

# Postgraduate Certificate Berthing Works, Parameters





## Postgraduate Certificate Berthing Works, Parameters

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/us/engineering/postgraduate-certificate/berthing-works-parameters](http://www.techtitute.com/us/engineering/postgraduate-certificate/berthing-works-parameters)

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# 01

# Introduction

This program in Berthing Works, Parameters focuses on the marine layout of the port including both plan and elevation dimensioning. With a teaching staff of professionals with more than 50 years of experience in the different specialties of maritime works, it is a first-class opportunity to bring professionals up to date in this field of work.





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*Acquire the most up-to-date knowledge in berthing works and parameters with the most advanced online program on the market"*

The Postgraduate Certificate will delve into the dimensioning, based on the ROM Maritime Works Recommendations.

Subsequently, it will focus on the design of piers, with their classification according to various factors and with the parameters for the choice of the most suitable structural typology.

In the last topic, several examples of berthing works and their characteristics will be shown, so that the student will become familiar with the design of docks.

Therefore, the student will acquire knowledge about the typologies of berthing works, the advantages and disadvantages of each type and the construction procedures of these works. They will also gain the ability to structurally design berthing works.

This **Postgraduate Certificate in Berthing Works, Parameters** contains the most complete and up-to-date program on the market. Its most notable features are:

- ◆ The development of practical cases presented by experts in berthing works, parameters
- ◆ The graphic, schematic, and practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional development
- ◆ Practical exercises where self-assessment can be used to improve learning
- ◆ Its special emphasis on innovative methodologies in berthing works, parameters
- ◆ 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



*A complete deepening of berthing works and parameters created specifically for the professional in this area"*

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*A quality program that will allow you not only to follow the Training, but also to have complementary support and information banks available"*

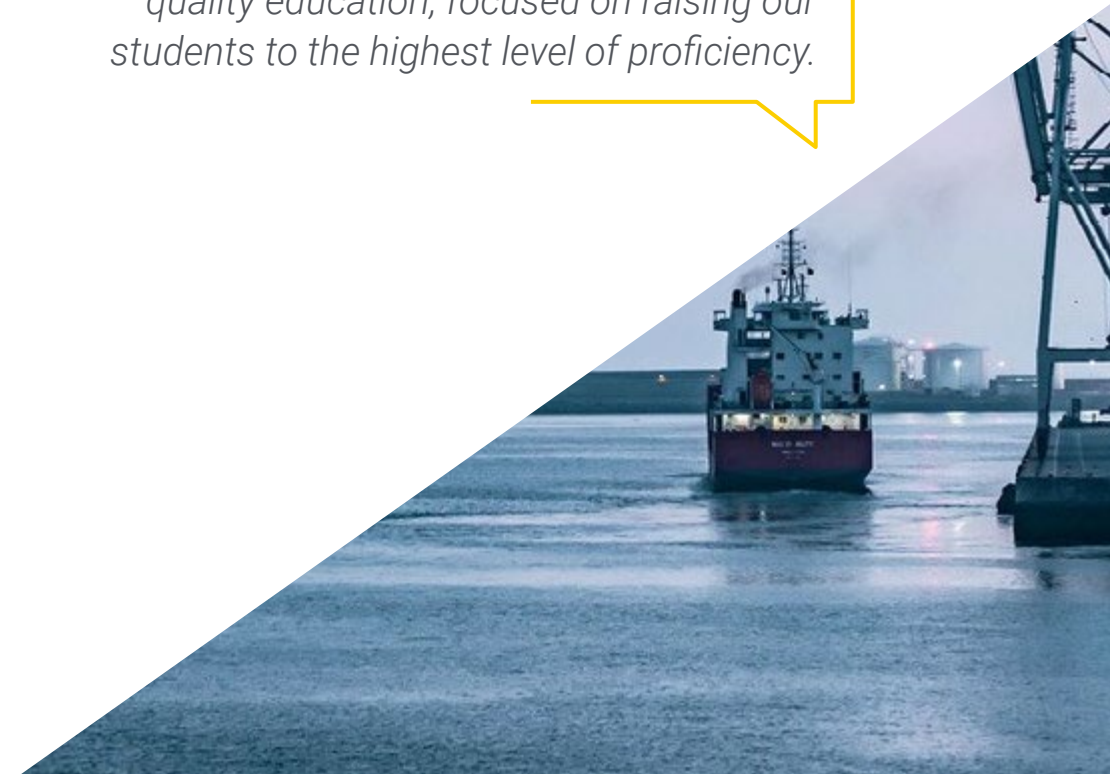
Its teaching staff includes professionals from the field of civil engineering, who contribute their work experience to this training, as well as renowned specialists from reference societies and prestigious universities.

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 education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced in Berthing Works, Parameters.

*This program has the best educational resources that can be accessed online or downloaded, to make it easier for you to manage your studies and effort.*

*A highly comprehensive program, created with the objective of delivering the highest quality education, focused on raising our students to the highest level of proficiency.*



# 02

# Objectives

The objectives of this Postgraduate Certificate have been established based on realistic and necessary goals for the professional in the sector. Gradually, you will be able to check your learning and your progress in the mastery of the contents so that, at the end, you will have achieved a complete process of professional growth.







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*Realistic, achievable and high-impact goals  
for your professional development”*



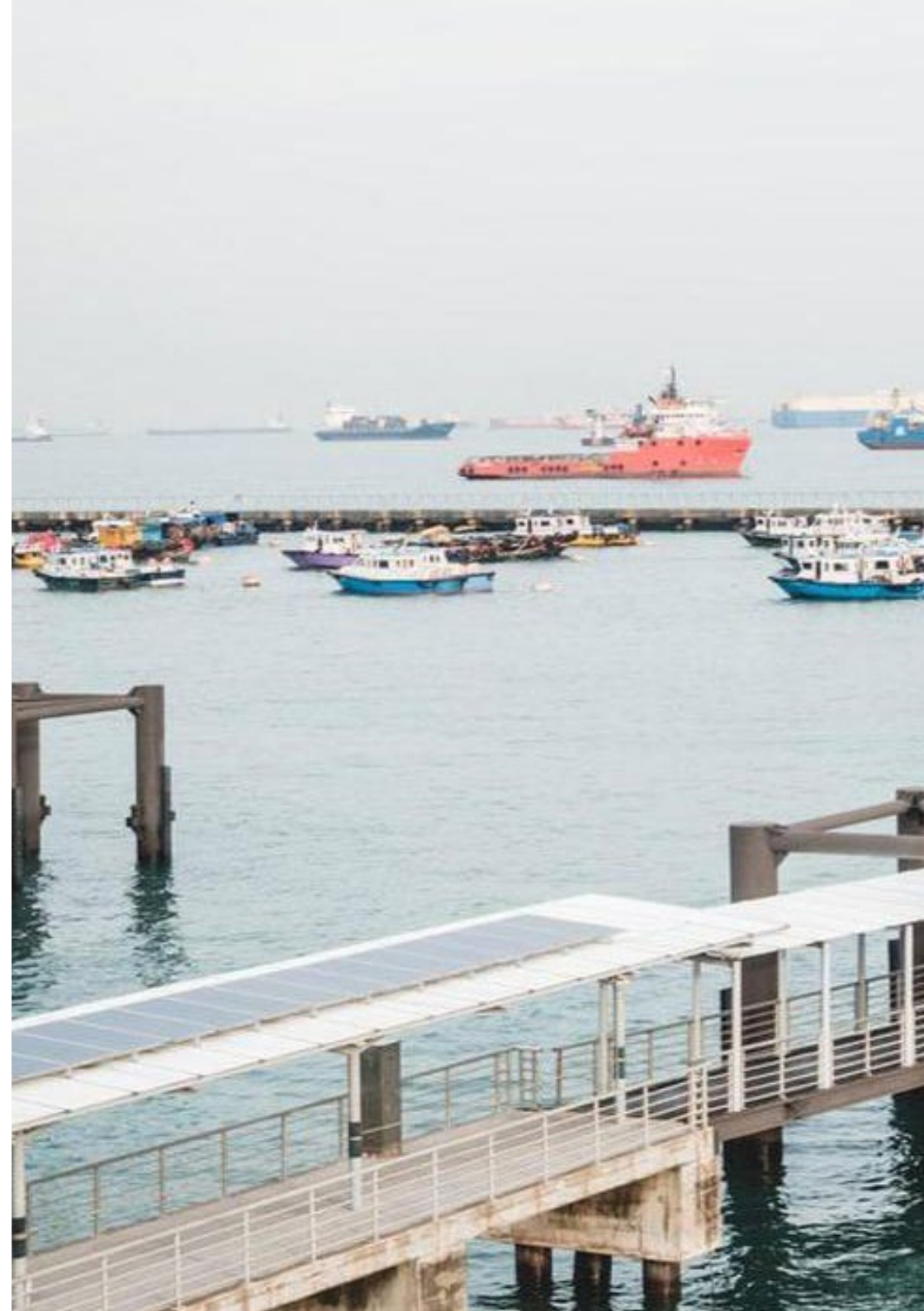
## General Objective

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- ◆ Create future professionals capable of addressing actions and solutions in the field of port infrastructures, from a multidisciplinary perspective and based on the investigation of the design of maritime works and the elements that influence it

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*A stimulating journey of professional growth designed to keep you interested and motivated throughout the entire program”*





## Specific Objectives

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- ◆ Delve into the maritime layout of a port based on ROM maritime works recommendations
- ◆ Analyze the most convenient structural typology of the dock
- ◆ Delve into the design of docks
- ◆ Delve into the typologies of berthing works, the advantages and disadvantages of each type and the construction procedures of such works
- ◆ Delve into the structural design of berthing works

03

# Course Management

Within the quality criteria that we apply in all our programs, this Postgraduate Certificate offers you the opportunity to learn from the best, with a teaching faculty made up of professionals in the sector who will bring their theoretical and practical knowledge to take you to the highest level of proficiency. With the latest and most effective teaching methods on the online teaching market.





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*Learn with the best and acquire the knowledge and skills you need to intervene in this area of development with total success"*

## Management



### Mr. Angulo Vedriel, Rafael

- ◆ Positions: Civil Engineer
- ◆ Master's Degree studies in Civil Engineering
- ◆ Ph.D. in Civil Engineering
- ◆ project manager and Design Manager both in Spain and on secondment in Latam, Middle East and Southeast Asia
- ◆ PMP © certification for project management



## Professors

### Mr. Tordesillas García, Víctor Manuel

- ◆ Positions: Civil Engineer, Polytechnical University of Madrid
- ◆ Mentions in Civil Construction and Hydrology
- ◆ Experience has focused on project management and infrastructure design in maritime engineering

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*A comprehensive and multidisciplinary training program that will allow you to excel in your career, following the latest advances in the field of civil engineering”*

# 04

# Structure and Content

The syllabus of the Postgraduate Certificate is configured as a complete tour through each and every one of the elements required to understand and assume the ways of working in this field. With allow approach focused on practical application that will help you grow as a professional from the very first moment.



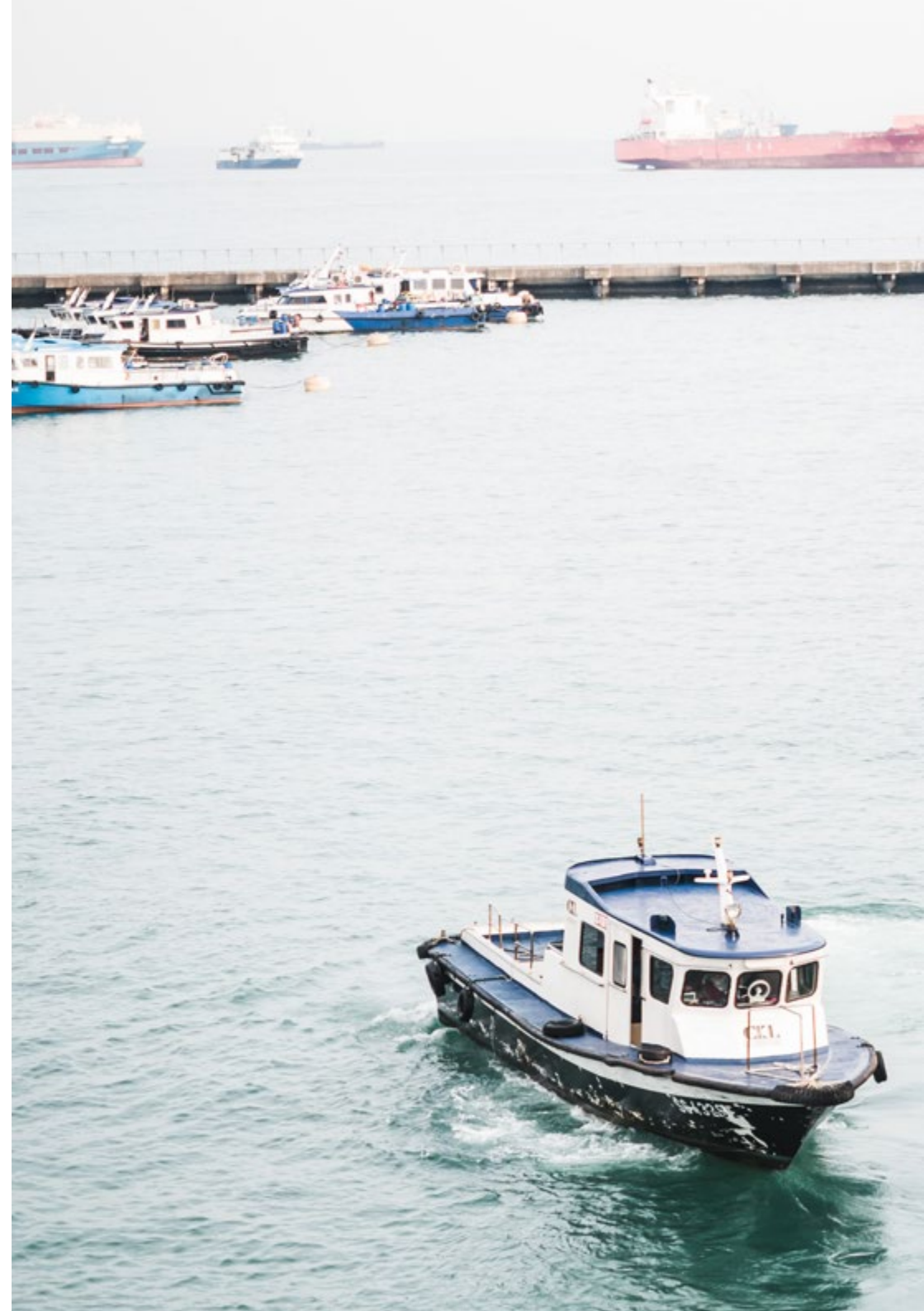




“A comprehensive syllabus focused on acquiring knowledge and converting it into real skills, created to propel you to excellence”

## Module 1. Maritime Port Layout and Berthing Works

- 1.1. Maritime Port Layout: Elevation Requirements
  - 1.1.1. Project Criteria
  - 1.1.2. Ship
  - 1.1.3. Water Level
  - 1.1.4. Bottom
- 1.2. Maritime Port Layout: Elevation Requirements
  - 1.2.1. Navigation Areas
  - 1.2.2. Harbour Mouth
  - 1.2.3. Maneuver
  - 1.2.4. Docks and Maneuvers
  - 1.2.5. Operation
- 1.3. In-plant Port Dimensioning
  - 1.3.1. General Considerations for Location, Orientation and Alignments
  - 1.3.2. Determination of the Number of Berths
  - 1.3.3. Length of Berthing Line
  - 1.3.4. Dimensioning of Heels and Ramps
  - 1.3.5. Determination of Width
- 1.4. Port Dimensioning in Elevation
  - 1.4.1. Dock Superstructure Crest Elevation
  - 1.4.2. Mooring Berthing Ditch
  - 1.4.3. Longitudinal Profile of Heels and Ramps
  - 1.4.4. Operating Area Slopes





- 1.5. General and Classification of Berthing Works
  - 1.5.1. General Aspects on Berthing Works
  - 1.5.2. General and Functional Classification
- 1.6. Mooring and Berthing Works: Structural Typology
  - 1.6.1. Classification According to Structural Typology
- 1.7. Main Elements of the Berthing Works
- 1.8. Classification of Berthing and Mooring Works according to the Structural Typology of their Parts
- 1.9. Berthing Works: Parameters for the Choice of Structural Typology
  - 1.9.1. Berthing Works: Geotechnical and Seismic Parameters
  - 1.9.2. Berthing Works: Morphological, Climatic and Environmental Parameters
  - 1.9.3. Berthing Works: Construction and Material Parameters, Use and Operation, and Maintenance and Conservation
- 1.10. Examples of Berthing Works and Characteristics



*This program will allow you to advance in your career comfortably"*

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.





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*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.*



### 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.

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

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

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 Berthing Works, Parameters 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 program will allow you to obtain your **Postgraduate Certificate in Berthing Works, Parameters** 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** title 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 Berthing Works, Parameters**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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



## Postgraduate Certificate Berthing Works, Parameters

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- » Certificate: TECH Global University
- » Credits: 6 ECTS
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