



Postgraduate Certificate

Molecular Gastronomy

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/nutrition/postgraduate-certificate/molecular-gastronomy

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The Postgraduate Certificate in Molecular Gastronomy is presented as an educational program that favors connection, learning, participation and the construction of knowledge. 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 with us on an educational program, with an eminently practical, active and participative orientation. 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 that are provided in the qualification and networking that we incorporate into the program.

Allowing you to complete your training in a context that connects you to the professional world. Are you ready to start your project?"

This **Postgraduate Certificate in Molecular Gastronomy** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- 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 program



A tour through the essential techniques of Molecular Gastronomy: spherifications, foams, gelations"

Our teaching staff is made up of working professionals. This ensures that the intended educational updating objective is achieved. A multidisciplinary team of qualified and experienced professors in different environments, who will develop the theoretical knowledge in an efficient manner, but above all, they will provide the Postgraduate Certificate with practical knowledge derived from their own experience: one of the differential qualities of this Postgraduate Certificate.

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, the students will be able to study with a range of easy-to-use and versatile multimedia tools will give you the necessary skills you need for specialization.

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, telepractice will be used: with the help of an innovative system of interactive videos, and learning from an expert you will be able to acquire the knowledge as if you were facing the case you are learning at that moment. A concept that will make it possible to integrate and fix learning in a more realistic and permanent way.

The observing an expert, during a task, triggers brain mechanisms similar to those activated by the performance of the same activity: this is the principle of the high efficiency of our "learning from an expert".

This 100% online Professional Master's Degree will allow you to combine your studies with your professional work while increasing your knowledge in this field.







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General Objectives

- Define and classify flavors
- Provide participants with an overview of flavor chemistry and its sensory relationship
- Identify the neural processes that are affected through flavors
- Apply flavor chemistry to the processes
- Identify the main sources and suppliers of aromatic chemicals
- Carry out the Flavor Design process in different environments
- Apply the techniques of maximum innovation in Flavor Design
- Revolutionize gastronomy through chemistry and other techniques
- Understand how to carry out various techniques in Flavor Design







Specific Objectives

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



Enter one of the most creative and exciting areas in Molecular Gastronomy: the world of gastronomy and food"





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Management



Mr. Thuemme Canales, Juan José

- ETADAR Senior Flavorist. Flavor Design Laboratory of the Multinational Company DEIMAN
- 40 years of experience in the Mexican, Dutch, and U.S. food industry
- During his career, he has created and developed for the dairy, bakery, confectionery, beverage, and savory sectors
- Senior Flavorist since 1985
- Senior Engineer, Monterrey Institute of Technology and Higher Education, Monterrey, Mexico
- Teacher in Biochemistry of Technology and Higher Education, Monterrey, Mexico
- Speaker at the University of Durango, at the Frutech Citrus Symposium in Mexico City and at the Food Technology Summit & Expo 2015

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
- 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
- Flavorist in Development 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
- Master's Degree in Andrology
- Food Specialist
- Applications Technologist
- DEIMAN, Mexico City

Mr. Oviedo García, Miguel

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

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. Solis Montiel, Yoalli Lizbeth

- 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





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Module 1. Molecular Gastronomy

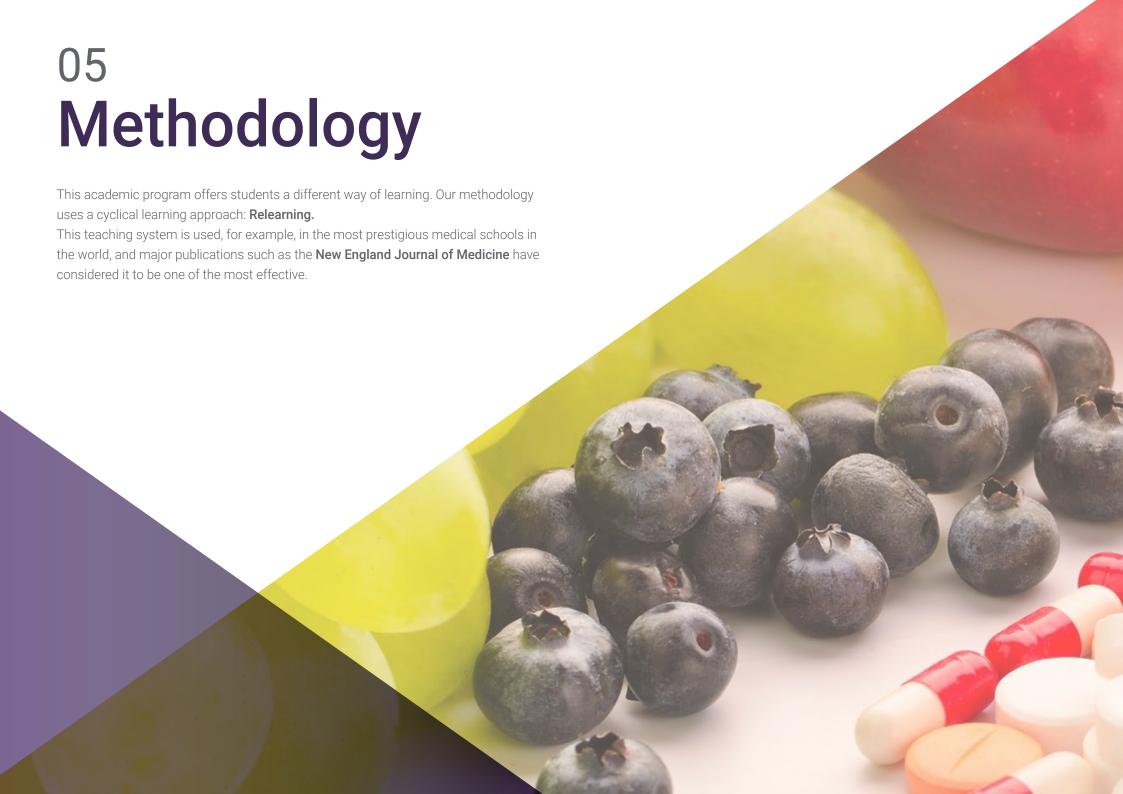
- 1.1. Introduction to Molecular Gastronomy
- 1.2. Techniques: Direct Spherification
- 1.3. Techniques: Indirect Spherification
- 1.4. Techniques: Foams
- 1.5. Techniques: Liquid Nitrogen
- 1.6. Techniques: Gelling
- 1.7. Recipes







A complete syllabus that will guide you through the most stimulating you through the most stimulating and creative learning proposals"



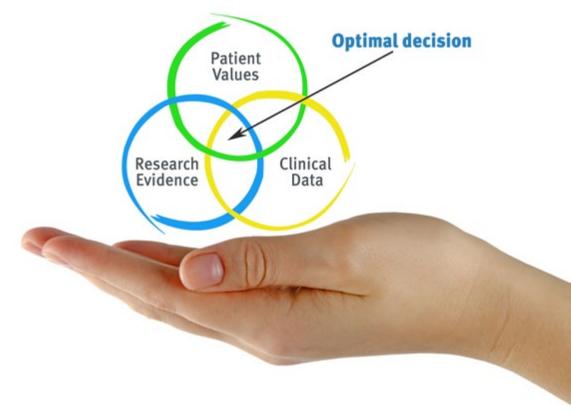


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At TECH we use the Case Method

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.



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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.

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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

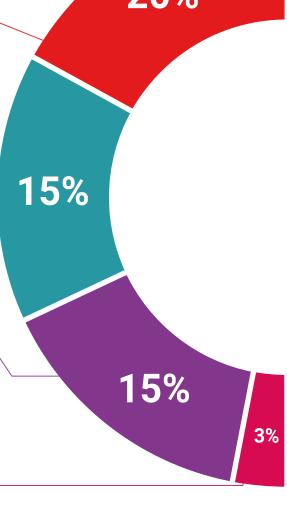
TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current nutritional counselling techniques and procedures. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all,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



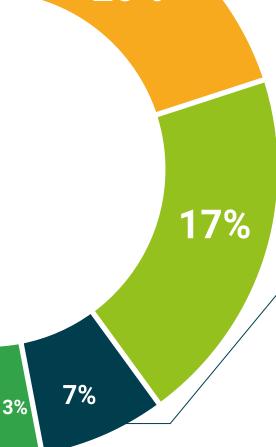
There is scientific evidence suggesting that observing third-party experts can be useful.

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.







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This program will allow you to obtain your **Postgraduate Certificate in Molecular 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 Certificate in Molecular Gastronomy

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



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

Postgraduate Certificate in Molecular Gastronomy

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

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



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

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Molecular Gastronomy

