

Postgraduate Certificate Wine Aging and Breeding



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

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

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01

Introduction

From the fermentation process to the final product served in the wine glass, there are essential procedures that specialists must put into practice. Among them is aging in barrels or bottles. In this sense, oak barrels offer great benefits to the product that are reflected in its smell, texture, taste and ultimate composition. In order for winemaking engineers to promote the incorporation of artificial barrels that are more environmentally friendly and offer a biological product, they must take into account all the innovations and the history of the container. For this reason, TECH has designed a Postgraduate Certificate for specialists to be able to identify barrel manufacturing methods and their influence on wine. This is a 100% online program, so that students can learn the subject in just 6 weeks.



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With this Postgraduate Certificate you will know perfectly the history of the oak barrel that has been the protagonist in the aging of wines for years"

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"

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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”

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.

Thanks to TECH, you will master the importance of microorganisms during drying and increase your skills as an experienced wine professional.

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



02 Objectives

This Postgraduate Certificate in Wine Aging and Breeding has been designed for winemaking engineers and other interested professionals to develop around the aromatic contributions of oak barrels in wine. TECH achieves this, thanks to the simulation of real situations, which will make students fully prepared to apply them in practice. It is a program with great flexibility, since the specialists will be able to acquire the knowledge at any time and place, according to the 100% online modality used by TECH.



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TECH's objective is that you meet yours, perfect your skills and update your knowledge about the morphology and anatomy of the oak tree"



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"

03

Course Management

TECH has called on an experienced professional team in Enology and they are the ones in charge of teaching the program. Thanks to their contribution, students will not only have theoretical knowledge, but will also be able to acquire the keys to the actions of professionals in the real world of winemaking. In this way, the monitoring of the students will be carried out in an exhaustive way, to achieve the objectives of the program and their own, providing advantages and alternatives in the production of wine from their company.



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TECH brings you knowledge from the professional experiences of the teachers who teach this program. Register now and enjoy it!"

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



04

Structure and Content

The syllabus of this Postgraduate Certificate in Wine Aging and Breeding has been carefully designed by experts in Viticulture, who will transmit their knowledge through audiovisual contents that are easy to assimilate and that will prepare them for real performance in the work environment through the simulation of cases. These professionals will share all their wine knowledge through audiovisual materials, with a theoretical-practical format that will allow the pace of study to be adapted to each student. In addition, TECH applies the *Relearning* methodology to exempt students from long hours of memorization and to allow them to assimilate all the contents in a gradual and simple way.



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Register now to discover the kinetics of barrel tannin release over time"

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



- 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"

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.



The background of the slide features a technical drawing on a blue grid. A yellow ruler is positioned horizontally across the upper portion of the image. Below the ruler, a pair of compasses is shown, with its legs extended and a small circle drawn on the grid. The entire scene is overlaid with a large, diagonal white shape that cuts across the image from the bottom left towards the top right, creating a modern, geometric design.

“

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"

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.

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.



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

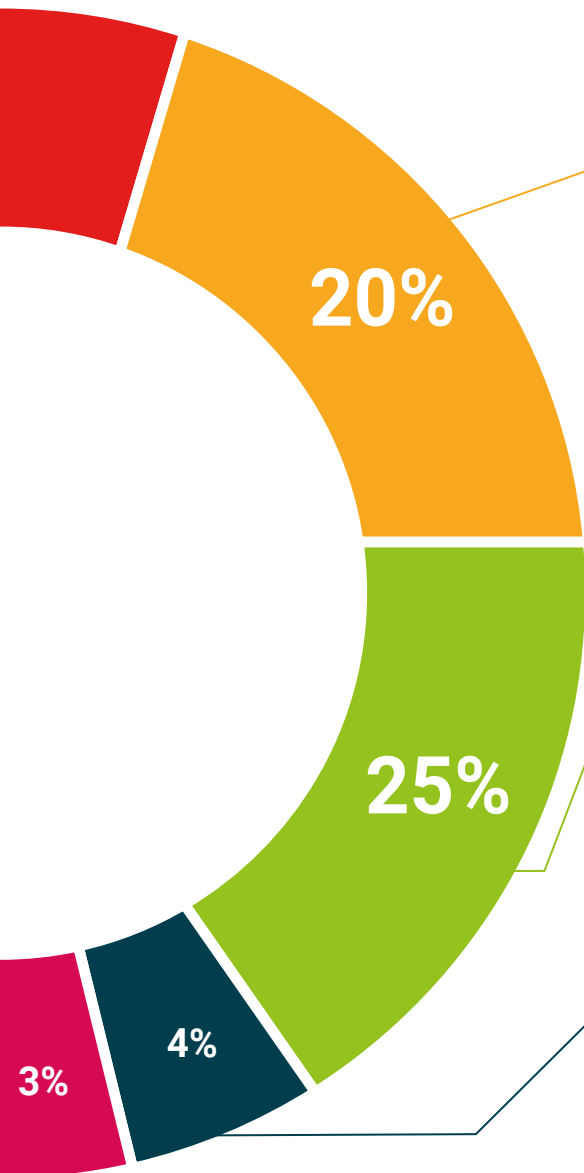
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



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.



**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 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.



06 Certificate

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



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

This **Postgraduate Certificate in Wine Aging and Breeding** 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 Wine Aging and Breeding**

Official N° of Hours: **150 h.**



future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present quality
development languages
virtual classroom



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