

Postgraduate Certificate

Marine Facilities Management and Operations





Postgraduate Certificate Marine Facilities Management and Operations

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

Website: www.techtute.com/us/engineering/postgraduate-certificate/marine-facilities-management-operations

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Methodology

p. 20

06

Certificate

p. 28

01

Introduction

Ship management and operations is essential in the shipbuilding industry, since it is fundamental to know what maritime events can arise once ships are at sea in order to manage them appropriately. This Postgraduate Certificate will instruct students in identifying every potential emergency that may arise in marine facilities. This is a 100% online Postgraduate Certificate, with downloadable material and without predetermined schedules.



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At TECH we want to offer you the best specialization in Marine Facilities Management and Operations so you can specialize in the field and increase your employability”

The Postgraduate Certificate in Marine Facilities Management and Operations is a program of the highest academic level that aims to specialize professionals in the field, enabling them to carry out their work with the highest quality and safety requirements. It is a very complete program, imparted by professionals with years of experience, and which includes the latest advances in the field.

The program covers everything that affects ships or naval vessels, from the moment they leave the shipyard to being withdrawn from service. The program will begin with an exhaustive analysis of the vessel documentation required to go to sea and start performing the intended activity.

Furthermore, it will delve into the most crucial task of ship maintenance, analyzing the different types of methods available and establishing maintenance plans accordingly. It will also cover everything required at port when ships are not at sea, understanding how maritime agencies operate, how ships are victualled and what is required to board them.

Moreover, time will be devoted to the study of one of the most important assets of any ship: the crew. Namely, the hiring process, the qualifications required and vessel access, including the analysis of ship operations, purpose of design and the different activities involved.

The difficulties crews encounter when passengers are on board, security against piracy and safety frameworks for collision prevention, and operating costs are other important aspects that this training program will address, including sustainability, recycling and cleaner fuels.

It should be noted that since this is a 100% online program, students are not constrained by fixed schedules or commutes, but rather, can access the contents at any time of the day, thus balancing their work or personal life with their academic life.

This **Postgraduate Certificate in Marine Facilities Management and Operations** contains the most complete and up-to-date program on the market. The most important features include:

- ◆ Case studies presented by experts in Naval Engineering
- ◆ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ◆ Practical exercises where the self-assessment process can be carried out to improve learning
- ◆ Special emphasis on innovative methodologies in marine facilities management and operations
- ◆ 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



The completion of this program will place Naval Engineering professionals at the forefront of the latest developments in the sector”

“

This Postgraduate Certificate is the best investment you can make in the selection of a refresher program in Marine Facilities Management and Operations. We offer you quality and free access to content"

The teaching staff includes professionals in naval engineering, who bring their experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will facilitate situated and contextual learning, which is to say, a simulated environment that will provide professionals with an immersive specialization 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. To that purpose, students will be assisted by an innovative, interactive video system created by renowned and extensively experienced experts in Marine Facilities Management and Operations.

This program comes with the best educational 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. You choose where and when to train.



02 Objectives

The program in Marine Facilities Management and Operations is designed to facilitate professional performance so students acquire and know the main novelties in the field, which will enable them to practice their profession with the highest quality and professionalism.





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Our goal is to make you the best professional in your sector. And for this we have the best methodology and content”



General Objectives

- ◆ Possess an overall vision of all stages of the life cycle of a naval project
- ◆ Possess and understand knowledge that provides the basis for developing research ideas
- ◆ Conceive and develop appropriate technical and economical solutions for naval projects
- ◆ Develop the conceptual design that meets shipowner requirements, cost estimates and risk assessments
- ◆ Work and negotiate with shipowners from the point of view of design, define ship missions, and assist shipowners in defining ships according to the requirements
- ◆ Apply acquired knowledge and problem-solving skills in new environments related to Naval Engineering
- ◆ Solve complex problems and make responsible decisions
- ◆ Acquire the basis of scientific and technological knowledge applicable to Naval and Ocean Engineering and management methods
- ◆ Organize and lead multidisciplinary work groups in multilingual environments
- ◆ Acquire the fundamental knowledge of ship design, structure, machinery and on-board installations
- ◆ Know the scope of detailed engineering of structure, outfitting, electricity, flag authorization and air conditioning
- ◆ Know how to organize and control the processes of construction, repair, transformation, maintenance and inspection of naval projects
- ◆ Delve into shipyard management, having a global and current vision of all shipyard departments
- ◆ Acquire the knowledge of ship operations throughout the entire flow line
- ◆ Possess detailed knowledge of the latest trends in innovation and development in the naval market in all stages of the life cycle of projects, from the initial stages of design to operations and vessel or artifact scrapping



*Join us and we will help you
achieve professional excellence"*



Specific Objectives

- ◆ Know the necessary permits for vessels to operate
- ◆ Know the crews, legislation and contracting options
- ◆ Understand how to manage ship maintenance and how to make maintenance plans
- ◆ Understand the different operations that ships perform depending on purpose and design
- ◆ Understand how to live together on board and what to do in case of emergency
- ◆ Analyze the world of piracy, naval boarding actions and possible collisions
- ◆ Become aware of the latest technologies in fleet management
- ◆ Understand and analyze ship profit and loss account
- ◆ Understand how ships can be sustainable

03

Course Management

In its desire to have the best professionals in academia, TECH has selected for this program a highly qualified and well-versed teaching staff with more than 10 years of experience in the field. Active professors, they aspire to help new generations by offering their knowledge and resolving any doubts that may arise during the program.





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Our university employs the best professionals in all areas who share their knowledge to help you"

Management



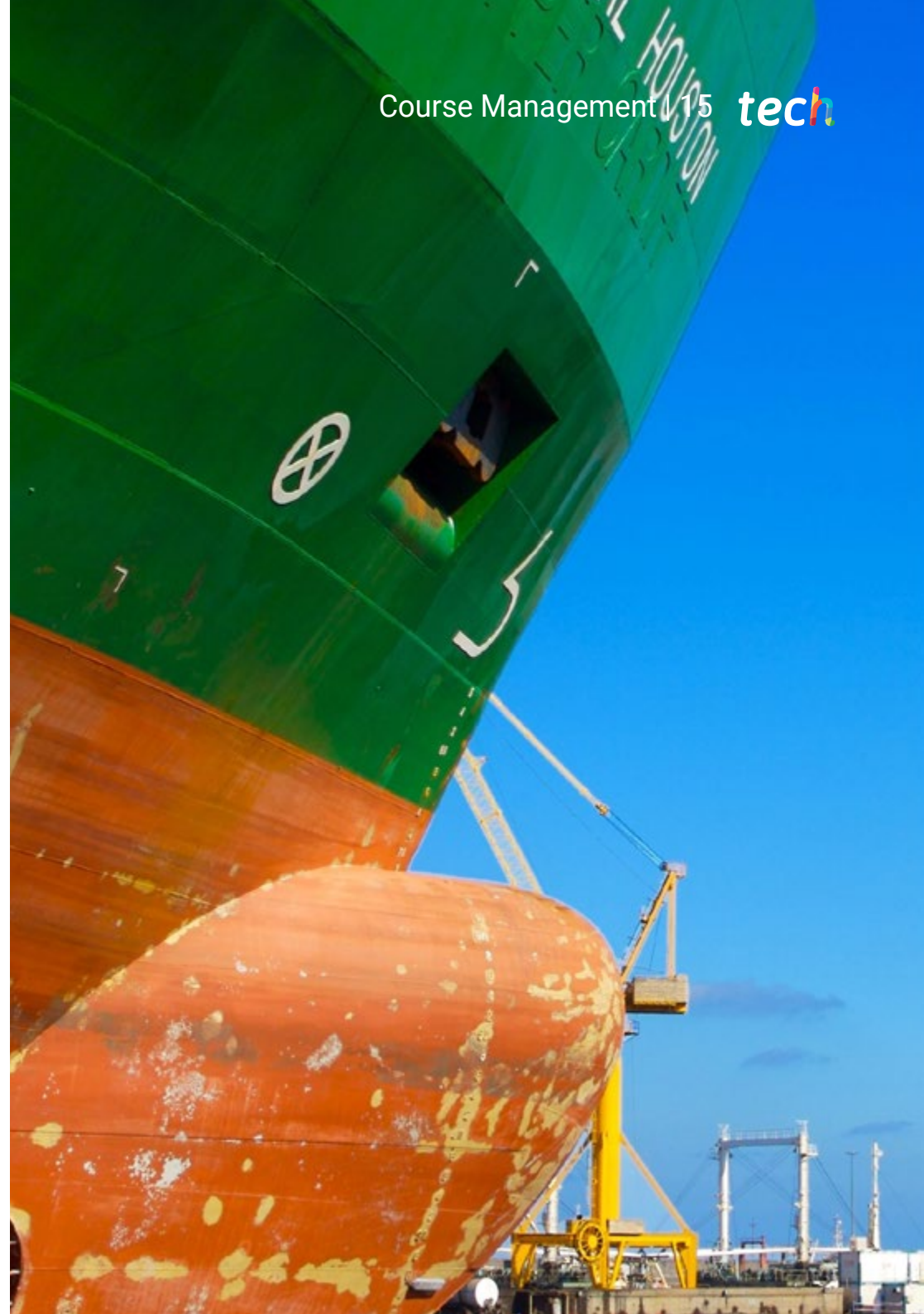
Ms. López Castejón, María Ángeles

- Naval and Ocean Engineer School of Naval Engineering (ETSIN)
- 22 years of experience in Naval Engineering, Engineering and Shipyards
- Master's Degree in Occupational Risk Prevention Safety. MAPFRE
- PRL Auditor C.E.F
- Safety Coordinator
- C.A.P. University of Seville
- CCPC Co-Active Professional Certified Coach CTI
- Director of Marine Projects at SENER INGENIERIA Y SISTEMAS, S.A
- Certified Professional Coach

Professors

Mr. Sánchez Plaza, Carlos

- ◆ Naval and Ocean Engineer School of Naval Engineering (ETSIN)
- ◆ 26 years of experience in Naval Engineering
- ◆ PADE, Senior Management Plan, IESE (University of Navarra)
- ◆ COO Deoleo
- ◆ Fishing and Merchant Fleet Management Specialist
- ◆ Member of the Bureau Veritas Naval Technical Committee



04

Structure and Content

The contents have been structured and designed by the best professionals in Naval and Ocean Engineering, who have extensive experience and recognized prestige in the profession, and who are aware of the benefits that the latest educational technology can bring to higher education.





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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. Naval Vessel Management and Operation

- 1.1. Basic Vessel Documentation
 - 1.1.1. Vessel Documentation and Permits
 - 1.1.2. Crew Documentation and Permits
 - 1.1.3. Cargo Documentation and Permits
 - 1.1.4. Marine Insurance
- 1.2. Maintenance
 - 1.2.1. Obligations, Certifications and Flags
 - 1.2.2. Maintenance Plans
 - 1.2.2.1. Preventative Maintenance
 - 1.2.2.2. Predictive Maintenance
 - 1.2.2.3. Corrective Maintenance
 - 1.2.2.4. Maintenance Plan Monitoring
 - 1.2.3. Digital Twins
 - 1.2.4. Quadrennial or Quinquennial Major Repairs
- 1.3. Port Management
 - 1.3.1. Shipping Agencies or Consignees
 - 1.3.2. Ship Victualling
 - 1.3.3. Permits and Authorizations Vessel Operations
- 1.4. Staff Management
 - 1.4.1. Crew: Key Positions
 - 1.4.2. Travel and Boarding Documentation
 - 1.4.3. Personnel Selection
 - 1.4.4. Labor Conditions and Legislation
 - 1.4.5. Crew Transfer
- 1.5. Ship or Vessel Operations
 - 1.5.1. Civilian Vessels
 - 1.5.1.1. Transport Vessels
 - 1.5.1.1.1. Dry Cargo
 - 1.5.1.1.2. Frozen Cargo
 - 1.5.1.1.3. Fuel Transportation and Vetting
 - 1.5.1.2. Fishing Vessels
 - 1.5.1.3. Support Vessels, Artifacts and Platforms
 - 1.5.1.4. Passenger Vessels
 - 1.5.2. Military Vessels
 - 1.5.3. Maritime Navigation
 - 1.5.3.1. Navigation and Tracking Equipment
- 1.6. Daily Life on Board, Coexistence
 - 1.6.1. Daily Life on Board
 - 1.6.2. Medical Emergencies and Health on Board
 - 1.6.3. Occupational Risk Prevention on Board
- 1.7. Port and Navigation Vessel Safety and Integrity
 - 1.7.1. Piracy and Stowaways
 - 1.7.2. Collisions and Naval Boarding Action
- 1.8. New Technologies in Ship Management and Operations
 - 1.8.1. Enterprise Resource Planning (ERP) and Corporate Tools
 - 1.8.2. Other Management Tools
- 1.9. Vessel Operating Income Statement
 - 1.9.1. Main KPIS Indicators in Vessel Management
 - 1.9.2. Vessel P&L
- 1.10. Sustainability on Ships
 - 1.10.1. Recycling
 - 1.10.2. Sustainability
 - 1.10.3. Sustainable Fuels



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A comprehensive and multidisciplinary educational program that will allow you to excel in your career, following the latest advances in the field of Naval Engineering”

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.



“

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.



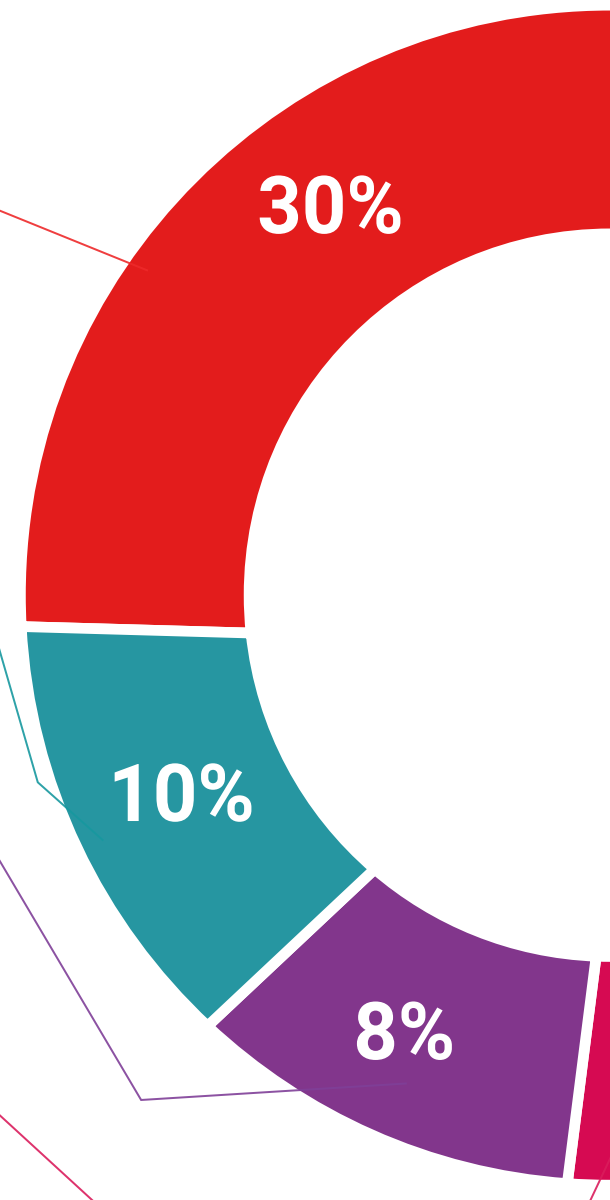
Practising Skills and Abilities

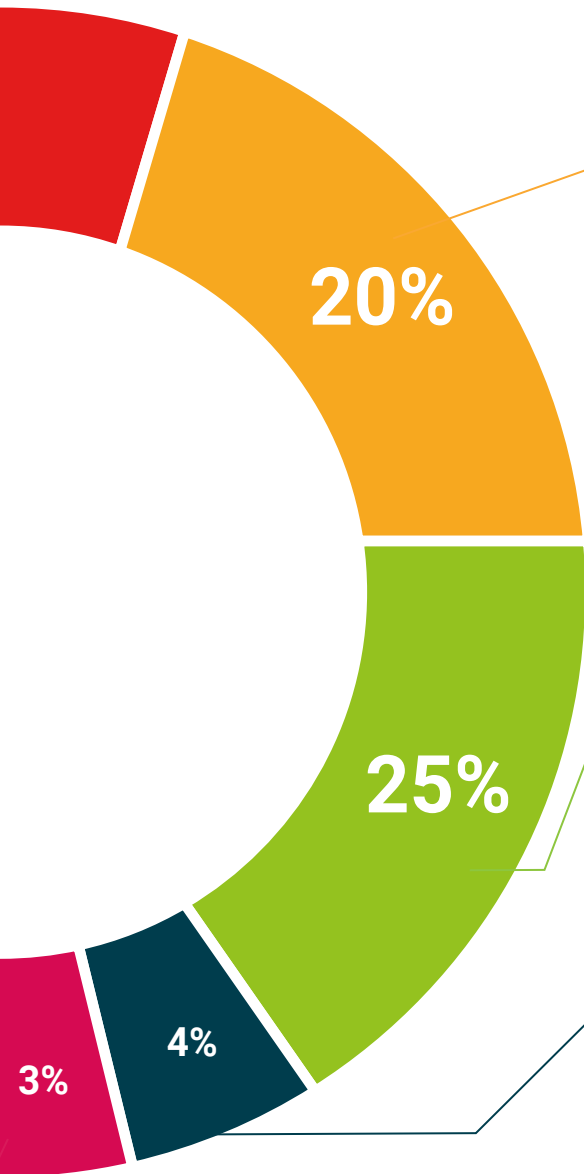
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



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 Marine Facilities Management and Operations guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global 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 Marine Facilities Management and Operations** 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 Marine Facilities Management and Operations**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

personalized service innovation

knowledge present

online training

development language

virtual classroom



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