

Postgraduate Certificate Aquaculture Production





Postgraduate Certificate Aquaculture Production

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

Website: www.techtitute.com/us/veterinary-medicine/postgraduate-certificate/aquaculture-production

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01

Introduction

Aquaculture production enables the supply of food worldwide, which is essential due to the increase in population, which has led to a growing increase in demand. In this program, we offer you the most complete training in the market on Aquaculture Production, so that you can specialize in this field to get the most out of your daily work.





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There are different aquaculture production models depending on the species concerned. Get certified with us and discover the distinctive features of each type to get the highest yield from each of them"

Aquaculture encompasses the farming of aquatic organisms, including fish, mollusks, crustaceans and aquatic plants, which involves human intervention in the process of rearing to increase production in operations such as sowing, feeding and protection from predators. Currently, it is an activity of great relevance, since it has become one of the most economically important activities within the field of food production, mainly to breed live organisms for repopulation and for the cultivation of species for ornamental use.

In this Postgraduate Certificate course, the importance of aquaculture production and the different aquaculture models that exist for a responsible and profitable practice are discussed in depth.

Therefore, aquaculture activity has been classified into three main sections, according to the type of species being cultivated. These groups are: Continental Aquaculture, Marine Aquaculture and Ornamental Aquaculture. Furthermore, in the aquaculture culture models, the teachers have selected the most characteristic species of each one in order to build both your theoretical and practical knowledge and to obtain a clearer and more specific vision of each of these practices.

This Postgraduate Certificate provides students with specialized tools and skills to successfully develop their professional activity in the wider aquaculture environment, working on fundamental competencies such as inside knowledge of the realities of the sector, practical experience, and developing responsibility in the monitoring and supervision of their work, as well as communication skills through teamwork. In addition, as it is an online Postgraduate Certificate, the student is not constrained by fixed timetables or the need to move to another physical location, but can access the contents at any time of the day, balancing his or her work or personal life with their academic life.

This **Postgraduate Certificate in Aquaculture Production** is the most comprehensive and up-to-date educational program on the market. The most important features of the program include:

- » Practical cases studies are presented by experts in Aquaculture
- » The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice.
- » New developments in Aquaculture Production
- » Practical exercises where the self-assessment process can be carried out to improve learning
- » Special emphasis is placed on innovative methodologies in Aquaculture Production
- » Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work.
- » Content that is accessible from any fixed or portable device with an Internet connection.

“*Immerse yourself in this high-quality educational training-program, which will allow you to face the future challenges in Aquaculture Production*”



This Postgraduate Certificate is the best investment you can make in selecting a refresher program to bring your knowledge of Aquaculture Production up to date"

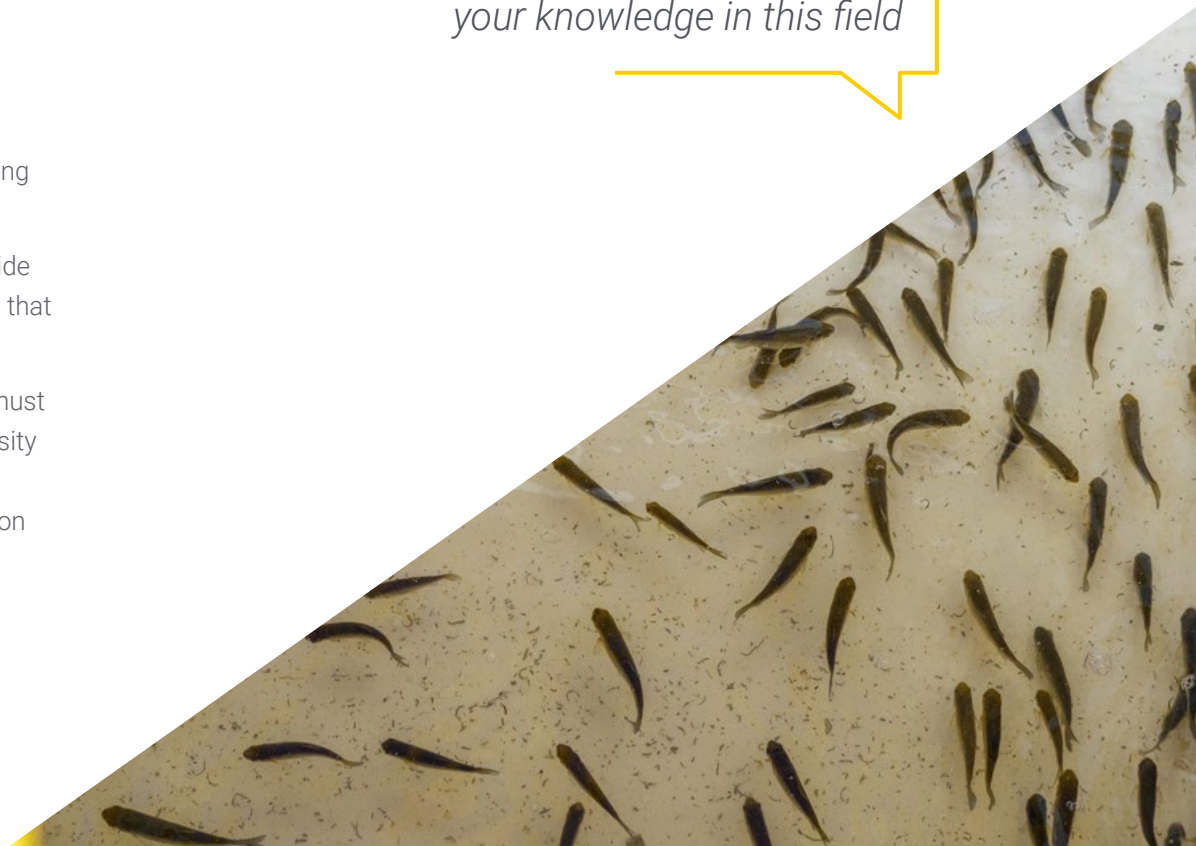
This training comes with the best didactic material, providing you with a contextual approach that will facilitate your learning

This 100% online Postgraduate Certificate will allow you to combine your studies with your professional work while expanding your knowledge in this field

Its teaching staff includes professionals from the veterinary field, who bring the experience of their work to this training, as well as recognised specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training programmed to train in real situations.

This program is designed around Problem Based Learning, whereby the specialist must try to solve the different professional practice situations that arise during the university academic year. For this purpose, the Professional will be assisted by an innovative Interactive Video System, developed by well-known experts in Aquaculture Production



02 Objectives

The **Postgraduate Certificate in Aquaculture Production** is designed to facilitate the performance of the veterinary professional with the latest advances and most innovative procedures in the sector.



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Our goal is to achieve academic excellence and to help you achieve professional success as well"



General Objectives

- » Examine the different types of aquaculture
- » Build specialized knowledge on the criteria and parameters that determine a suitable environment in which to implement an aquaculture culture
- » To specify which measures are necessary to maintain Safe Crops
- » Build specialized knowledge on the fundamentals of genetic improvement in aquaculture.
- » Analyze the details of the different Aquaculture Cultures
- » Analyze the differences that can be observed between the various types of aquaculture cultures
- » Examine the different systems used within the variety of existing aquaculture cultures.
- » Determine the different standards to be followed in the different products obtained within the wide practice of aquaculture



Make the most of the opportunity and take the step to get up to date on the latest developments in Aquaculture Production"





Specific Objectives

- » Analyze the history and evolution of aquaculture production for a better understanding of its current situation
- » Examine the different criteria that determine water quality in aquaculture
- » Determine the parameters that determine water quality in aquaculture
- » Analyze the different types of cultures that exist and the most frequent production systems for them
- » Examine the different biosafety measures existing within the different types of culture
- » Generate specialized knowledge on the different Genetic Resources that can be used to achieve a better culture
- » Establish the processes of handling and waste management in aquaculture
- » Develop specialized knowledge on ways to control, manage, and minimize the pollution produced by this activity
- » Examine the Production Systems used in Inland Aquaculture
- » Analyze the Culture Models of Different Inland Species
- » Determine the production systems used in Marine Aquaculture
- » Analyze the Culture Patterns of Different Marine Species
- » Examine the production systems used in Ornamental Aquaculture
- » Analyze the Culture Models of different Ornamental Species
- » Determine the details and differences between fish species in order to take them into account during their cultivation.
- » Develop the most relevant aspects of other types of aquaculture models, such as Live Food Culture

03

Course Management

The program's teaching staff includes leading experts in aquaculture who contribute their Expertise to this training program. They are world-renowned professionals from different countries with proven theoretical and practical professional experience.





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We have the best Teaching Team in the field of Aquaculture, with years of experience and who are determined to transmit all their knowledge about this Sector"

Management



Mr. Gracia Rodríguez, José Joaquín

- ♦ Degree in Veterinary Medicine from the University of Murcia.
- ♦ Diploma in Aquaculture Specialization. Polytechnic University of Valencia
- ♦ Advanced Ichthyopathology Course
- ♦ International Congress on Sustainable Aquaculture
- ♦ Certificate in Pedagogical Aptitude University of Extremadura
- ♦ Attendance at the AVEPA Continuing Education Conference
- ♦ Teacher in Higher Vocational Training Degrees in the Sanitary Branch
- ♦ Training in Biosecurity and Pathology in the Ornamental Aquaculture Sector
- ♦ Speaker at National Congresses and Courses on Ornamental Aquaculture
- ♦ Training Courses for Livestock Farmers on Safety and Regulations in the Transport of Animals
- ♦ Food Handler Courses for Companies and Individuals.
- ♦ Consultant in Ichthyopathology for several companies in the Aquaculture Sector
- ♦ Technical Director in the Ornamental Aquaculture Industry
- ♦ Coordination of Projects in Maintenance of Wild Species and Water Quality
- ♦ Projects in Natural Parks for the Control of Allochthonous Ichthyofauna
- ♦ Projects for the Recovery of Native Crayfish
- ♦ Carrying out Wildlife Species Censuses
- ♦ Coordination of livestock Sanitation Campaigns in Castilla-La Mancha
- ♦ Veterinarian in a Breeding and Genetic Improvement Company in the Rabbit Breeding Sector



Ms. Herrero Iglesias, Alicia Cristina

- ♦ Degree in Veterinary Medicine from the University of Extremadura.
- ♦ Master's Degree in Secondary Education, International University of La Rioja
- ♦ Course "Animal Welfare in Livestock Production" organized by the Official College of Veterinarians of Madrid, in collaboration with the Faculty of Veterinary Medicine UCM and the Ministry of Environment and Land Management of the Community of Madrid
- ♦ Occupational Trainer, given by the INESEM Postgraduate Training Center.
- ♦ "Trainer of Trainers" Course given by the University Antonio de Nebrija .
- ♦ Teacher in the Degree in Veterinary Medicine, University of Alfonso X el Sabio (Madrid)
- ♦ Since February 2012 she has been Teaching "Ethnology and Veterinary Business Management" and "Animal Production"
- ♦ From the Academic Year 2016-2017 to the present, she has been teaching Hematological Analysis Techniques and Immunological Diagnostic Techniques for the 2nd year of the Formative Cycle of Higher Degree of Clinical and Biomedical Laboratory in Opesa (Madrid)
- ♦ Secondary School Teacher Cristóbal Colón School (Talavera de la Reina) Academic Year 18/19
- ♦ Veterinary Trainer in the Alonso Herrero HACCP Company for the Training of Food Handlers
- ♦ Teacher of the Course of Veterinary Technical Assistant, in Grupo INN, giving Classes during the course 18/19 (Talavera de la Reina)
- ♦ Her Professional Career began with Field Work in the Field of Large Animal Production
- ♦ After working in Animal Health and Sanitary Inspection, she began to focus on the Field of Teaching
- ♦ At present, she combines her Teaching Work at the University with Higher Technical Classes and Field Activities within the Veterinary Field
- ♦ During her Professional Career, she has taken a large number of Continuing Education and Specialization Courses

04

Structure and Content

The structure of the content has been designed by the best Professionals in the Aquaculture Sector, with extensive Experience and Recognized Prestige in the Profession, backed by the volume of cases Reviewed, Studied, and Diagnosed, and with extensive knowledge of New Technologies applied to Veterinary Medicine.





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We have the most complete and up-to-date academic program in the market. We strive for excellence and for you to achieve it too"

Module 1. Aquaculture Production

- 1.1. Aquaculture
 - 1.1.1. History
 - 1.1.2. Types of Aquaculture according to the Organism to be Cultured
 - 1.1.3. Types of Aquaculture according to Location
 - 1.1.4. Aquaculture in Micro-reservoirs
 - 1.1.5. Recirculation Systems in Aquaculture
- 1.2. Water Quality
 - 1.2.1. Water in Aquaculture
 - 1.2.2. Physical Properties of Water
 - 1.2.3. Water Quality Criteria
 - 1.2.4. Measurements
- 1.3. Water Quality Parameters in Aquaculture Cultures
 - 1.3.1. Physical Parameters
 - 1.3.2. Chemical Parameters
 - 1.3.3. Biological Parameters
- 1.4. Types of Aquaculture
 - 1.4.1. Fish Farming
 - 1.4.2. Bivalve Mollusc Culture
 - 1.4.3. Crustacean Culture
- 1.5. Live Food Culture
 - 1.5.1. Importance of Live Food
 - 1.5.2. Use of Microalgae as Live Feed
 - 1.5.3. Rotifers as Live Food
 - 1.5.4. Artemia as Live Food
 - 1.5.5. Other Organisms used as Live Food
- 1.6. Aquaponics.
 - 1.6.1. Introduction
 - 1.6.2. Aquaponic Recirculation Systems
 - 1.6.3. Design of Aquaponic Recirculating Aquaponics System
 - 1.6.4. Species used in this type of System





- 1.7. Biosecurity in Aquaculture Farms
 - 1.7.1. Biosecurity
 - 1.7.2. Measures to reduce the Risk of Pathogen Incursion
 - 1.7.3. Measures to reduce the Risk of Pathogen Spread
- 1.8. Prophylaxis and Vaccination in Aquaculture
 - 1.8.1. Immunology
 - 1.8.2. Vaccination as a Preventive Measure
 - 1.8.3. Types of Vaccines and Means of Administration in Aquaculture
- 1.9. Handling and Waste Management in Aquaculture
 - 1.9.1. Waste Management
 - 1.9.2. Waste Characteristics
 - 1.9.3. Waste Storage
- 1.10. Aquaculture as a Source of Pollution and its Prevention
 - 1.10.1. Inland Aquaculture as a Source of Pollution
 - 1.10.2. Marine Aquaculture as a Source of Pollution
 - 1.10.3. Other types of Aquaculture as a Source of Contamination
 - 1.10.4. Prevention of Water Pollution in Inland Aquaculture Activity
 - 1.10.5. Prevention of Water Pollution in Marine Aquaculture Activity
 - 1.10.6. Prevention of Water Pollution in other Aquaculture Activities



This training will allow you to seamlessly advance in your career"

05

Methodology

This training provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

This teaching system is used in the most prestigious medical schools in the world, and major publications such as the ***New England Journal of Medicine*** have considered it to be one of the most effective.





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Discover Re-learning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

In a given clinical situation, what would you do? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you can experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gervas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching potential or because of its uniqueness or rarity. It is essential that the case be based on current professional life, trying to recreate the real conditions in the Veterinarian's Professional Practice.

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Did you know that this method was developed in 1912 at Harvard for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method

The effectiveness of the method is justified by four fundamental achievements:

1. Veterinarians who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity through exercises to evaluate real situations and the application of knowledge.
2. The learning process has a clear focus on practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the time dedicated to working on the course.



Re-learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our University is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.



Veterinarians will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning

At the forefront of world teaching, the Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 65,000 veterinarians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

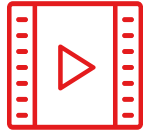
Re-learning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success

In our program, learning is not a linear process, but rather a spiral (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards.



In this program you will have access to the best educational material, prepared with you in mind:



Study Material

All didactic content is created by the very specialists who will teach the course, making it both specific and practical.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Latest Techniques and Procedures on Video

We bring you closer to the latest Techniques, to the latest Educational Advances, to the forefront of current Veterinary Techniques and Procedures. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



Interactive Summaries

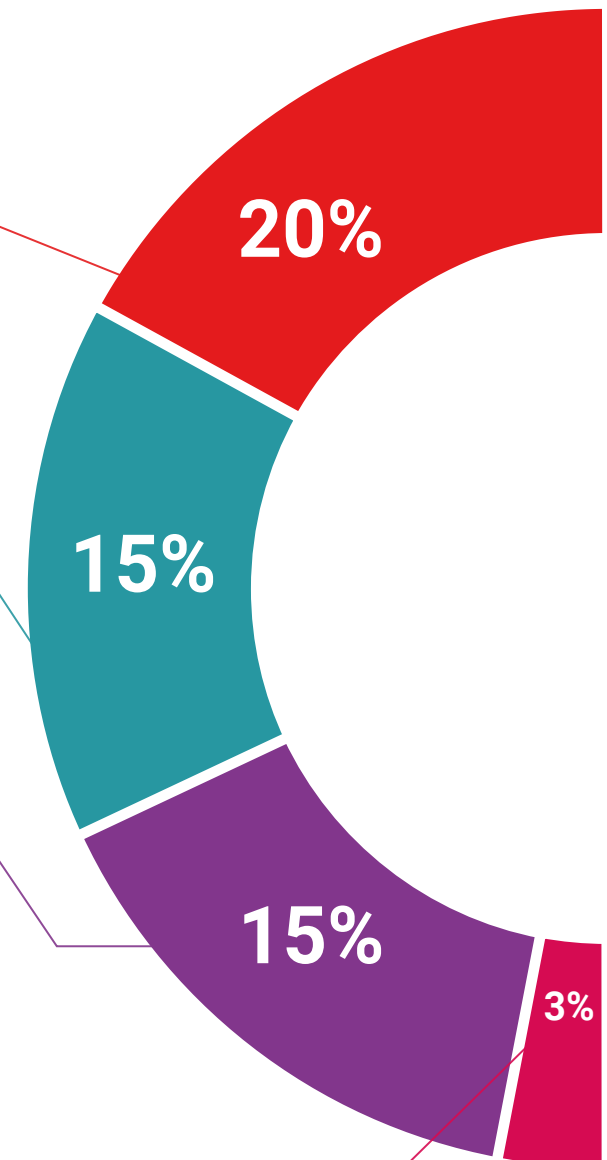
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

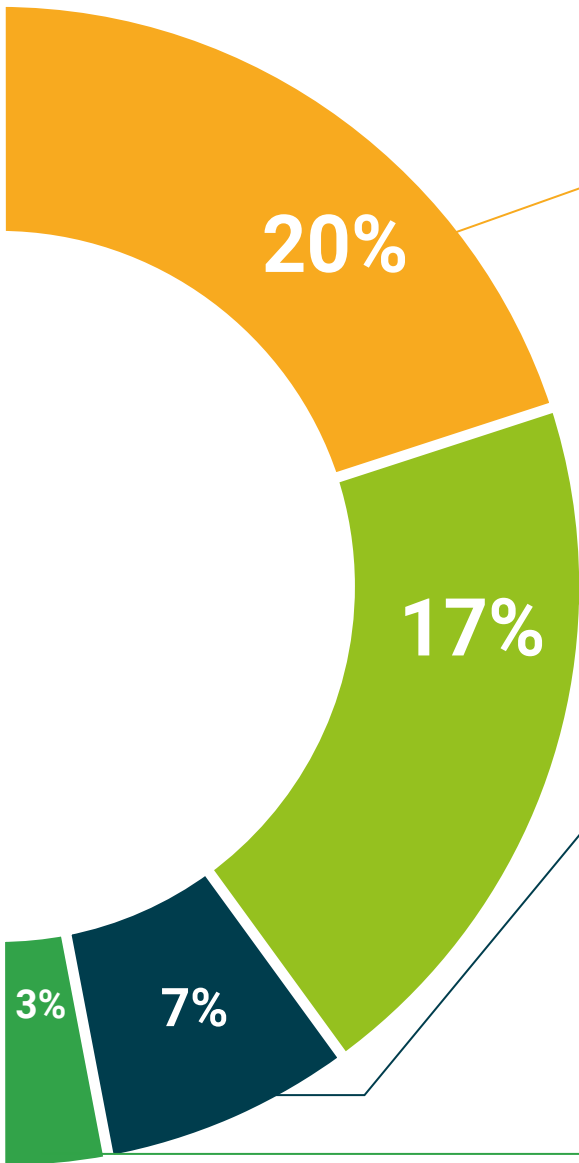
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents, international guides. in our virtual library you will have access to everything you need to complete your training.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Retesting

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



Classes

There is scientific evidence suggesting that observing third-party experts can be useful.
Learning from an expert strengthens knowledge and memory, and generates confidence in our future difficult decisions.



Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.



06 Certificate

Through a different and stimulating learning experience, you will be able to acquire the necessary skills to take a big step in your training.

An opportunity to progress, with the support and monitoring of a modern and specialized university, which will propel you to the next professional level.





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Successfully complete this training and receive your university degree without travel or laborious paperwork”

This **Postgraduate Certificate in Aquaculture Production** is the most comprehensive and up-to-date scientific program on the market.

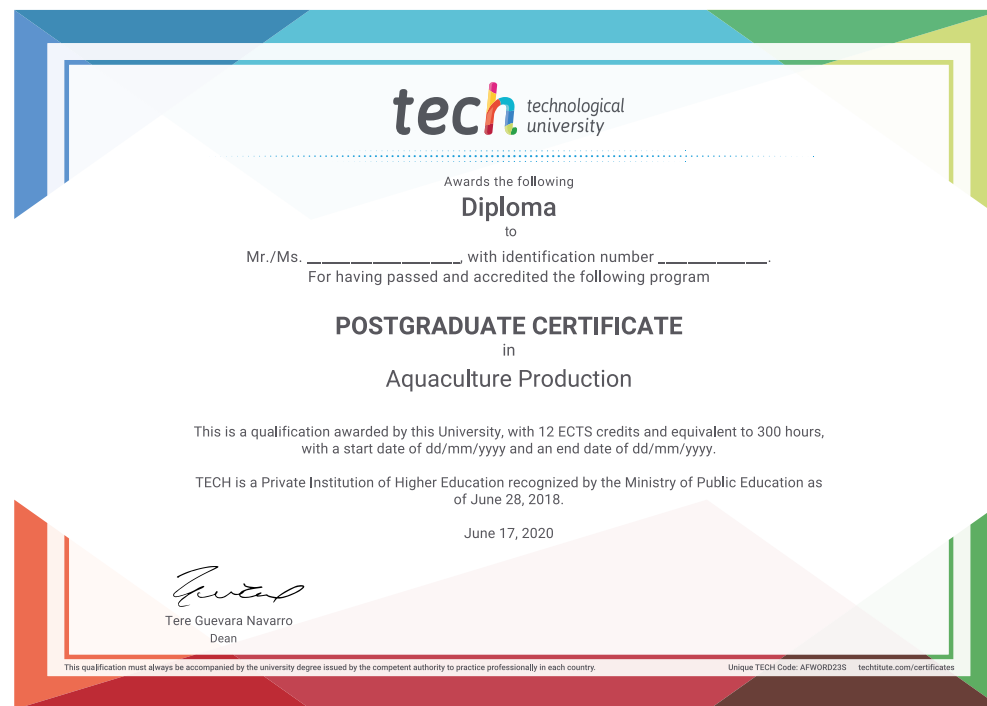
After students have passed the assessments, they will receive their **Postgraduate Certificate Certificate** issued **TECH - Technological University**.

The Postgraduate Certificate issued by **TECH - Technological University** will reflect the qualification obtained in the **Postgraduate Course**, and meets the requirements commonly demanded by job markets, competitive examinations and evaluation committees of professional careers.

Title: **Postgraduate Certificate in Aquaculture Production**

ECTS: **12**

Official Number of Hours: **300**





Postgraduate Certificate Aquaculture Production

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

Postgraduate Certificate Aquaculture Production

