

# Postgraduate Certificate

## Enotechnics and Stabilization of Wines



## Postgraduate Certificate Enotechnics and Stabilization of Wines

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online
- » Target Group: University graduates who have previously completed any degree in the field of Social, Administrative and Business Sciences.

Website: [www.techtute.com/pk/school-of-business/postgraduate-certificate/enotechnics-stabilization-wines](http://www.techtute.com/pk/school-of-business/postgraduate-certificate/enotechnics-stabilization-wines)

# Index

01

Welcome

---

*p. 4*

02

Why Study at TECH?

---

*p. 6*

03

Why Our Program?

---

*p. 10*

04

Objectives

---

*p. 14*

05

Structure and Content

---

*p. 18*

06

Methodology

---

*p. 24*

07

Our Students' Profiles

---

*p. 32*

08

Course Management

---

*p. 36*

09

Impact on Your Career

---

*p. 40*

10

Benefits for Your Company

---

*p. 44*

11

Certificate

---

*p. 48*

# 01 Welcome

Wineries are increasingly incorporating the latest advances in devices that allow a better stabilization of wines, offering the final consumer a higher quality product. At the same time, laboratories are focusing their efforts on the study of new analytical approaches oriented to the different techniques used to provide stability to the great variety of wines. An exciting world of clarification, filtration and bacterial elimination that brings TECH Technological University of bacteria that brings TECH closer to tourism professionals who wish to enter into first level wine tourism businesses. All this, in a program with a 100% online format and with the most innovative teaching material that can be accessed 24 hours a day, from any electronic device with an internet connection.



Postgraduate Certificate Enotechnics and Stabilization of Wines.  
TECH Technological University



“

*Become a specialist in wine stabilization and contribute with your advice to wine tourism businesses your advice to wine tourism businesses”*

02

# Why Study at TECH?

TECH is the world's largest 100% online business school. It is an elite business school, with a model based on the highest academic standards. A world-class center for intensive managerial skills education.



“

*TECH is a university at the forefront of technology, and puts all its resources at the student's disposal to help them achieve entrepreneurial success"*

## At TECH Technological University



### Innovation

The university offers an online learning model that balances 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.

**+100000**

executives prepared each year

**+200**

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.





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.



### 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 groundbreaking price**. This way, TECH ensures that studying is not as expensive for students as it would be at another university.



### 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.

Teachers representing 20 different nationalities.



*At TECH, you will have access to the most rigorous and up-to-date case analyses in academia"*

03

# Why Our Program?

Studying this TECH program means increasing the chances of achieving professional success in senior business management.

It is a challenge that demands effort and dedication, but it opens the door to a promising future. Students will learn from the best teaching staff and with the most flexible and innovative educational methodology.



“

*We have highly qualified teachers and the most complete syllabus on the market, which allows us to offer you education of the highest academic level”*

This program will provide you with a multitude of professional and personal advantages, among which we highlight the following:

**01**

### A Strong Boost to Your Career

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 students achieve positive career development in less than 2 years.*

**02**

### Develop a strategic and global vision of the company

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

*Our global vision of companies will improve your strategic vision.*

**03**

### 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.*

**04**

### You will 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.*

05

### 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.*

06

### Thoroughly develop business projects

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

*20% of our students develop their own business idea.*

07

### 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.*

08

### You will be part of an exclusive community

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

*We give you the opportunity to study with a team of world-renowned teachers.*

# 04 Objectives

The professional who enters this university program will do so through an advanced syllabus that will allow him/her to acquire a solid base of knowledge on Enotechinics and Wine Stabilization. A learning process that will be achieved thanks to the support of a team of expert oenologists, who will answer any questions about the syllabus and thus facilitate the students' professional progression.



“

*Raise your professional profile with a Postgraduate Certificate that will give you the latest news on wine stabilization techniques”*

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

The Postgraduate Certificate in Enotechnics and Stabilization of Wines will enable students to:

01

Be able to identify an organoleptic problem (gustatory, aromatic or visual) and be able to correct it by means of the different types of fining

04

Avoid bad practices in the use of fining agents

02

Give practical and visual examples to help identify the different instabilities or problems that can occur in a wine



03

Determine solutions to avoid the problems of physical-chemical and microbiological instability of wine

05

Promote the knowledge of wine altering microorganisms and to know how to avoid their development



06

Analyze the filtration methods prior to wine stabilization, and to have the ability to choose the most appropriate one(s) according to the objectives to be achieved

08

Encourage the student's interest in the use of ecological and non-allergenic products (fining agents) As well as, the choice of stabilization methods that involve less energy expenditure



07

Make the students aware of the importance of stabilization in order to avoid problems with the final product or its depreciation on the market

09

Discover the new trends in sparkling wines

10

Provide the widest possible range of viticultural knowledge

05

# Structure and Content

This university program is aimed at offering the professional the most outstanding and exhaustive information on Enothecnics and the different processes currently used for wine stabilization. An advanced syllabus, which incorporates a multitude of pedagogical resources to approach in an attractive way a content that gives curricular value to students who wish to progress in the world of Oenology and Tourism.



“

*You will be able to combine your professional responsibilities with a 100% online and advanced Postgraduate Certificate in Enotechnics and Wine Stabilization”*

## Syllabus

The syllabus of this Postgraduate Certificate focuses on one of the most important processes for any winery, wine stabilization and enotechnics. Therefore, from the beginning of this program, students are immersed in the most traditional techniques of clarification of the main wines up to the most advanced ones.

A 6-week educational itinerary, where the professional in the tourism sector will learn about scientific-technical concepts that will be shown in a much simpler and dynamic way through multimedia content.

In this way, through video summaries, detailed videos and specialized readings, you can learn more about clarification, filtration methods, potassium bitartrate stabilization and bacterial elimination. In addition, case studies will give you a much more practical insight.

A program that also allows the professional to reduce the long hours of study and memorization with the use of the Relearning system, based on the reiteration of the key contents throughout the 150 hours of classes.

A 100% online university program, flexible and that you can access whenever and wherever you want comfortably. The graduate only needs an electronic device (cell phone, tablet or computer) with an Internet connection to access the syllabus of this program. An ideal option for those who wish to progress in the field of Oenology through an instruction in accordance with current academic times.

This Postgraduate Certificate in **Enotechnics and Stabilization of Wines** is spread out over 6 weeks and is divided into 1 module

### Module 1

### Wine Clarification and Stabilization

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

TECH Technological University offers students the opportunity to study this Postgraduate Certificate in Enotechnics and Stabilization of Wines completely online. Throughout the 6 weeks of the program, the students will be able to access all the contents of this program at any time, which will allow the students to distribute their study time

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



**Module 1. Wine Clarification and Stabilization**

**1.1. Clarification of Red Wines**

- 1.1.1. Clarification of Tannins, Elimination of Harshness and Bitterness
- 1.1.2. Clarification of Coloring Matter (Anthocyanins)
- 1.1.3. Substitution of Allergenic Fining Agents in Red Wines
- 1.1.4. Specific Clarification to Eliminate Microorganisms

**1.2. Clarification of White and Rosé Wines**

- 1.2.1. Elimination of Wine Proteins
- 1.2.2. Elimination of Oxidizable Polyphenols
- 1.2.3. Substitution of Allergenic Clarification Agents in White and Rosé Wines
- 1.2.4. Clarification for the Elimination of Microorganisms Prevention of Malolactic Fermentation

**1.3. Wine Filtration**

- 1.3.1. Influence of Turbidity on Wine Stabilization
- 1.3.2. Depth Filtration or Adsorption Filtration: Soil Filtration and Plate Filtration
- 1.3.3. Tangential Filtration
- 1.3.4. Direct Membrane Filtration
- 1.3.5. Other Methods for Wine Purification after Clarification: Centrifuge, Decanter, Flotation

**1.4. Stabilization of Potassium Bitartrate in Wine**

- 1.4.1. Origin of Potassium in Grapes and Wine
- 1.4.2. Cation Exchange
- 1.4.3. Cold Treatment of Wines
- 1.4.4. Reverse Osmosis
- 1.4.5. Use of Potassium Polyaspartate
- 1.4.6. Carboxymethyl Cellulose and Metatartaric Acid

**1.5. Stabilization of Calcium Tartrate**

- 1.5.1. Origin of Calcium in Grapes and Wine
- 1.5.2. Factors Influencing the Formation of Calcium Tartrate Crystals
- 1.5.3. Calcium Removal in Wine

**1.6. Stabilization of Coloring Matter in Red Wines**

- 1.6.1. Origin and Formation of Anthocyanins in Grapes
- 1.6.2. Fixation of the Coloring Matter
- 1.6.3. Anthocyanin-Tannin Condensation
- 1.6.4. Fixation and Stabilization of Anthocyanins with Polysaccharides

**1.7. Instability Caused by Metals**

- 1.7.1. Ferrous Breakdown
- 1.7.2. Copper Breakdown
- 1.7.3. Other Physical-Chemical Instabilities

**1.8. Microbiological Stabilization of Wine**

- 1.8.1. Microorganisms that Can Grow in Wine and their Origin
- 1.8.2. Viticultural and Enological Conditions that Favor Microbial Growth
- 1.8.3. Prevention of Microbial Growth

**1.9. Prevention of Bacterial Growth and Elimination**

- 1.9.1. Acetic Acid Bacteria
- 1.9.2. Oenococcus Oeni
- 1.9.3. Other Lactic Acid Bacteria: Lactobacillus and Pediococcus

**1.10. Preventing the Growth and Elimination of Yeasts and Molds**

- 1.10.1. Bretanomyces
- 1.10.2. Saccharomyces Cerevisiae
- 1.10.3. Apiculate Yeasts
- 1.10.4. Molds



“

*With this program you will be aware of the most effective methods used for the prevention and elimination of bacteria in wines”*

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"*

## 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.

“*At TECH, you will experience a learning methodology that is shaking the foundations of traditional universities around the world*”



*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.

## 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.



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.





### Case Studies

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

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.



07

# Our Students' Profiles

This university program is aimed at university graduates, who have previously completed any of the following degrees in the field of Social, Administrative and Economic Sciences.

This program uses a multidisciplinary approach as the students have a diverse set of academic profiles and represent multiple nationalities.

In addition, professionals with university degrees in other areas, but who have accredited experience in the oenology sector, will also have the possibility of completing this Postgraduate Certificate.







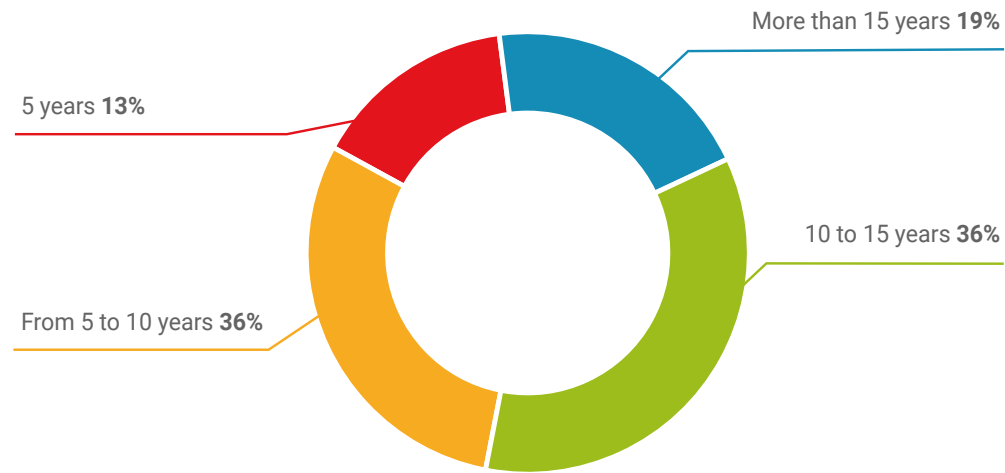
“

*With this program you will be up to date with of the most recent developments in Enotechnics and Wine Stabilization”*

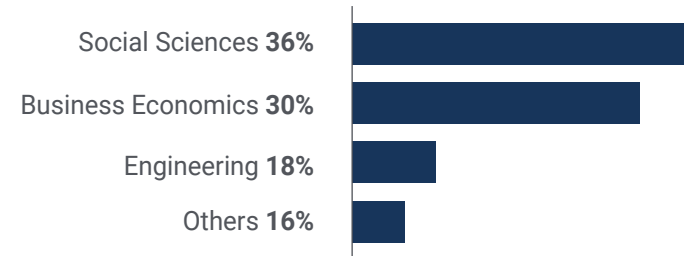
### Average Age

Between **35** and **45** years old

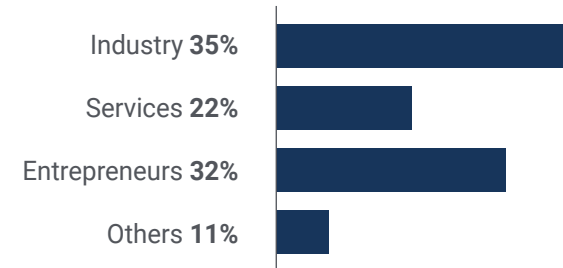
### Years of Experience



### Training

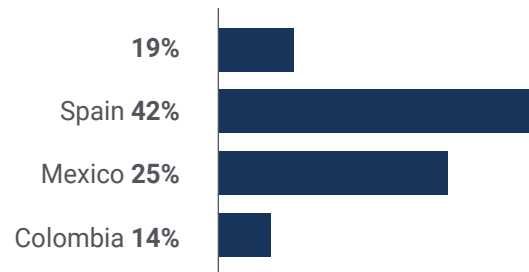


### Educational Profile



## Geographical Distribution

---



## Elsa Toledo

---

### Enotechnics in wine tourism companies

*"Thanks to this course I was able to gain much more solid knowledge about wine stabilization processes and techniques, and to be able to boost my professional career within the wine tourism company I work for. A further step that has been accompanied by significant salary improvements"*

08

# Course Management

TECH Technological University remains committed to offering its students a high level of education that is accessible to all. That is why it rigorously selects all the professionals that make up the programs. In this way, the graduate will have access to a syllabus prepared by oenologists and agronomists with an excellent professional background related to the wine industry. As such, the tourism professional will achieve high levels of projection in the wine tourism sector.



“

*You have at your disposal a team of expert winemakers with an excellent professional background in the wine industry”*

## Management



### Ms. Clavero Arranz, Ana

- General Manager of Bodegas Cepa 21
- General Manager of Grupo Bodegas Emilio Moro
- Financial Manager of Grupo Bodegas Emilio Moro
- Head of Administration at Bodegas Cepa 21
- Administration Technician at Bodegas Convento San Francisco
- Degree in Business Administration and Management from the University of Valladolid
- Master's Degree in Financial Management from ESIC
- Executive Coach by ICF
- Digital Immersion Program for CEOs by ICEX
- Management Development Program by IESE



## Professors

### Mr. Sáez Carretero, Jorge

- ♦ Responsible parties. of Viticulture at Bodegas Cepa 21
- ♦ Viticulture Technician at Fontana Winery
- ♦ Viticulture Manager at GIVITI
- ♦ Graduated in Agricultural Engineering and Science from Polytechnic University of Madrid
- ♦ Master's Degree in Viticulture and Oenology from the Polytechnic University of Madrid
- ♦ Accredited as an Integrated Pest Management Advisor
- ♦ Accredited as Advisors to the Official Register of Producers and Operators of phytosanitary defense means

### Ms. Masa Guerra, Rocío

- ♦ Winemaker at Bodegas Protos
- ♦ Assistant Winemaker at Matarromera Winery
- ♦ 2nd winemaker at Viñas del Jaro
- ♦ Responsible for grape intake at Emilio Moro Winery
- ♦ Responsible for quality at BRC and winemaker at Viñedos Real Rubio
- ♦ Winemaking Assistant at Solar Viejo Winery
- ♦ Winery and Vineyard Manager at Ébano Viñedos y Bodegas
- ♦ Oenology assistant and laboratory technician at El Soto Winery
- ♦ Degree in Oenology from the Higher Technical School of Agricultural Engineering of Palencia
- ♦ MBA in Wine Business Management from the Business School of the Chamber of Commerce of Valladolid

09

# Impact on Your Career

The professionals who chooses to take this Postgraduate Certificate also does so in order to improve their career. For this reason, TECH Technological University combines all its efforts to incorporate in this program the most advanced knowledge and with the maximum scientific rigor so that you can increase your profile and prosper in the wine and tourism sector. All this in an educational format compatible with the most demanding responsibilities.





“

*Boost your career towards the organization of wine product sales in the tourism sector”*

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

The Postgraduate Certificate in Enotechnics and Stabilization of Wines an intensive program that prepares you to face challenges and business decisions, globally. The main objective is to promote your personal and professional growth. Helping you achieve success.

If you want to improve yourself, make a positive change at a professional level, and network with the best, then this is the place for you.

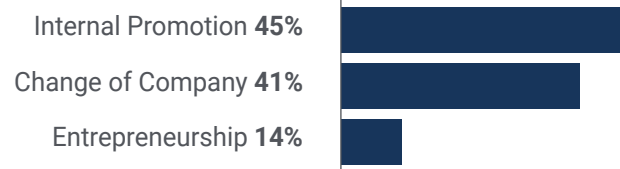
*Improve your professional profile and add value to the quality of your business' wine products.*

*Thanks to TECH Technological University you will be able to climb to positions of responsibility in companies linked to wine tourism.*

### Time of Change



### Type of Change



## Salary increase

---

The completion of this program represents a salary increase of more than **30%** for our students.



10

# Benefits for Your Company

The professional who takes this university program will contribute significantly to the improvement of strategic decisions and initiatives aimed at boosting the tourism business through wine products. In this way, companies will benefit from a specialized profile with advanced knowledge of wine stabilization processes. A specific area that few people have mastered.



“

*Contribute your knowledge of wine stabilization methods to improve the business strategies of your tourism company”*

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

01

### **Growth of talent and intellectual capital**

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

---

02

### **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.

03

### **Building agents of change**

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

---

04

### **Increased international expansion possibilities**

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



05

### **Project Development**

The professional can work on a real project or develop new projects in the field of R & D or business development of your company.

---

06

### **Increased competitiveness**

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

11

# Certificate

The Postgraduate Certificate in Enotechnics and Wine Stabilization 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 Enotechnics and Stabilization of Wines** contains the most complete and up-to-date 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 Enotechnics and Stabilization of Wines**

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.



## Postgraduate Certificate Enotechnics and Stabilization of Wines

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

# Postgraduate Certificate

## Enotechnics and Stabilization of Wines