

# Postgraduate Certificate Maritime-Port Security and Safety





## Postgraduate Certificate Maritime-Port Security and Safety

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

Website: [www.techtute.com/in/engineering/postgraduate-certificate/maritime-port-security-safety](http://www.techtute.com/in/engineering/postgraduate-certificate/maritime-port-security-safety)

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# 01

# Introduction

The important advance of commercial maritime transport at a global level has influenced the improvement of port infrastructures, considerably increasing traffic and feverish activity. In this way, a large number of regulations have been designed to exercise order and control in maritime operations, increasing the level of safety and security in the port system. According to the relevance that this subfield has taken in the field of Port Management, this university qualification has been developed, providing advanced content on potential threats to port infrastructure, analyzing specific vulnerabilities and proposing cybersecurity solutions. All this by means of a 100% online pedagogical format widely flexible and without a fixed schedule.







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*TECH is innovation and this Postgraduate Certificate based on Port Management is a true reflection of that"*

Currently, maritime transport is the most relevant among all the major commercial sectors in the world, and at the same time, one of the most dangerous. Therefore, over the years, ways have been sought to minimize risks, improving maritime safety through the development of international standards and rules, with the objective that all nations fully comply with each one of them. All this to protect the economic interests of ships and ports, and, above all, to protect people.

In this way, the studies in this sector have advanced giving answers and solutions to multiple questions, making it clear that engineering professionals must be at the forefront in this area of knowledge that is constantly developing. In this way, this Postgraduate Certificate will provide the professional with updates in the effectiveness of physical protection measures in a specific port, examining the existing security design.

The graduate will enhance their skills in specific areas related to the comprehensive analysis of threats and providing informed recommendations for risk mitigation. On the other hand, it is a program that integrates a teaching team with extensive experience and fully specialized, supported by audiovisual content of the highest quality that offers a better experience to students for its dynamism and ease of learning.

Therefore, TECH emphasizes excellence and comfort, offering the most complete update and the highest standards, being a qualification of great flexibility by only needing a device with internet connection to easily access the virtual platform from the comfort of the place where you are.

This **Postgraduate Certificate in Maritime-Port Security and Safety** contains the most complete and up-to-date program on the market. The most important features include:

- ♦ The development of case studies presented by experts in Port Management and Intermodal Transportation
- ♦ 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
- ♦ 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



*At TECH you will continue to expand your knowledge and you will be able to answer questions in disciplines such as Maritime Safety"*

“

*TECH offers you multimedia content to support you in achieving your goals, providing you with dynamism and comfort with the online methodology”*

*Acquire more knowledge and become an expert engineer in Maritime-Port Security and Safety.*

*TECH is excellence and efficiency, as it offers you innovative tools and the most current content of the educational program.*

The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned 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 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 during the academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.



# 02 Objectives

This Postgraduate Certificate in Maritime-Port Security and Safety has been developed with the purpose of offering the graduate the most recent developments in security procedures in the handling and transport of goods within the area of Port Management. In addition, TECH provides several innovative didactic tools, guaranteeing the successful development of the program. At the end of this program, professionals will have broadened their educational outlook in terms of risk analysis and security assessment of protection.







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*TECH is at the forefront, providing you with advanced industry content to meet your career goals in less time than you think”*



## General Objectives

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- ♦ Conceptualize logistics and place it in the current economic environment
- ♦ Conceptually define the processes that compose it and give rise to the different types of logistics
- ♦ Understand what each of these processes consists of and the purpose for which they were conceived
- ♦ Analyze the general composition of today's intermodal chains
- ♦ Update the student's knowledge in the field of multimodal transport
- ♦ Substantiate the importance of maritime transport in globalization
- ♦ Analyze multimodality and its role in the logistics chain
- ♦ Examine the main maritime traffics and transport vessels
- ♦ Delve into the main maritime traffics
- ♦ Specify the international legislation in maritime transport
- ♦ Delve into the traditional characteristics and functions of ports and their historical evolution
- ♦ Delve into the evolution of the logistics function in ports
- ♦ Examine the alternative of port infrastructure specialization as a way of adapting to the demands of logistics chains
- ♦ Analyze the latest innovation trends
- ♦ Define the different Governance Models of Ports
- ♦ Examine the evolution of port governance in relation to the level of development of the countries
- ♦ Provide a context for the governance structure of a typical port
- ♦ Define a future port model in a context of in-depth and global transformation
- ♦ Analyze with maximum objectivity these aspirations, from a technical point of view
- ♦ Identify the importance of consensus, communication and transparency in the process of formulating the strategy of a port system that has important repercussions on society as a whole, both economically and socially



*Give your career the boost it needs and specialize in the Maritime and Port Security and Safety sector"*



## Specific Objectives

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- ◆ Identify potential threats to port infrastructure, analyzing specific vulnerabilities and proposing concrete cybersecurity solutions to prevent attacks and ensure the integrity of systems
- ◆ Assess the effectiveness of physical protection measures at a specific port by examining the existing security design, identifying areas for improvement and developing a plan to strengthen the security of the facility
- ◆ Present a detailed risk assessment report for a selected port, compiling relevant data, demonstrating a thorough analysis of threats, and providing recommendations for analysis of threats and providing informed risk mitigation
- ◆ Propose and develop a mock port crisis exercise, establishing a realistic scenario, coordinating the response of a security team and critically evaluate performance to improve emergency preparedness



03

# Course Management

TECH is among the elite of education, since it provides teaching of the highest educational standards supported by didactic tools, with which the graduate will develop and successfully complete each of its university programs. In this way, the professional will have access to an exclusive syllabus designed by a teaching staff specialized in the division of projects, works and maritime signals. Their wide experience and vast knowledge in this field of study will lead the student to face the different challenges that may arise during the Postgraduate certificate process.







“

*The content to which you will have access was designed by professional specialists in Civil Engineering”*

## Management



### Dr. López Rodríguez, Armando

- ♦ Head of Technical Advisory Area in the Office of the President of Ports of the State
- ♦ Head of Strategic Planning Area at Ports of the State
- ♦ Project Manager at Ports of the State
- ♦ Head of the Resources and Information and Communications Technology Area at Ports of the State
- ♦ Head of Development Ports of the State
- ♦ Head of Corporate Relations Area at Ports of the State
- ♦ Head of Strategic Planning Area at Ports of the State
- ♦ Head of the Strategic Planning Area at Ports of the State
- ♦ AENOR Associate Professor
- ♦ UBT Associate Professor Lab
- ♦ Telecommunications Engineer from Universidad Politécnica de Madrid
- ♦ Degree in History from the National University of Distance Education (UNED)
- ♦ PhD's Degree in History from the National University of Distance Education (UNED)
- ♦ Master's Degree in Advanced Methods and Techniques of Historical, Artistic and Geographic Research from the National University of Distance Education (UNED)
- ♦ Management Development Program (PDD) from the IESE of the University of Navarra



## Professors

### Dr. López Ansorena, César

- ◆ Expert in Port Management
- ◆ Port Facility Security Officer recognized by the competent authority in maritime security matters
- ◆ Director of Private Security recognized by the Ministry of the Interior
- ◆ PhD in Civil Engineering Systems (Territory and Environment program) Cum Laude from the Polytechnic University of Madrid
- ◆ Civil Engineer from the Polytechnic University of Madrid
- ◆ Professional Master in Intelligence Analysis

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*An unique, key, and decisive educational experience to boost your professional development”*



# 04

# Structure and Content

This program is focused on the professional according to the most recent studies in the field of Port Management, establishing a syllabus that provides an exquisite content related to cyber threats and specific vulnerabilities. This Postgraduate Certificate is designed to provide the most advanced knowledge on technological trends in port security. All this according to the various teaching tools that offer dynamism in the development of this educational qualification.







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*A syllabus developed with advanced content related to risk mitigation strategies and protection plans”*

## Module 1. Port security and safety

- 1.1. Port Security
  - 1.1.1. Port Security
  - 1.1.2. Security and safety
  - 1.1.3. International norms, regulations and standards
- 1.2. Technological and Industrial Safety in Ports
  - 1.2.1. Management of Dangerous Goods
  - 1.2.2. Prevention of Industrial Accidents
  - 1.2.3. Safety procedures for the handling and transport of goods
- 1.3. Port security Security Planning
  - 1.3.1. Identification of Threats and Vulnerabilities
  - 1.3.2. Risk Analysis and Protection assessment
  - 1.3.3. Risk mitigation strategies. Protection plans
- 1.4. Physical and electronic protection
  - 1.4.1. Design of physical protection systems
  - 1.4.2. Access control and monitoring
  - 1.4.3. Port security technologies
- 1.5. Logical and cyber security in ports
  - 1.5.1. Specific cyber threats and vulnerabilities
  - 1.5.2. Port Cybersecurity Strategies
  - 1.5.3. Response to cyber incidents
- 1.6. Crisis and Emergency Management
  - 1.6.1. Emergency response planning
  - 1.6.2. Coordination with public safety agencies
  - 1.6.3. Response drills and exercises
- 1.7. Community Relations and Crisis Communication
  - 1.7.1. Importance of Communication with The Community
  - 1.7.2. Strategies in Communication in Crisis Situations
  - 1.7.3. Corporate Social Responsibility in ports







- 1.8. Security Department Management
  - 1.8.1. Safety Public and Private Management
  - 1.8.2. Security Planning
  - 1.8.3. Material Resources
  - 1.8.4. Human Resources Management and Training
- 1.9. Prevention and Protection
  - 1.9.1. Recommendations against risks of an antisocial nature
  - 1.9.2. Recommendations for fire risks
  - 1.9.3. Recommendations against occupational risks
- 1.10. Innovation and the Future of Port Security
  - 1.10.1. Technological trends in port security
  - 1.10.2. Business intelligence and data analysis
  - 1.10.3. Preparation for future challenges

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*A 100% online program that provides flexibility and convenience to delve into Port Management programs at your convenience”*

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.*



*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 Maritime-Port Security and Safety 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 Maritime-Port Security and Safety** 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 Maritime-Port Security and Safety**

Official N° of Hours: **150 h.**



\*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION 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  
development language  
virtual classroom



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