

# Postgraduate Certificate Molecular Gastronomy





## Postgraduate Certificate Molecular Gastronomy

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/pk/nutrition/postgraduate-certificate/molecular-gastronomy](http://www.techtute.com/pk/nutrition/postgraduate-certificate/molecular-gastronomy)

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# 01

# Introduction

The future has settled in gastronomy. Kitchens have become laboratories in which traditional flavors, aromas and textures are giving way to surprising and seductive concepts. Molecular Cuisine is the undisputed protagonist of this new paradigm.

We propose a journey to a new way of conceiving the kitchen, in a highly specialized program that will give the keys to this way of working.





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*The keys to Molecular Gastronomy, in a highly specialized Postgraduate Certificate that will give you the keys to introduce you to the most revolutionary form of cooking in recent times"*

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

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*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.*



# 02 Objectives

TECH Technological University aims to specialize highly qualified professionals for the workplace. An objective that is complemented, moreover, in a global manner, by promoting human development that lays the foundations for a better society. This objective is focused on helping professionals reach a much higher level of expertise and control. A goal that the student will achieve with a high intensity and precise program.







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*Our goal is yours: to provide you with the best online program on the Molecular Gastronomy market. A one-of-a-kind Postgraduate Certificate that will propel you to the forefront of your industry”*



## General Objectives

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- 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

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

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

03

# Course Management

Within the concept of total quality of our Postgraduate Certificate, we are proud to put at your disposal a teaching staff of the highest level, chosen for their proven experience in the educational field. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.



A close-up, microscopic view of plant cells, showing a network of red, translucent cell walls forming a honeycomb-like structure. The cells are arranged in a regular pattern, with some showing internal organelles. The background is a soft, light blue gradient.

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*An impressive teaching staff, made up of professionals from different areas of expertise, will be your teachers during your program a unique opportunity not to be missed”*

## 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

# 04

# Structure and Content

This program offered in 100% online format, will serve the student as a way to achieve their goals, choosing the right time and place to review downloadable material whenever and wherever required. The student will go through a highly structured agenda that will allow them to know each and every one of the essential aspects for the field of action of flavorists, allowing them to grow as a professional in the world of aromas and flavors.







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

## 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





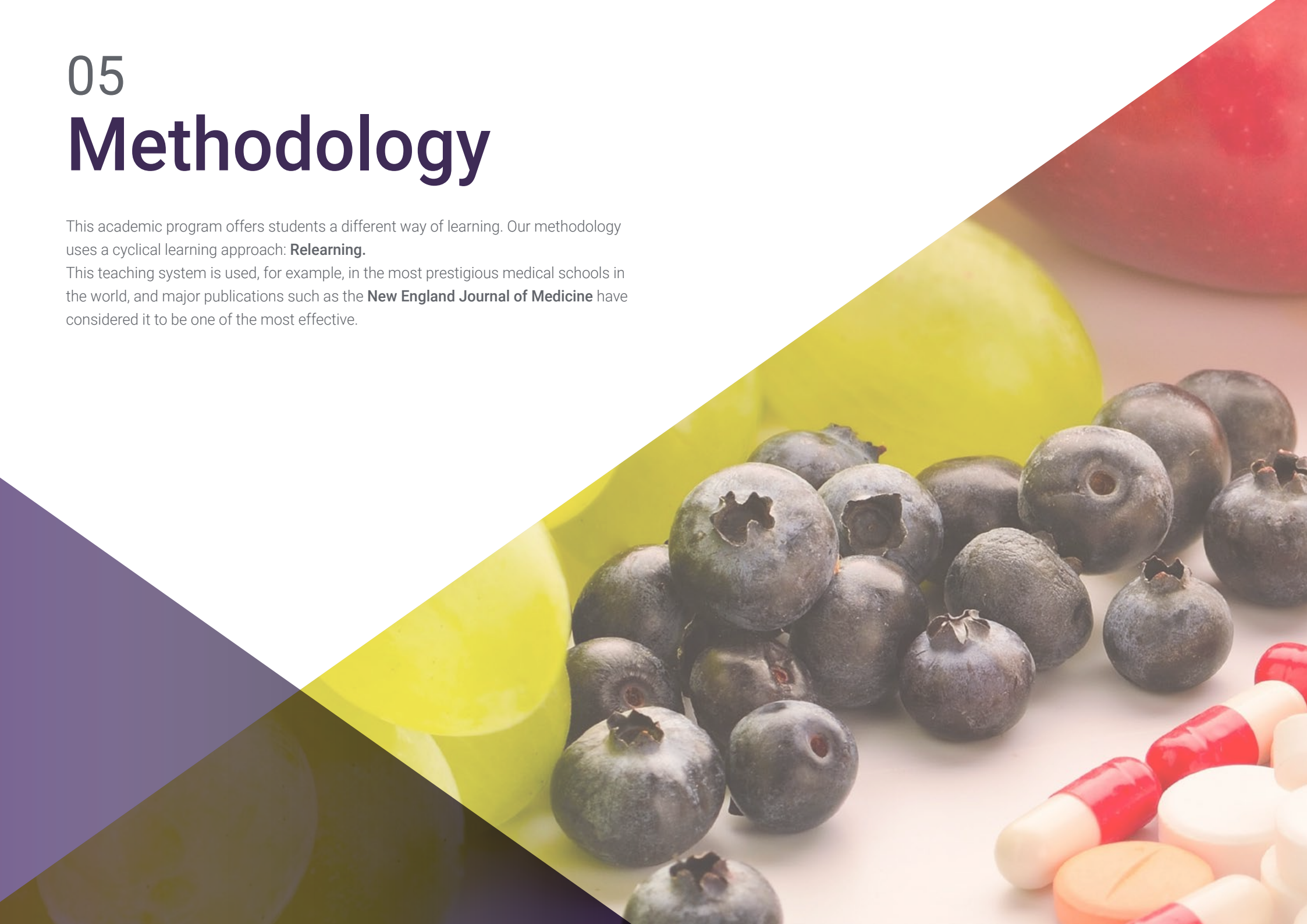
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*A complete syllabus that will guide you through the most stimulating and creative learning proposals”*

# 05 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.





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*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.

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*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.



# 06 Certificate

The Postgraduate Certificate in Molecular Gastronomy guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.





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

This **Postgraduate Certificate in Molecular Gastronomy** 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 **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

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

Title: **Postgraduate Certificate in Molecular Gastronomy**

Official N° of Hours: **150 h.**



\*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.

future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

**tech** technological  
university

personalized service innovation

knowledge present quality

online training

development languages

virtual classroom

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