



# Postgraduate Certificate Biochemistry of Flavors

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/pk/school-of-business/postgraduate-certificate/biochemistry-flavors

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Certificate

# 01 **Welcome**

Humans can perceive different flavors, which act synergistically to mediate appetite-protective responses, warn of toxic substances and, in some cases, determine food preferences. Knowing the biochemistry of foods helps professional flavorists differentiate between a cured cheese and a fresh cheese, for example. The food industry and master chefs use this science to make their best products more appealing. TECH, being aware of the growth opportunity in the gastronomic sector, has prepared a complete qualification in which students obtain the necessary knowledge in flavor biochemistry.









### tech 08 | Why Study at TECH?

### At TECH Technological University



#### **Innovation**

The university offers an online learning model that combines the latest educational technology with the most rigorous teaching methods. A unique method with the highest international recognition that will provide students with the keys to develop in a rapidly-evolving world, where innovation must be every entrepreneur's focus.

"Microsoft Europe Success Story", for integrating the innovative, interactive multi-video system.



### The Highest Standards

Admissions criteria at TECH are not economic. Students don't need to make a large investment to study at this university. However, in order to obtain a qualification from TECH, the student's intelligence and ability will be tested to their limits. The institution's academic standards are exceptionally high...

95%

of TECH students successfully complete their studies



### Networking

Professionals from countries all over the world attend TECH, allowing students to establish a large network of contacts that may prove useful to them in the future.

100,000+

200+

executives trained each year

different nationalities



### **Empowerment**

Students will grow hand in hand with the best companies and highly regarded and influential professionals. TECH has developed strategic partnerships and a valuable network of contacts with major economic players in 7 continents.

500+

collaborative agreements with leading companies



#### **Talent**

This program is a unique initiative to allow students to showcase their talent in the business world. An opportunity that will allow them to voice their concerns and share their business vision.

After completing this program, TECH helps students show the world their talent.



### **Multicultural Context**

While studying at TECH, students will enjoy a unique experience. Study in a multicultural context. In a program with a global vision, through which students can learn about the operating methods in different parts of the world, and gather the latest information that best adapts to their business idea.

TECH students represent more than 200 different nationalities.



### Why Study at TECH? | 09 tech

TECH strives for excellence and, to this end, boasts a series of characteristics that make this university unique:



### **Analysis**

TECH explores the student's critical side, their ability to question things, their problem-solving skills, as well as their interpersonal skills.



### Learn with the best

In the classroom, TECH's teaching staff discuss how they have achieved success in their companies, working in a real, lively, and dynamic context. Teachers who are fully committed to offering a quality specialization that will allow students to advance in their career and stand out in the business world.

access to Harvard Business

School case studies"

Teachers representing 20 different nationalities.



#### **Academic Excellence**

TECH offers students the best online learning methodology. The university combines the Relearning methodology (the most internationally recognized postgraduate learning methodology) with Harvard Business School case studies. A complex balance of traditional and state-of-the-art methods, within the most demanding academic framework.



### **Economy of Scale**

TECH is the world's largest online university. It currently boasts a portfolio of more than 10,000 university postgraduate programs. And in today's new economy, **volume + technology = a ground-breaking price**. This way, TECH ensures that studying is not as expensive for students as it would be at another university.





### tech 12 | Why Our Program?

This program will provide students with a multitude of professional and personal advantages, particularly the following:



### A significant career boost

By studying at TECH, students will be able to take control of their future and develop their full potential. By completing this program, students will acquire the skills required to make a positive change in their career in a short period of time.

70% of participants achieve positive career development in less than 2 years.



# Develop a strategic and global vision of companies

TECH offers an in-depth overview of general management to understand how each decision affects each of the company's different functional areas.

Our global vision of companies will improve your strategic vision.



### Consolidate the student's senior management skills

Studying at TECH means opening the doors to a wide range of professional opportunities for students to position themselves as senior executives, with a broad vision of the international environment.

You will work on more than 100 real senior management cases.



### Take on new responsibilities

The program will cover the latest trends, advances and strategies, so that students can carry out their professional work in a changing environment.

45% of graduates are promoted internally.



### Access to a powerful network of contacts

TECH connects its students to maximize opportunities. Students with the same concerns and desire to grow. Therefore, partnerships, customers or suppliers can be shared.

You will find a network of contacts that will be instrumental for professional development.



### Thoroughly develop business projects

Students will acquire a deep strategic vision that will help them develop their own project, taking into account the different areas in companies.

20% of our students develop their own business idea.



### Improve soft skills and management skills

TECH helps students apply and develop the knowledge they have acquired, while improving their interpersonal skills in order to become leaders who make a difference.

Improve your communication and leadership skills and enhance your career.



### Be part of an exclusive community

Students will be part of a community of elite executives, large companies, renowned institutions, and qualified professors from the most prestigious universities in the world: the TECH Technological University community.

We give you the opportunity to train with a team of world renowned teachers.





### tech 16 | Objectives

TECH makes the goals of their students their own goals too. Working together to achieve them.

The Postgraduate Certificate in Biochemistry of Flavors will enable the student to:

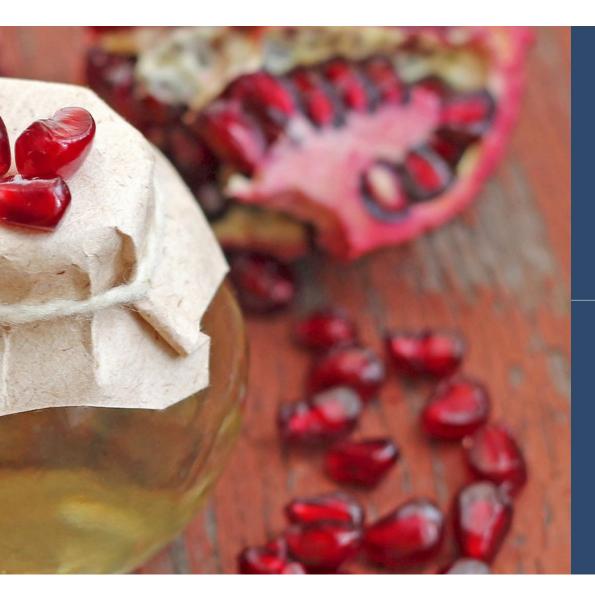


Provide participants with an overview of flavor chemistry and its sensory relationship



Define the differences between essential oils from fruits, vegetables and spices, aromatic plants, and animal profiles







Determine the behavior of aromatic chemicals within the food matrix and all the reactions produced during the food preparation processes



Identify how emotional behavior and its temporality occur in the mind, biochemically linked to the neuronal mechanism generating "memories" and "experiences"





### tech 20 | Structure and Content

### **Syllabus**

Taste is the bodily sense that perceives the chemical substances that dissolve when a food is tasted. There are four types of tastes: sweet, bitter, salty and sour, but over the years, the Japanese have included umami, which refers to sodium glutamate, which enhances the flavor of some foods. For this reason, many professionals decide to specialize in this field, as they want to better understand how to enhance the flavor of their dishes or of a product already on the market.

Throughout each class, we will go deeper into those topics that help the professional to explain the differences between essential, nut or vegetable oils, as well as the different elements that help to enhance flavor. In this way, the student will be able to learn new tools that will enhance their creativity and innovation.

The program's teaching staff includes leading professionals who bring their work experience to each class. In addition, renowned and prestigious people participate in its design and elaboration, completing the program in an interdisciplinary way. Teachers with vocation that will give students to the necessary impulse to grow.

This Postgraduate Certificate takes place over 6 weeks:

Module 1.

Biochemistry



### Where, When and How is it Taught?

TECH offers the possibility of developing this Postgraduate Certificate in Biochemistry of Flavors completely online. Over the course of 6 weeks you will be able to access all the contents of this program at any time, allowing you to self-manage your study time.

A unique, key, and decisive educational experience to boost your professional development and make the definitive leap.

### tech 22 | Structure and Content

| Mod  | dule 1. Biochemistry   |   |      |  |      |                               |
|------|--|---|------|--|------|-------------------------------|
| 1.1. | Chemistry of Flavors<br>and Structures and their<br>Sensory Relationship | Biochemistry and Interactions with the Chemicals Responsible for Flavor | 1.3. | Essential Oils (Fruits, Vegetables and Spices) | 1.4. | Importance of Aromatic Plants |
| 1.5. | Complexity of Animal Profiles  |   |      |  |      |                               |







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.





### tech 26 | Methodology

# TECH Business School uses the Case Study to contextualize all content

Our program offers a revolutionary approach to developing skills and knowledge. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.





This program prepares you to face business challenges in uncertain environments and achieve business success.



Our program prepares you to face new challenges in uncertain environments and achieve success in your career.

### A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch to present executives with challenges and business decisions at the highest level, whether at the national or international level. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and business reality is taken into account.



You will learn, through collaborative activities and real cases, how to solve complex situations in real business environments"

The case method has been the most widely used learning system among the world's leading business schools for as long as they have existed. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They must integrate all their knowledge, research, argue and defend their ideas and decisions.

### tech 28 | Methodology

### Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

Our online system will allow you to organize your time and learning pace, adapting it to your schedule. You will be able to access the contents from any device with an internet connection.

At TECH you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our online business school is the only one in the world licensed to incorporate this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



### Methodology | 29 **tech**

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. With this methodology we have trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, markets, and financial instruments. 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.

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.



#### 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.



### **Management Skills Exercises**

They will carry out activities to develop specific executive competencies in each thematic area. Practices and dynamics to acquire and develop the skills and abilities that a high-level manager needs to develop in the context of the globalization we live in.



#### **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.





Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best senior management specialists in the world.



#### **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".

### **Testing & Retesting**

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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.



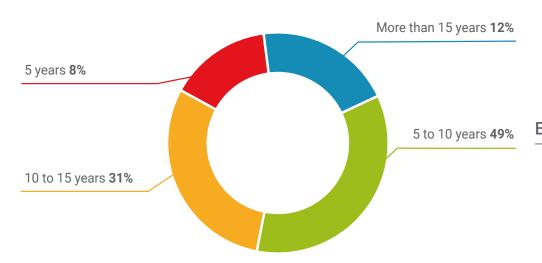
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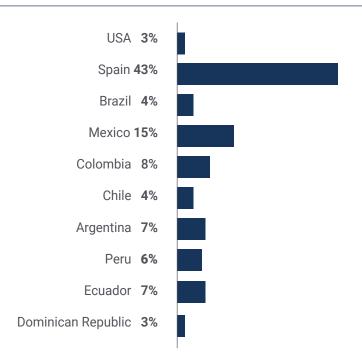
### tech 34 | Our Students' Profiles







### **Geographical Distribution**





## **Gabriel Sánchez**

#### Chef in molecular cuisine

"At TECH, I have found a unique opportunity to specialize in an area that is growing, due to the different demands of users. With this Postgraduate Certificate I have been able to update my knowledge in food chemistry from the comfort of my home. For this reason, I have started a personal project that I have been putting off for a long time, designing my own molecular menu"





## Management



## Mr. Thuemme Canales, Juan José

- ETADAR Technical Manager. Flavor Design Laboratory of the Multinational Company DEIMAN
- He has 40 years of experience as a senior international flavorist at IFF Mexico, as well as in the Netherlands and the United States
- During his career, he has created and developed flavors for the dairy, bakery, confectionery, beverage, and savory sectors
- He holds a Bachelor's Degree Senior Flavorist 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

## **Professors**

### Mr. Coranguez Reyes, Gabriel

- Food Engineer
- ◆ Flavorist in Development ETADAR by DEIMAN, Mexico City

#### Ms. Martínez Sánchez, Berenice

- ◆ Bachelor's Degree in Food Chemistry, Faculty of Chemistry UNAM
- Technologist in free ETADAR by DEIMAN Applications, Mexico City
- Postgraduate Certificate in Food Additives. Faculty of Chemistry, UNAM

#### Mr. Santiago, Miriam

- Flavorist in Development ETADAR by DEIMAN, Mexico City
- Technologist in Oils and Flavors ETADAR by DEIMAN Applications, Mexico City
- Oils and essence Applications Technologist

#### Ms. Peña García, Maribel

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

#### Mr. Oviedo García, Miguel

- Clinical Laboratory Technician
- ◆ Scales Coordinator DEIMAN, Mexico City
- Quality Control Inspector DEIMAN, Mexico City, Mexico
- Quality Control Head DEIMAN, Mexico City, Mexico







If you want to make a positive change in your profession, the Postgraduate Certificate in Flavor Biochemistry will help you to achieve it.

# Are you ready to take the leap? Excellent professional development awaits you

TECH's Postgraduate Certificate in Flavors Biochemistry is an intensive program that prepares students to face challenges and decisions in the field of business. The main objective is to promote personal and professional growth. Helping students achieve success.

Those who wish to improve themselves, achieve a positive change at a professional level and interact with the best will find their place in this university.

Do not miss the opportunity to specialize in TECH and get the improvement you were looking for.

## Time of change

During the program

58%

After 2 years

19%

## Type of change

Internal Promotion 44%
Change of Company 44%
Entrepreneurship 12%

## Salary increase

This program represents a salary increase of more than **25.28%** for our students.

\$38,047

A salary increase of

25.28%

Salary after **\$47,668** 





## tech 46 | Benefits for Your Company

Developing and retaining talent in companies is the best long-term investment.



## **Intellectual Capital and Talent Growth**

The professional will introduce the company to new concepts, strategies, and perspectives that can bring about significant changes in the organization.



## Retaining high-potential executives to avoid talent drain

This program strengthens the link between the company and the professional and opens new avenues for professional growth within the company.



## **Building agents of change**

You will be able to make decisions in times of uncertainty and crisis, helping the organization overcome obstacles.



## Increased international expansion possibilities

Thanks to this program, the company will come into contact with the main markets in the world economy.







## **Project Development**

Be able to work on a real project or develop new projects in the R&D or Business Development area of your company.



## Increased competitiveness

This program will equip students with the skills to take on new challenges and drive the organization forward.





## tech 50 | Certificate

This **Postgraduate Certificate in Biochemistry of Flavors** 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 Biochemistry of Flavors
Official N° of Hours: 100 h.



<sup>\*</sup>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.



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