



# Postgraduate Certificate Wine Aging and Breeding

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Accreditation: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/engineering/postgraduate-certificate/wine-aging-breeding

# Index

 $\begin{array}{c|c} 01 & 02 \\ \hline & Dijectives \\ \hline & 03 \\ \hline & Course Management \\ \hline & & P. 12 \\ \hline \end{array}$ 

06 Certificate

p. 28





# tech 06 | Introduction

The aging and reserve process is directly related to the quality of the barrels used by wine companies. In this sense, reserve and grand reserve wines are those that spend the longest time in the cellars and the oak barrels are decisive for their quality. The truth is that the felling of forests is also a reality faced by the industry. This is why today's companies, taking into account ethical principles and sustainability, are committed to alternatives that replace barrels on an equal footing.

To provide solutions to organic winemaking, specialists in this field must master the proper use of oak barrels, the keys to their manufacture and importation, but also be able to offer other alternatives that are more respectful of the natural environment. For this reason, TECH offers a Postgraduate Certificate aimed at engineering graduates and other professionals interested in new technologies in the industrial and winemaking scenario in order to improve their skills in real practice.

This is a program that offers theoretical and practical knowledge with the support of a professional team made up of winemakers with extensive experience in the sector. These teachers will be the ones who will teach the program and provide students with the keys to develop towards sustainability in an ever-changing field. TECH also uses audiovisual materials in different formats so that students are highly dynamic during the study weeks, in order to motivate them and promote the best performance on their part. All this, with a 100% online modality that allows the specialists to combine the academic experience and their personal life.

This **Postgraduate Certificate in Wine Aging and Breeding** contains the most complete and up-to-date program on the market. The most important features include:

- Case studies presented by experts in Enological Engineering and Viticulture
- The graphic, schematic and eminently practical contents with which it is conceived provide Scientific information on those disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning.
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection



In only 6 weeks you will obtain all the knowledge in the drying and maturation of wood in barrels"



In the Virtual Campus you will have access to 150 hours of additional high quality material and you will be able to contact directly with the teachers to solve your doubts" Thanks to TECH, you will master the importance of microorganisms during drying and increase your skills as an experienced wine professional.

The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will provide the professionals with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

The design of this program focuses on problem-based learning, through which the professional must try to solve the different professional practice situations that arise during the academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned experts.

Gain all the knowledge for the selection of the most suitable wood for the production of specific wines.







# tech 10 | Objectives



### **General Objectives**

- Provide the widest possible range of viticultural knowledge
- Show the student the importance of viticulture for the production of great wines
- Inculcate the need for environmental protection based on sustainability
- Substantiate the enological importance of these compounds both in the winemaking stages and in the final product
- Examine the microorganisms associated with the winemaking process, their nutritional requirements, and the beneficial or detrimental properties they can contribute to the wine
- Provide knowledge for the production of white wines
- Determine the wide range of existing possibilities in order to choose the most appropriate processes for a given terroir, grape variety and wine style
- Develop to the maximum the most advanced enology so that the student can produce top quality white wines
- Turn the student into an expert in red winemaking

- Determine the varieties used or with potential in the vinification of sparkling wines
- Examine the viticultural elements that affect winemaking
- Generate specialized knowledge about the expedition Preparation of wines for consumption
- Establish the importance of winemaking for this group of great wines
- Substantiate the need to protect these heritage treasures as part of our culture
- Broaden knowledge of fining and elimination of the various components that can depreciate the wine
- Broaden the knowledge of barrel construction
- Present the importance of barrel toasting
- Delve into the sensory analysis of wine Aspects to evaluate and how to carry it out
- Identify the organoleptic alterations of the wine





# **Specific Objectives**

- Be able to identify and understand the different stages of barrel manufacturing
- Illustrate the elements of differentiation between the different manufacturers
- Be aware that the barrel is not only an aromatic contribution, but also an element of wine stabilization
- Analyze the composition of oak
- Determine the difference between French, American, and Eastern European oak
- Examine the phenomena of interaction between the oak barrel and the wine
- Understand the importance of ellagitannins
- Be able to understand the concept of grain



Enroll now in this Postgraduate Certificate and discover the manufacturing processes of the barrel tops that are fundamental in the aging of wine"





### Management



#### Ms. Clavero Arranz, Ana

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

#### **Professors**

#### Ms. Masa Guerra, Rocío

- Winemaker at Bodegas Protos
- Assistant winemaker at Matarromera Winery
- Responsible for incoming grapes at Bodega Emilio Moro
- Responsible for quality at BRC and winemaker at Viñedos Real Rubio
- Winemaking Assistant at Bodega Solar Viejo
- Winery and vineyard manager at Ébano Viñedos y Bodegas
- Assistant winemaker and laboratory technician at Bodega El Soto
- Degree in Oenology from the Escuela Técnica Superior de Ingenierías Agrarias de Palencia (Palencia School of Agricultural Engineering)
- MBA in Wine Business Management from the Business School of the Chamber of Commerce of Valladolid

### Ms. Arranz Núñez, Beatriz

- Winemaker in Viñas del Jaro
- Assistant Winemaker at Viña Buena
- Winemaker at Familia A. De La Cal Winery
- Attendees Winemaker at Viña Cancura
- Winery worker at Vitalpe
- Winemaker trainer at the Business Development Institute
- Winemaker and guide at the Valladolid Provincial Wine Museum
- Overseer of the Superior Council of the Ribera del Duero D.O
- Degree in Enology from the University of Valladolid







# tech 18 | Structure and Content

## Module 1. Importance of the Oak Barrel in Wine Aging

- 1.1. Importance of Oak for Barrel Manufacturing
  - 1.1.1. Use of the Barrel History
  - 1.1.2. Knowledge about Cooperage Wood
  - 1.1.3. Use of Barrels in Dry White Wines
  - 1.1.4. Use of Barrels in Red Wines
- 1.2. Oak
  - 1.2.1. Morphology and Anatomy
  - 1.2.2. Botanical Differentiation and Origins
  - 1.2.3. Notion of Grain and Porosity
- 1.3. Wood Selection
  - 1.3.1. Selection in the Forest
  - 1.3.2. Selection at the Sawmill
  - 1.3.3. Selection in the Cooperage
- 1.4. Drying and Seasoning of the Wood
  - 1.4.1. Drying the Wood
  - 1.4.2. Seasoning the Wood
  - 1.4.3. Importance of Microorganisms During Drying
- 1.5. Barrel Manufacturing
  - 1.5.1. The Transformation of the Staves
  - 1.5.2. Assembly of the Staves
  - 1.5.3. The Toasting of the Barrel
  - 1.5.4. Manufacture of the Barrel Tops
  - 1.5.5. Finishing the Barrel
- 1.6. Aromatic Contributions of Oak Barrels
  - 1.6.1. Aromatic Contributions of French Oak
  - 1.6.2. Aromatic Contributions of American Oak
  - 1.6.3. Aromatic Contributions of Eastern European oak



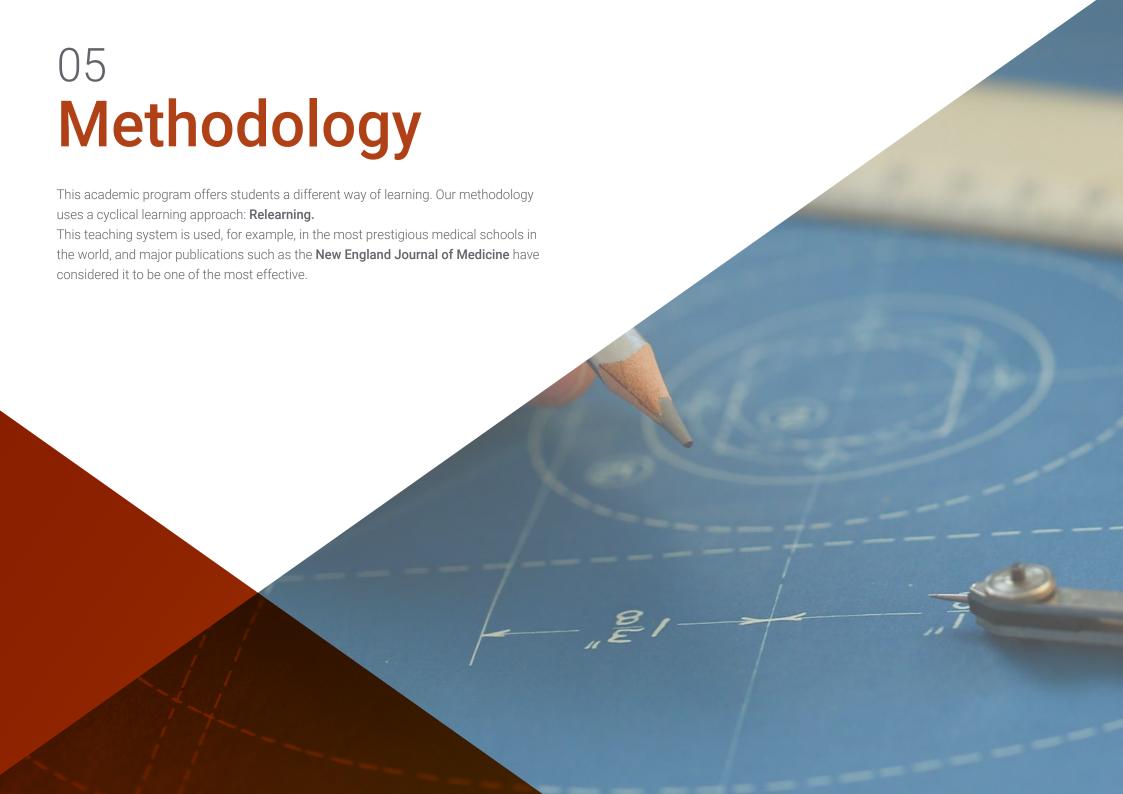


# Structure and Content | 19 tech

- 1.7. Oak Tannin
  - 1.7.1. The Elagitannins
  - 1.7.2. Enological Interest
  - 1.7.3. Importance of Tannin in the Structure of Wine
  - 1.7.4. Kinetics of Tannin Release from the Barrel in Time
- 1.8. The Barrel, an Impermeable and Porous Container
  - 1.8.1. Impermeability of the Barrel
  - 1.8.2. Porosity of the Barrel
  - 1.8.3. Importance of the Barrel in the Aging Process
- 1.9. The Good Use of Oak Barrels
  - 1.9.1. Reception of New Barrels
  - 1.9.2. Maintenance of the Barrels Over Time
  - 1.9.3. Repair of Leaks
- 1.10. The Second Life of Oak Barrels
  - 1.10.1. The Interest of the Second-Hand Barrel
  - 1.10.2. The Use of Second-Hand Barrels for Spirits
  - 1.10.3. Alternatives to Enological Use



A program designed for professionals like you, who want to improve their skills in an industrial field in constant technological change"





# tech 22 | Methodology

## 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"



You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.



The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

## A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. 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 professional reality is taken into account.



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

The case method is the most widely used learning system in the best faculties in the world. 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 that you are presented with in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

# tech 24 | Methodology

# Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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

In 2019, we obtained the best learning results of all online universities in the world.

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 university is the only one in the world authorized to employ 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 | 25 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.

This methodology has 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, and financial markets and 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 training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for 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.



### **Practising Skills and Abilities**

They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



#### **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.



# Methodology | 27 tech





#### **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.





20%





# tech 30 | Certificate

This private qualification will allow you to obtain an **Postgraduate Certificate in Wine Aging and Breeding** 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** private qualification, 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 Wine Aging and Breeding

Modality: **online**Duration: **6 weeks**Accreditation: **6 ECTS** 



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

#### Postgraduate Certificate in Wine Aging and Breeding

This is a private qualification 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



tech global university

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- » Exams: online

