4. Support Processes

7.6. Platforms for Monitoring "Standard Operating Procedures (SOPs)”
- 7.6.1. Training of Personnel in the Documentation of Specific SOPs
- 7.6.2. Channels of Communication and Monitoring of the SOPs Documentation

7.7. Protocols for Document Management and its Communication Between Departments
- 7.7.1. Traceability Documents Management
  - 7.7.1.1. Sales Department Protocols
  - 7.7.1.2. Traceability of Protocols in the Receipt of Raw Materials
  - 7.7.1.3. Warehouse Protocols Traceability
  - 7.7.1.4. Process Area Protocols
  - 7.7.1.5. Hygiene Protocols Traceability
  - 7.7.1.6. Product Quality Protocols
- 7.7.2. Implementation of Alternative Communication Channels
  - 7.7.2.1. Use of Cloud Storage and Restricted Access Folders
  - 7.7.2.2. Codification of Documents for Data Protection

7.8. Documentation and Digital Protocols for Audits and Inspections
- 7.8.1. Internal Auditing Management
- 7.8.2. Record of Corrective Actions
- 7.8.3. Application of the "Deming Cycle"
- 7.8.4. Continuing Improvement Programs Management

7.9. Strategies for an Appropriate Communication of Risks
- 7.9.1. Risk Management and Communication Protocols
- 7.9.2. Strategies for Effective Communication
- 7.9.3. Public Information and Use of Social Media

7.10. Case Studies of Digitization and its Advantages in Reducing Risks in the Food Industry
- 7.10.1. Food Safety Risks
- 7.10.2. Food Fraud Risks
- 7.10.3. Food Defence Risks

Module 8. Validation of New Methodologies and Processes

8.1. Critical Control Points
- 8.1.1. Significant Hazards
- 8.1.2. Prerequisite Programs
- 8.1.3. Critical Control Point Management Chart

8.2. Verification of a Self-Control System
- 8.2.1. Internal Audits
- 8.2.2. Revision of Historical Records and Trends
- 8.2.3. Customer Complaints
- 8.2.4. Detection of Internal Incidences

8.3. Monitoring, Validation and Verification of Control Points
- 8.3.1. Monitoring Techniques
- 8.3.2. Control Validation
- 8.3.3. Verification of Efficiency

8.4. Validation of Processes and Methods
- 8.4.1. Documentation Support
- 8.4.2. Validation of Analysis Techniques
- 8.4.3. Plan of Validation Sample
- 8.4.4. Method Bias and Accuracy
- 8.4.5. Determine Uncertainty

8.5. Validation Methods
- 8.5.1. Stages of Validation Methods
- 8.5.2. Types of Validation Processes, Focuses
- 8.5.3. Validation Reports, Summary of Data Collected

8.6. Incident and Deviation Management
- 8.6.1. Staff Training
- 8.6.2. Description of the Problem
- 8.6.3. Determining the Root Cause
- 8.6.4. Corrective and Preventative Actions
- 8.6.5. Verification of Efficiency

8.7. Analysis of Causes and its Methods
- 8.7.1. Analysis of Causes: Qualitative Methods
  - 8.7.1.1. Root Cause
  - 8.7.1.2. Why
  - 8.7.1.3. Cause and Effect
  - 8.7.1.4. Ishikawa Diagram
- 8.7.2. Analysis of Causes: Quantitative Methods
  - 8.7.2.1. Data Collection Model
  - 8.7.2.2. Pareto Chart
  - 8.7.2.3. Dispersion Graphs
  - 8.7.2.4. Histograms

8.8. Managing Complaints
- 8.8.1. Complaints Data Collection
- 8.8.2. Investigation and Action Taken
- 8.8.3. Preparation of Technical Report
- 8.8.4. Analysis of Complaints Trends

8.9. Internal Audits of the Self-Control System
- 8.9.1. Competent Auditors
- 8.9.2. Program and Audit Plan
- 8.9.3. Scope of the Audit
- 8.9.4. Reference Documents

8.10. Internal Auditing Execution
- 8.10.1. Opening Meeting
- 8.10.2. System Assessment
- 8.10.3. Deviations from Internal Audits
- 8.10.4. Closing Meeting
- 8.10.5. Evaluation and Monitoring of the Effectiveness of Closing Deviations

Module 9. R&D&i of New Food and Ingredients

9.1. New Trends in the Elaboration of Food Products
- 9.1.1. Functional Food Design Aimed at Improving the Specific Physiological Functions
- 9.1.2. Innovation and New Trends in the Design of Functional and Nutraceutical Foods

9.2. Technology and Tools for Isolating, Enriching and Purifying the Functional Ingredients From the Different Starting Materials
- 9.2.1. Chemical Properties
- 9.2.2. Sensory Properties

9.3. Procedures and Equipment for the Incorporation of Functional Ingredients of a Base Food
- 9.3.1. Formulation of Functional Foods According to Their Chemical and Sensory Properties, Caloric Value, etc.
- 9.3.2. Stabilizing Bioactive Ingredients Through the Formulation
- 9.3.3. Dosages

9.4. Research in Gastronomy
- 9.4.1. Texture
- 9.4.2. Consistency and Flavor Thickeners Used in Nouvelle Cuisine
- 9.4.3. Gelification Agents
- 9.4.4. Emulsions

9.5. Innovation and New Trends in the Design of Functional and Nutraceutical Foods
- 9.5.1. Functional Food Design Aimed at Improving the Specific Physiological Functions
- 9.5.2. Practical Applications of the Design of Functional Foods

9.6. Specific Formulation of Bioactive Compounds
- 9.6.1. Transformation of Flavonoids in the Formulation of Functional Foods
- 9.6.2. Bioavailability Studies of Phenolic Compounds
- 9.6.3. Antioxidants in the Formulation of Functional Foods
- 9.6.4. Preservation of the Antioxidant Stability in the Design of Functional Foods

9.7. Design of Foods Low in Sugar and Fat
- 9.7.1. Development of Low-Sugar Products
- 9.7.2. Low-Fat Products
- 9.7.3. Strategies for the Synthesis of Structured Lipids

9.8. Processes for the Development of New Food Ingredients
- 9.8.1. Advanced Processes for Obtaining Food Ingredients with an Industrial Application Micronization and Microencapsulation Technologies
- 9.8.2. Supercritical and Clean Technologies
- 9.8.3. Enzymatic Technology for the Production of New Food Ingredients
- 9.8.4. Biotechnological Production of New Food Ingredients

9.9. Plant-Based and Animal Origin New Food Ingredients
- 9.9.1. R&D&I Development Trends in New Ingredients
- 9.9.2. Applications of Plant-Based Ingredients
- 9.9.3. Applications of Anima-Origin Ingredients

9.10. Research and Improvement of Labeling and Preservation Systems
- 9.10.1. Labeling Requirements
- 9.10.2. New Preservation Systems
- 9.10.3. Validation of Health Claims

Module 10. Development, Coordination and Execution of R+D+I Projects

10.1. Innovation and Competition in the International Field
- 10.1.1. Food Sector Analysis
- 10.1.2. Innovation in Processes, Products and Management
- 10.1.3. Regulatory Conditions for the Marketing of New Foods

10.2. The R&D System
- 10.2.1. Public Research and Private Research
- 10.2.2. Regional Plans and Local Business Support Plans
- 10.2.3. National R&D&I Plans
- 10.2.4. International Programs
- 10.2.5. Research Promotion Organisms

10.3. R+D+I Projects
- 10.3.1. R+D+I Support Programs
- 10.3.2. Types of Projects
- 10.3.3. Types of Funding
- 10.3.4. Evaluation, Monitoring and Control of the Project

10.4. Scientific and Technological Production
- 10.4.1. Publication, Dissemination and Diffusion of Research Results
- 10.4.2. Basic and Applied Research
- 10.4.3. Private Sources of Information

10.5. Technology Transfer
- 10.5.1. Protection of Industrial Property Patents
- 10.5.2. Regulatory Constraints on Transfers in the Food Sector
- 10.5.3. European Food Safety Authority (EFSA)
- 10.5.4. Food and Drug Administration (FDA)
- 10.5.5. National Organisms Example: Spanish Consumer Agency Food Safety and Nutrition (AESAN)

10.6. R+D+I Project Planning
- 10.6.1. Work Decomposition Scheme
- 10.6.2. Resource Allocation
- 10.6.3. Priority of Tasks
- 10.6.4. Gantt Diagram Method
- 10.6.5. Planning Systems and Method with Digital Support

10.7. R&D&I Project Development Documentation
- 10.7.1. Prior Studies
- 10.7.2. Delivery of Progress Reports
- 10.7.3. Development of the Project Report

10.8. Project Execution
- 10.8.1. Checklist
- 10.8.2. Submittals
- 10.8.3. Control of the Project Evolution

10.9. Submitting Projects and Validation
- 10.9.1. ISO Standard in Management of R+D+I Projects
- 10.9.2. Finalizing the Project Phase
- 10.9.3. Results and Viability Analysis

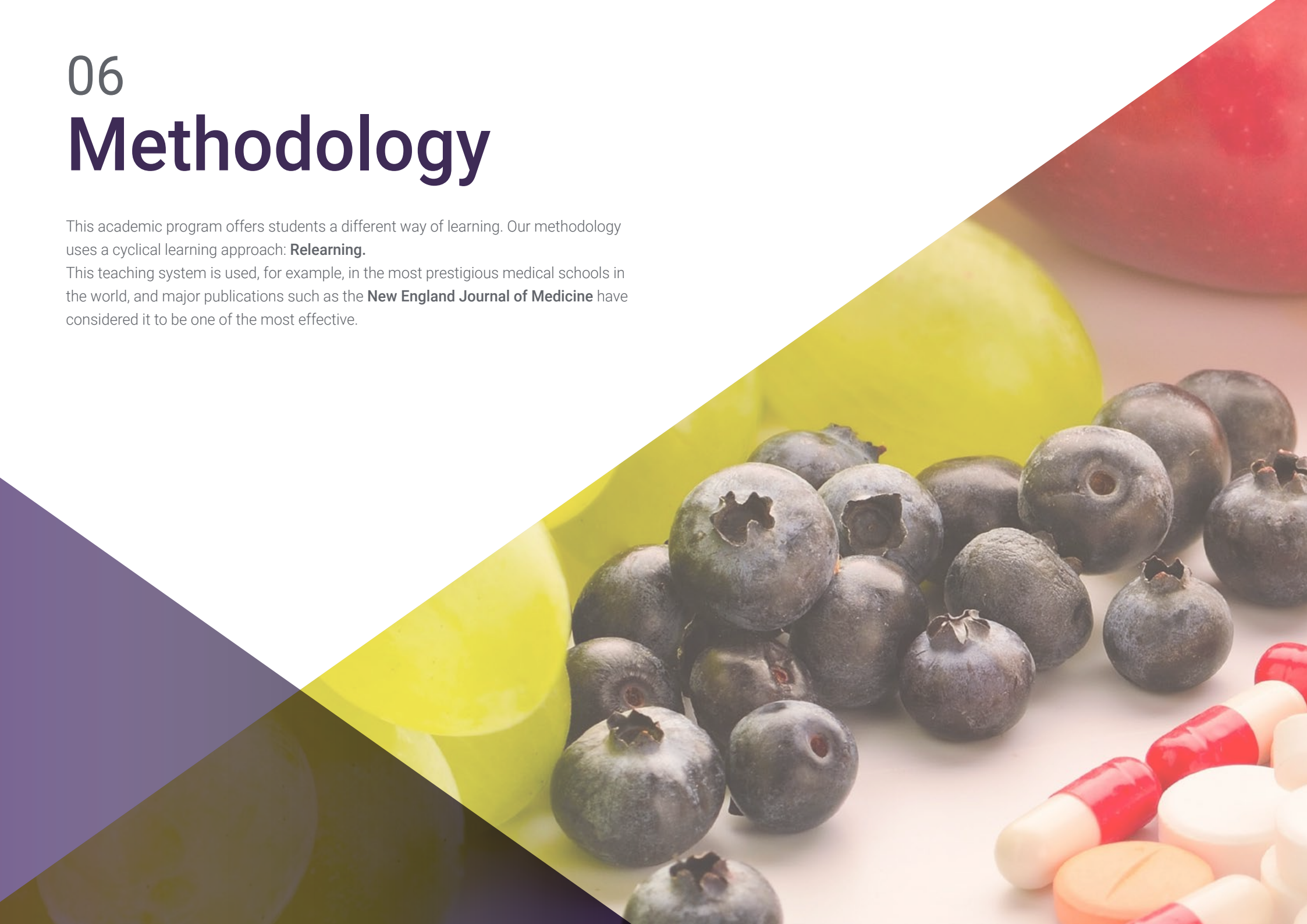
10.10. R&D&I Project Implementation
- 10.10.1. Purchase Management
- 10.10.2. Supplier Validation
- 10.10.3. Validation and Verification of the Project

06

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

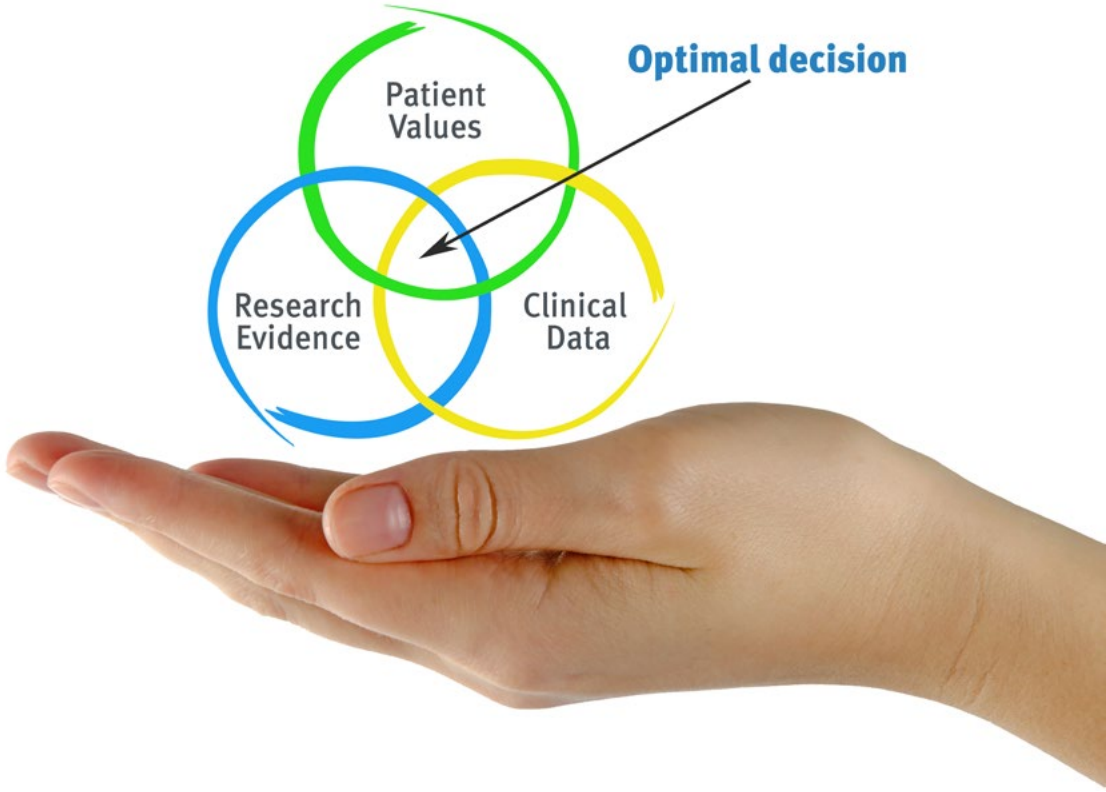


Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH, nutritionists can experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions of professional nutritional practice.

Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

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

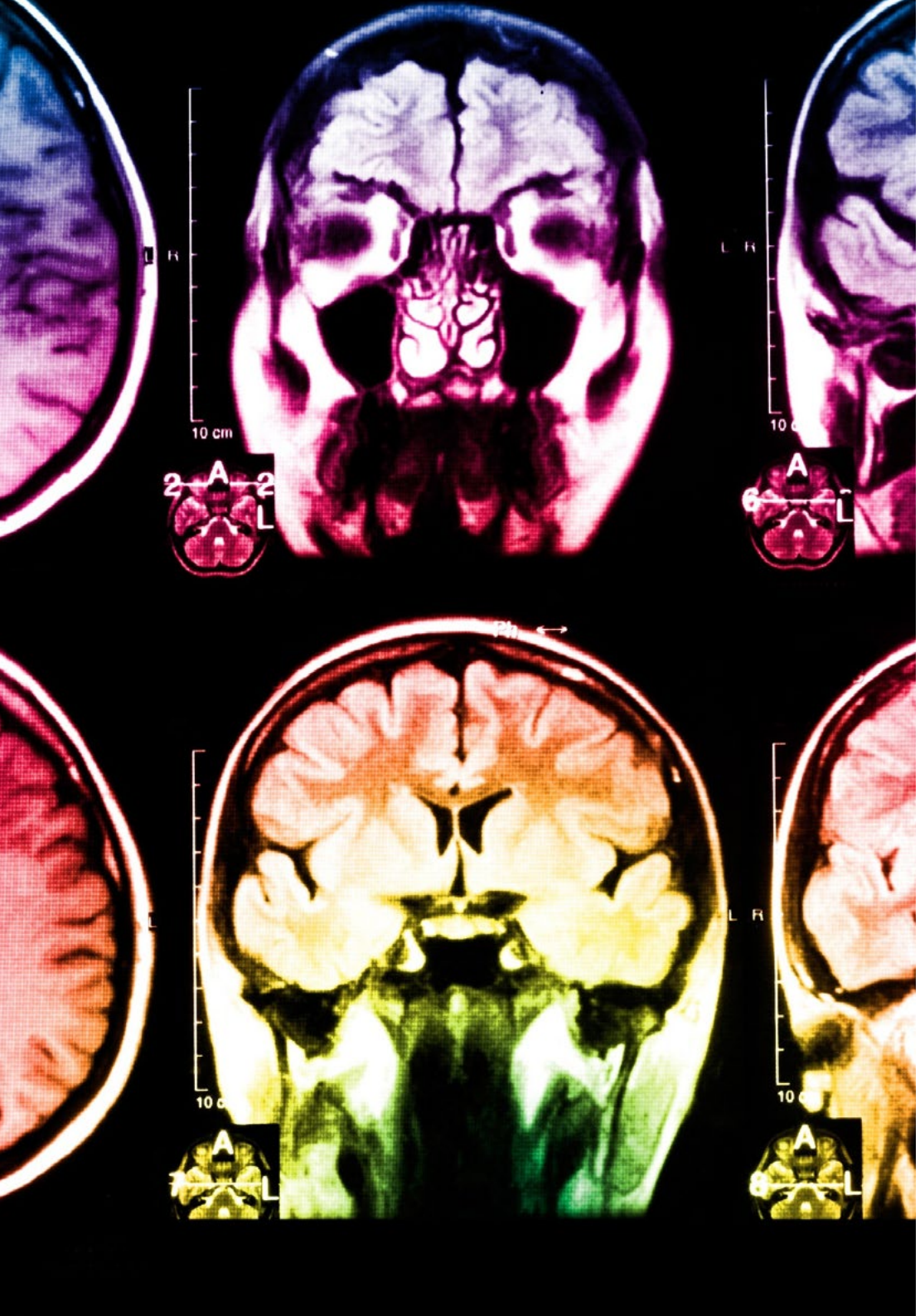
1. Nutritionists who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity through exercises to evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the nutritionist to better integrate knowledge into clinical practice.
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.

Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

The nutritionist will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 45,000 nutritionists have been trained with unprecedented success in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

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

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

This program offers the best educational material, prepared with professionals in mind:

Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Nutrition Techniques and Procedures on Video

TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current nutritional counselling techniques and procedures. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.

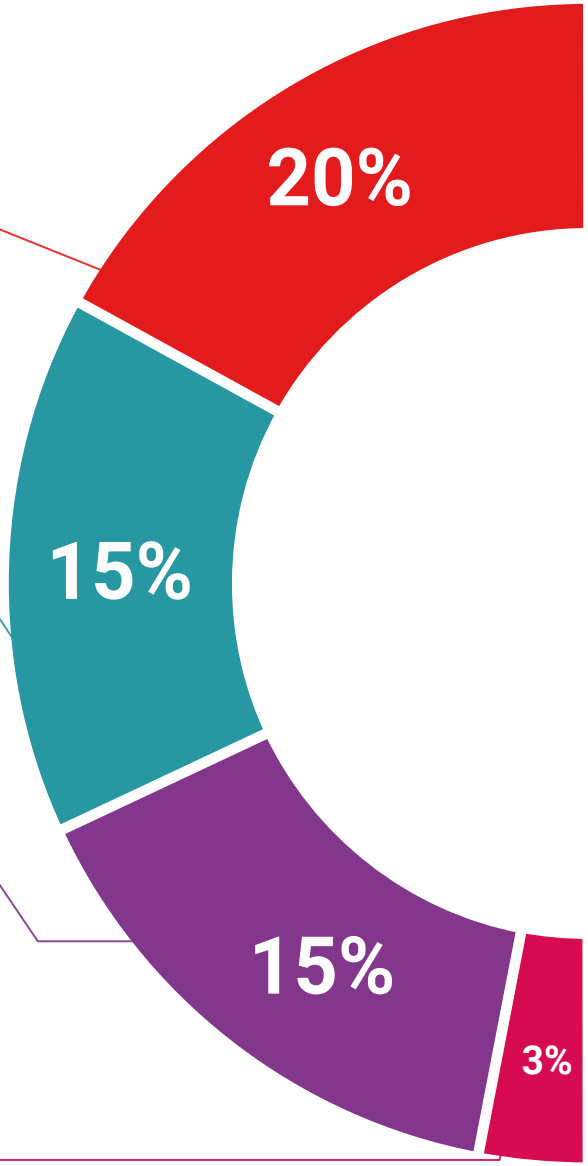
Interactive Summaries

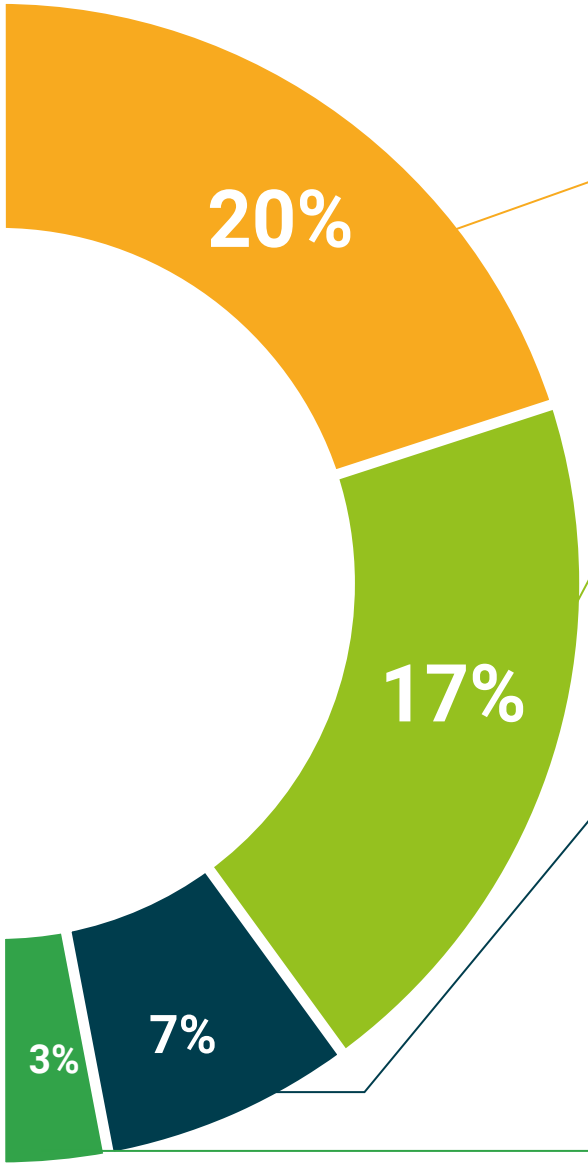
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

Classes

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

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

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.

07

Certificate

This Professional Master's Degree in Food Safety guarantees you, in addition to the most rigorous and updated training, access to a Professional Master's Degree issued by TECH Technological University.

Successfully complete this program and receive your university degree without travel or laborious paperwork"

This **Professional Master's Degree in Food Safety** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Professional Master's Degree** issued by **TECH Technological University** via tracked delivery*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Professional Master's Degree, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Professional Master's Degree in Food Safety**

Official Nº of hours: **1,500 h.**

tech technological university

Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having successfully passed and accredited the following program

PROFESSIONAL MASTER'S DEGREE

in

Food Safety

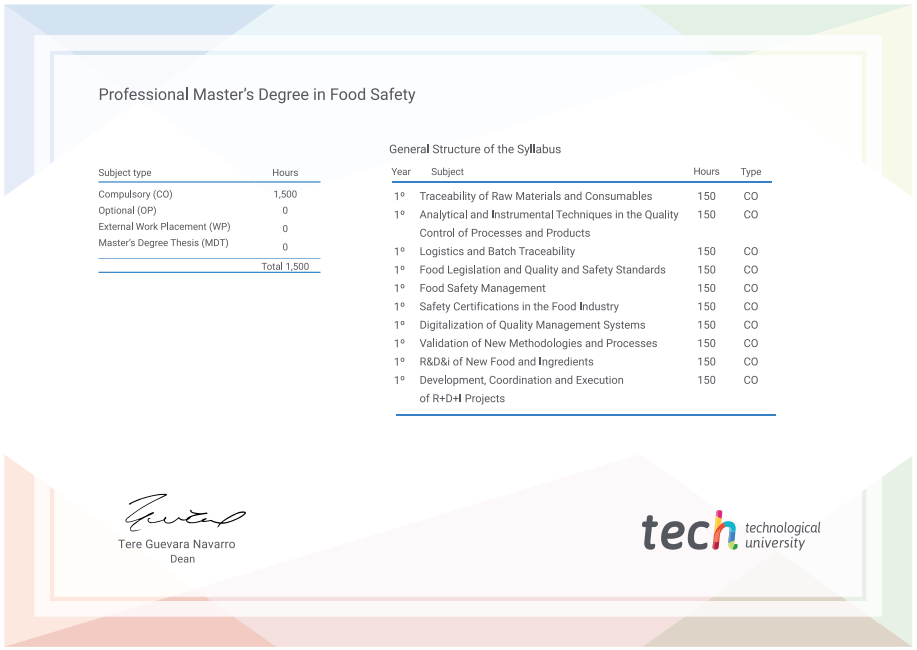
This is a qualification awarded by this University, equivalent to 1,500 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

Unique TECH Code: AFWORD23S techtitute.com/certificates


Professional Master's Degree in Food Safety

Subject type	Hours
Compulsory (CO)	1,500
Optional (OP)	0
External Work Placement (WP)	0
Master's Degree Thesis (MDT)	0
	Total 1,500

General Structure of the Syllabus

Year	Subject	Hours	Type
1º	Traceability of Raw Materials and Consumables	150	CO
1º	Analytical and Instrumental Techniques in the Quality Control of Processes and Products	150	CO
1º	Logistics and Batch Traceability	150	CO
1º	Food Legislation and Quality and Safety Standards	150	CO
1º	Food Safety Management	150	CO
1º	Safety Certifications in the Food Industry	150	CO
1º	Digitalization of Quality Management Systems	150	CO
1º	Validation of New Methodologies and Processes	150	CO
1º	R&D&i of New Food and Ingredients	150	CO
1º	Development, Coordination and Execution of R+D+I Projects	150	CO

Tere Guevara Navarro
Dean

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*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

tech technological university

Professional Master's Degree

Food Safety

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Professional Master's Degree

Food Safety

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