



## Postgraduate Diploma

Flavor Design Applied to Gastronomy

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 24 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/nutrition/postgraduate-diploma/postgraduate-diploma-flavor-design-applied-gastronomy

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### tech 06 | Introduction

The Postgraduate Diploma in Flavor Design Applied to Gastronomy is presented as a formative action that favors connection, learning, participation and knowledge construction. A program that aims not only to offer you specific knowledge, but also to create capable, innovative, and revolutionary professionals in their sector.

You will embark on a training course with us, designed to be practical, active, and participatory. You will work intensively but flexibly, thoroughly but concretely.

You will be personally monitored by a mentor, who will accompany you throughout the program.

This support will be provided through a wide range of communication possibilities, both in real time and delayed: internal messaging, discussion forums, telephone answering service, e-mail contact with the technical department, chat, and videoconferencing.

In addition, you will be able to share with other students and professionals in this field through the different systems provided in the course and the *networking* incorporated into the course.

This **Postgraduate Diploma in Flavor Design Applied to Gastronomy** offers you the characteristics of a high-level scientific, teaching, and technological course.

- The latest technology in online teaching software
- A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- Practical cases presented by practising experts
- State-of-the-art interactive video systems
- Teaching supported by telepractice
- Continuous updating and recycling systems
- Autonomous learning: full compatibility with other occupations
- Practical exercises for self-evaluation and learning verification
- Support groups and educational synergies: questions to the expert, debate and knowledge forums
- Communication with the teacher and individual reflection work
- Content that is accessible from any fixed or portable device with an Internet connection
- Supplementary documentation databases are permanently available, even after the course



Today's gastronomy needs qualified professionals in culinary research in the area of new flavors. Become part of the future of high-level gastronomy"



Discover a new way of approaching creativity in gastronomy, delving into flavor and its relationship with the consumer's emotions. A plus in the menu of any restaurant"

Observing the expert in the process of performing the task, triggers brain mechanisms similar to those activated when performing the same activity: this is the principle of the high efficiency of our "learning from an expert"

Our teaching staff is made up of working professionals. This ensures that it delivers the intended capacitive upgrade objective. A multidisciplinary team of teachers trained and experienced in different environments, who will develop the theoretical knowledge in an efficient way, but above all, they will put at the service of the course the practical knowledge derived from their own experience: one of the differential qualities of this course.

This mastery of the subject is complemented by the effectiveness of the methodological design of this Postgraduate Certificate. Developed by a multidisciplinary team of *e-learning* experts, it integrates the latest advances in educational technology. In this way, you will be to study with a range of easy-to-use and versatile multimedia tools that will give you the necessary skills you need for training.

The design of this program is based on Problem-Based Learning: an approach that conceives learning as a highly practical process. To achieve this remotely, we will use telepractice learning: with the help of an innovative interactive video system, and learning from an expert, you will be able to acquire the knowledge as if you were facing the assumption that is being learned at that moment. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

This 100% online Postgraduate Diploma will allow you to combine your studies with your professional work while increasing your knowledge in this field.







### tech 10 | Objectives



### **Objectives**

Section: Flavors

#### Module 1. Basic Exploration of the Evolutionary Implications of Foods

- Identify how emotional behavior and its temporary nature occur in the mind, linked biochemically to the neuronal mechanism generating "memories" and "experiences"
- Understand how the neural processes that generate the formation of memories are associated with flavor stimuli

#### Module 2. Natural Raw Materials Used as Flavorings

- Identify the natural raw materials used as flavor components
- Know the applicable techniques for the purification/improvement of natural raw materials used as flavor components

#### Module 3. Introduction to the Use of Flavorings in Cooking

- Determine the quantity of flavorings in the kitchen
- Identify suitable vehicles for flavors in the kitchen
- Know the complements of sensations and flavors in the kitchen

#### Module 4. Molecular Gastronomy

- Understand the application of laboratory techniques in food preparation
- Elaborate starters, dishes, desserts and beverages using innovative techniques and materials of molecular cuisine





#### Module 5. Neuromodulators in the Kitchen as Food Flavor Enhancers

- Modulate/Eliminate undesirable hints in foods through the use of flavor modulators
- Highlight desirable flavor hints through the use of flavor neuromodulators

#### Section: Affective Flavors

#### Module 6. Affective Flavors

- Identify the neural processes that are affected through flavors
- Provoke memories and affective sensations through flavor design



Enter one of the most creative and exciting areas in the world of gastronomy with the background of a complete professional, qualified to successfully lead any project"





### tech 14 | Course Management

#### Management



#### Mr. Thuemme Canales, Juan José

- Technical Manager (Senior Flavorist) of ETADAR. Flavor Design Laboratory of the Multinational Company DEIMAN
- He has 40 years of experience in the Mexican, Dutch, and U.S. food industry. During his career, he has created and developed flavors for the dairy, bakery, confectionery, beverage, and savory sectors
- He has been recognized as a Senior Flavorist since 1985. He holds a Bachelor's Degree in Engineering and a Master's degree in Biochemistry from the Monterrey Institute of Technology and Higher Education. Mexico
- During his career he has given a plethora of conferences oriented to "Creation and application of flavors in the food industry" at the University of Durango, "Top notes creation in citrus flavors" at the Frutech Citrus Symposium, "Creation of flavors" in Mexico City or "Native Flavors" at the Food Technology Summit & Expo 2015, among others
- He currently directs this training program aimed at expanding the knowledge of senior flavorists, preparing flavorists in training and providing entrepreneurs and chefs in the hospitality and catering industry with the tools to break the mold and continue transforming the concept of gastronomy and flavor as we know it.

#### **Professors**

#### Mr. Coranguez Reyes Gabriel

- Food Engineer
- Trainee Flavorist
- ETADAR by DEIMAN, Mexico City. Morales Heredia, Ana Gabriela

#### Ms. Morales Heredia, Ana Gabriela

- Bachelor's Degree in Food Chemistry
- Professional Master's Degree in Quality and Applied Statistics
- Technologist in ETADAR by DEIMAN Applications, Mexico City

#### Mr. Teutle Chávez, Juan Carlos

- Laboratory Technician
- Development Assistant
- ETADAR by DEIMAN, Mexico City

#### Mr. García Zepeda, Rafael

- Industrial Biochemical Engineer
- Specialization in Biotechnology
- Legislation and Standards Manager
- DEIMAN, Mexico City

#### Mr. Chávez Barrios, Meida

- Laboratory Technician
- Development Assistant
- ETADAR by DEIMAN, Mexico City

#### Mr. Vargas García, Jorge Luis

- Industrial Chemical Engineer
- Trainee Flavorist ETADAR by DEIMAN, Mexico City

#### Ms. Martínez Sánchez. Berenice

- Bachelor's Degree in Food Chemistry
- Application and library coordinator
- ETADAR by DEIMAN, Mexico City

#### Ms. Castañeda Olivera, Alondra Magdalena

- Food Engineer
- Raw Materials Purchaser
- Researcher for projects at the National Polytechnic Institute
- DEIMAN, Mexico City

#### Ms. Peña García, Maribel

- Biochemical Engineer
- Professional Master's Degree in Andrology
- Food Specialist
- Applications Technologist
- DEIMAN, Mexico City

#### Mr. Oviedo García, Miguel

- Clinical Laboratory Technician
- Scaling Coordinator
- DEIMAN, Mexico City

#### Mr. Miriam Santiago Nicolás

- Trainee Flavorist
- Oils and Flavors Applications Technologist
- ETADAR by DEIMAN, Mexico City

#### Ms. Monsivais Vilchis, María de Guadalupe

- Bachelor's Degree in Food Chemistry
- Sensory Evaluation Coordinator
- DEIMAN, Mexico City

#### Ms. Yoalli Lizbeth, Solis Montiel

- Food Engineer
- Applications Technologist
- DEIMAN, Mexico City Alonso Osnaya, Norma Nelly
- Development Assistant
- ETADAR by DEIMAN, Mexico City

#### Ms. Gómez Pérez, Karen

- Bachelor's Degree in Communication Sciences
- Specialist in Advertising Communication and Consumer Analysis
- Marketing Manager
- DEIMAN, Mexico City

#### Ms. Orozco López, Déborah María

- Bachelor's Degree in Graphic Communication Design
- Marketing Analyst Industrial Division
- DEIMAN, Mexico City

#### Ms. Carrasco Reyes Maria Luisa

- Industrial Engineer
- Project Coordinator
- DEIMAN, Mexico City

#### Mr. Curiel Monteagudo, José Luis

- Food Chemistry Engineer
- Master's Degree in Food Science and Technology
- Professor at Claustro de Sor Clara University
- Mexico City

#### Mr. Orozco, Carlos

- Diploma in Gastronomy
- Iberoamerican University Leon Gto
- Executive Chef at Meliá Cohiba
- Quintana Roo, Mexico





### tech 18 | Structure and Content

#### Module 1. Basic Exploration of the Evolutionary Implications of Foods

- 1.1. Introduction to Neurogastronomy
- 1.2. Neuromodulators
- 1.4. Odor Communication and Neurocognitive Patterns
- 1.5. Flavor Attributes: Color 6.6. Texture and Flavor Appreciation

#### Module 2. Oils

- 2.1. Essential Oils
- 2.2. Rectification of Processed Essential Oils
- 2.3. Liquid Extracts and Dyes
- 2.4. Solid Extracts
- 2.5. Exudates
- 2.6. Specific
- 2.7. Absolutes
- 2.8. Concentrated and Diluted Fruit Juices

### Module 3. Introduction to the Use of Flavorings in Cooking

- 3.1. Flavorings in Cooking
- 3.2. Food Preparation
- 3.3. Topical Techniques for the Application of Flavorings in the Kitchen
- 3.4. Food Matrix
- 3.5. Condiments and Seasoning





#### Module 4. Molecular Gastronomy

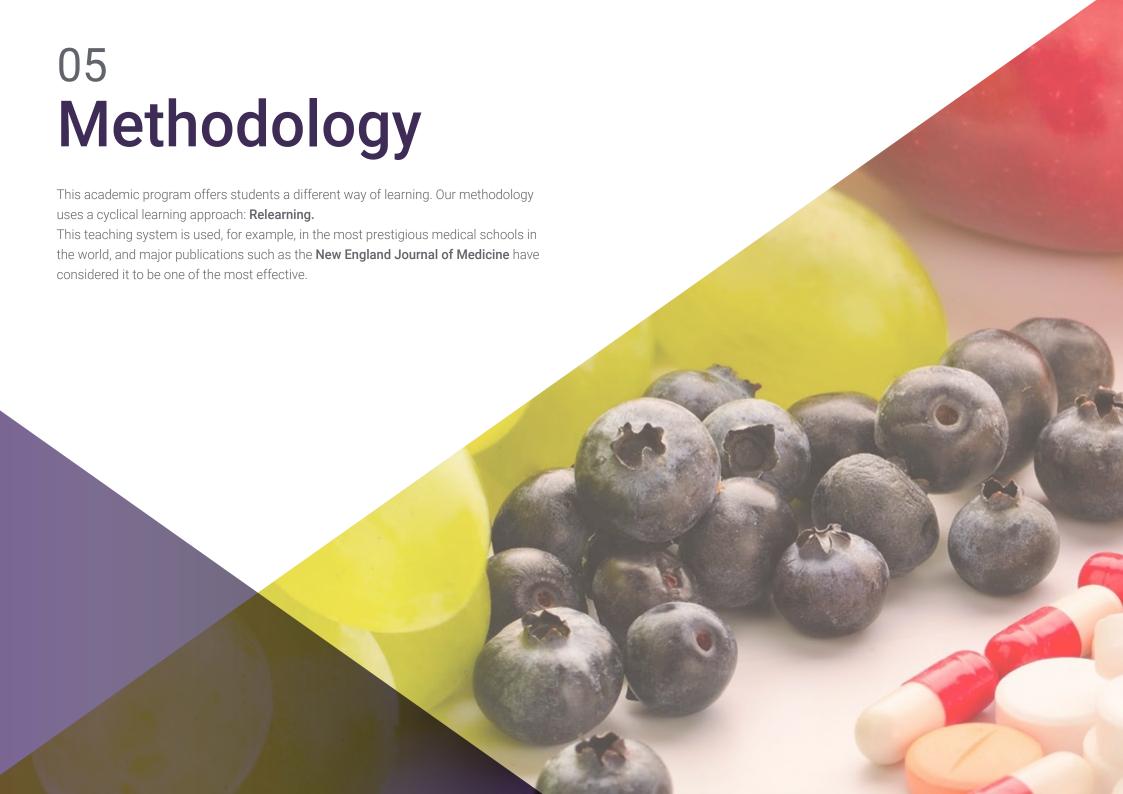
- 4.1. Introduction to Molecular Gastronomy
- 4.2. Techniques: Direct Spherification
- 4.3. Techniques: Indirect Spherification
- 4.4. Techniques: Foams
- 4.5. Techniques: Liquid Nitrogen
- 4.6. Techniques: Gelification
- 4.7. Recipes

#### Module 5. Neuromodulators as Food Flavor Enhancers

- 5.1. Enhance Flavor and Fix Food with Modulating Sugars
- 5.2. Blockers for Undesirable Sweetener, Preservative, and Medicinal Notes
- 5.3. Acid Blockers
- 5.4. Omega Blockers
- 5.5. Soy Blockers
- 5.6. Sweet and Savory Note Enhancers

#### Module 6. Affective Flavors

- 6.1. One of the Largest Challenges Today: Remembering is Reliving
- 6.2. Fruit Flavors and their Affective Reactions
- 6.3. Cherry and Chocolate as Generators of Feelings and Passions
- 6.4. Exotic and Tropical Fruits that Evoke Fun and a Party Environment
- 6.5. Christmas Spirit
- 6.6. Mexican Gastronomy. National Pride
- 6.7. Importance of Evoking Occurrences, Events, or Information Stored in the Past



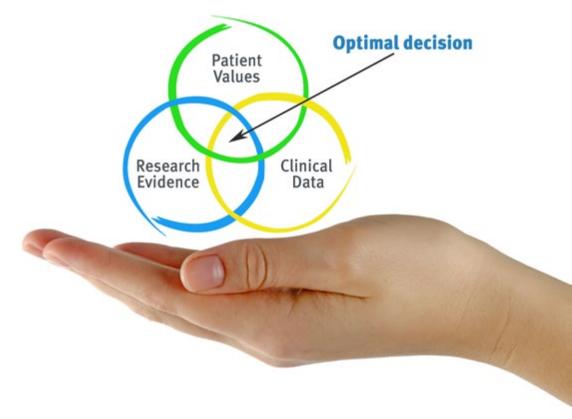


## tech 22 | Methodology

#### 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:

- 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.



## tech 24 | Methodology

### 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.



### Methodology | 25 tech

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 socioeconomic 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.

### tech 26 | Methodology

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**

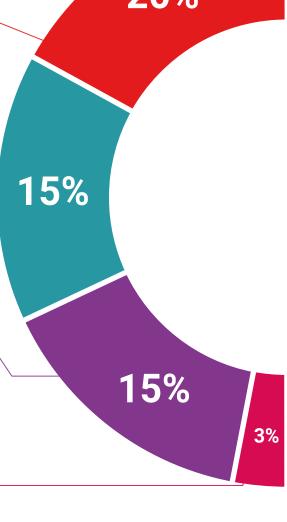
TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current nutritional counselling techniques and procedures. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all,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





#### **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



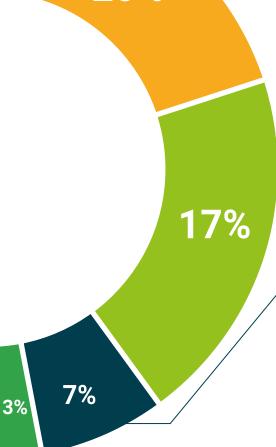
There is scientific evidence suggesting that observing third-party experts can be useful.

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.







### tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Diploma in Flavor Design Applied to Gastronomy** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Diploma in Flavor Design Applied to Gastronomy

Modality: online

Duration: 6 months

Accreditation: 24 ECTS



has successfully passed and obtained the title of:

, with identification document

#### Postgraduate Diploma in Flavor Design Applied to Gastronomy

This is a program of 600 hours of duration equivalent to 24 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra Ia Vella, on the 28th of February of 2024



<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

tech global university Postgraduate Diploma Flavor Design

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