



# Postgraduate Certificate Strategic Port Planning

» Modality: online» Duration: 12 weeks

» Certificate: TECH Global University

» Credits: 12 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/engineering/postgraduate-certificate/strategic-port-planning

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### tech 06 | Introduction

The electronic administration and digitalization of ports has experienced a remarkable progress due to the intrinsic transformation of this area of the mobility sector. Thanks to both, it is possible to streamline processes and reduce processing times, easing the bureaucratic burden on customs and receiving warehouses. There has also been an increased implementation of Industrial Internet of Things (IIoT) resources and technologies through sensors, monitoring systems and other tools for operational data analysis.

In parallel to all these innovations, standards and regulations are being developed to ensure the interoperability and cybersecurity of these scenarios. In such a changing context, it is imperative for professionals to keep up to date. For this reason, TECH has integrated the main advances in this field into a comprehensive syllabus composed of 2 intensive educational modules. Therefore, the qualification addresses key aspects for structuring a business plan in the context of port infrastructures. At the same time, it delves into investment lines, strategies to establish international relations in a more effective way and the search for greater environmental sustainability.

All this through a 100% online study format that is not restricted to rigid schedules or timetables. In this way, students will have the necessary flexibility to adapt their learning to their schedules and personal obligations. In addition, this modality facilitates access to a wide range of multimedia teaching resources and study materials from any device with an Internet connection. On the other hand, the Relearning methodology will enhance the assimilation of complex concepts through repetition. All this with the educational guidance of real experts with extensive professional experience and the best results. After completing the educational preparation, graduates will be able to distinguish themselves immediately and with excellence in their daily work practice.

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

- The development of practical cases presented by experts in Strategic Port Planning
- The graphic, schematic and eminently practical content of the system provides specialized and practical information on those 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



Differentiate yourself from other professionals in the field with an innovative program of studies in a booming sector with great projection"

### Introduction | 07 tech

Human resources planning are just some of the areas that you will master in this Postgraduate Certificate"

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.

Acquire solid skills to ensure environmental sustainability throughout this 100% online program.

Get up to date on the digitalization and e-government mechanisms that facilitate port administration thanks to TECH.





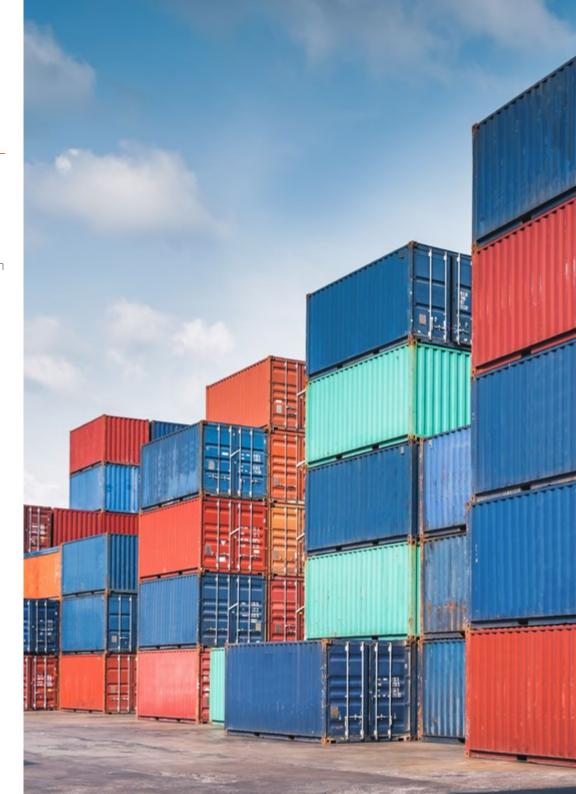


## tech 10 | Objectives



### **General Objectives**

- 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







### **Specific Objectives**

- Analyze the economic, technical, social and environmental dimensions of ports
- Determine the different strategic performance criteria of a port system (efficiency, connectivity, digitalization and sustainability)
- Examine the different strategic lines associated with the performance criteria
- Establish the general port management objectives associated with each of the strategic lines of action
- Analyze the management of a port and its short, medium and long term planning
- Define in a coordinated way all the aspects that affect the management of a port, infrastructures, investments, traffics, economic-financial, HR, environment
- Define and analyze the overall objectives of port management
- Specify HR planning based on management by competences, in accordance with the global strategy and its implementation at port level



This qualification guarantees you a holistic understanding of the economic, social, environmental and technical of ports"





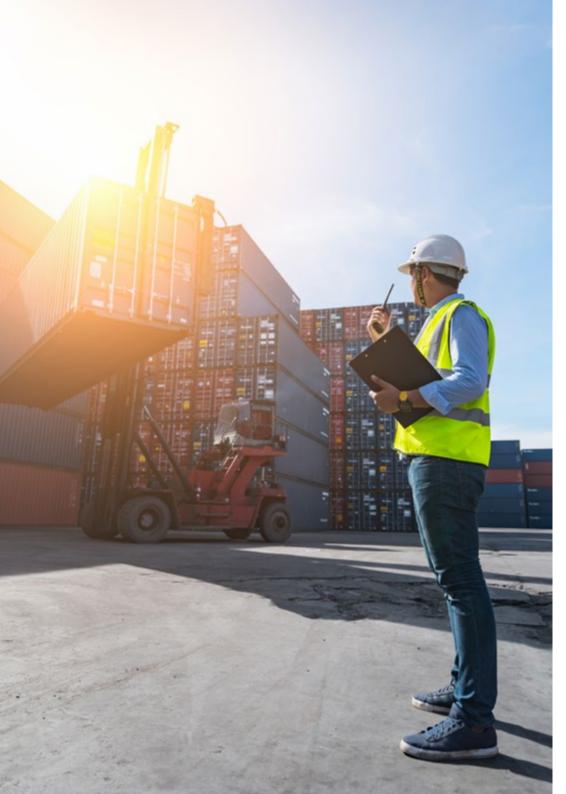


#### **Address**



#### 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



### Course Management | 15 tech

#### **Professors**

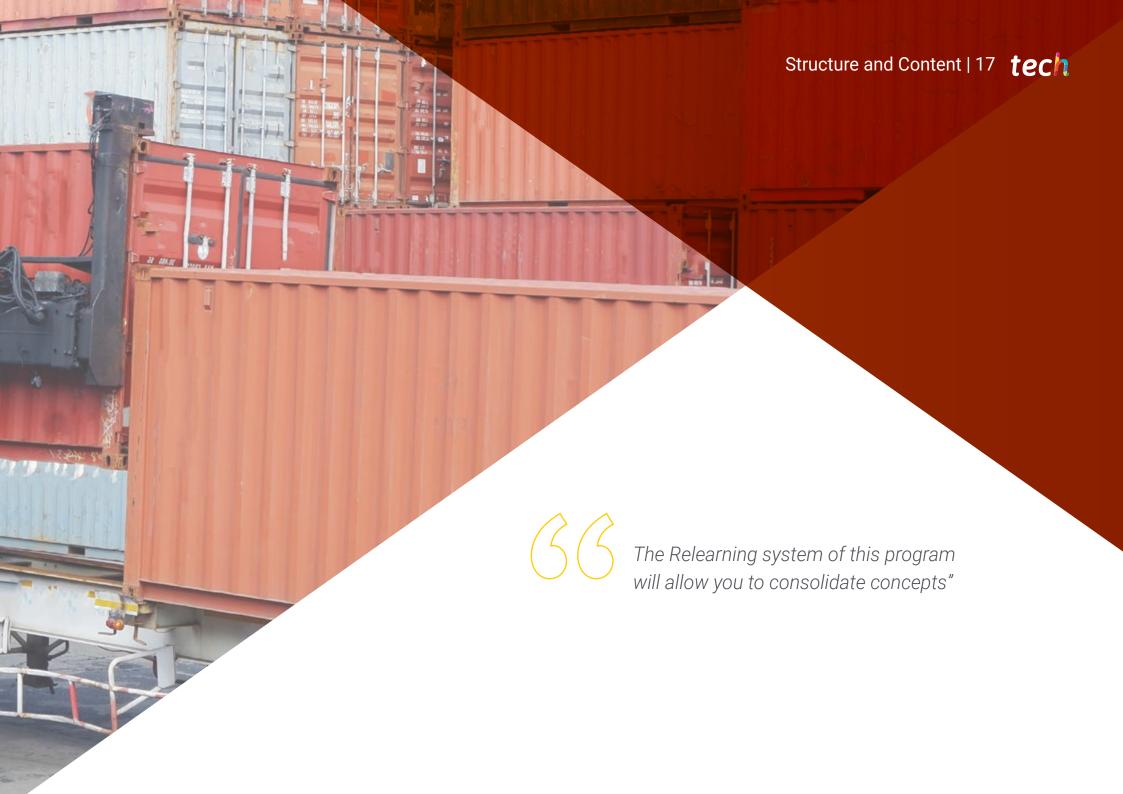
#### Mr. Pastrián García, José Miguel

- Expert in Human Resources Management in the Port Sector
- Human Resources Consultant
- Direction and coordination of the Master's Degree in Port Management of Ports of the State
- Lecturer at INAP, IIR and EOI
- Deputy Director of Port Studies
- Deputy Director of Business Plans
- Deputy Director of Human Resources
- Head of HR Organization and Planning Area
- Degree in Economics and Business Administration from the Autonomous University of Madrid
- Master's Degree in Human Resources Management from Escuela de Negocios
- Executive in Port Sector Management from IESE Business School
- Member of: Board of Directors of the Port Authorities of Castellón, Tarragona, A Coruña, Almería and Pasaje



An unique, key, and decisive training experience to boost your professional development"

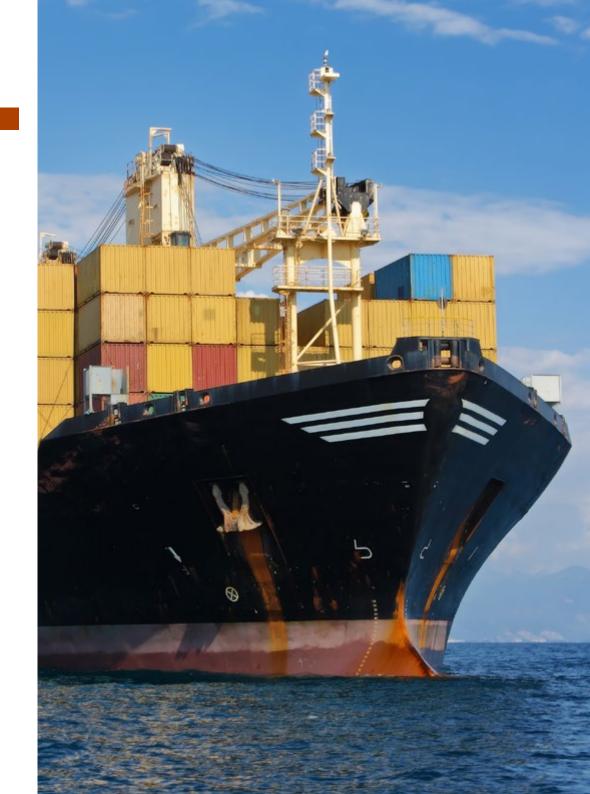




### tech 18 | Structure and Content

#### Module 1. Strategic Port Planning

- 1.1. Port System
  - 1.1.1. Port Authorities Coordination
  - 1.1.2. Economic Outlooks
  - 1.1.3. Environmental Outlooks
  - 1.1.4. Social Perspective
  - 1.1.5. Criteria for action
- 1.2. Economically profitable ports
  - 1.2.1. Financing
  - 1.2.2. Budgeting
  - 1.2.3. Prices associated with the port reality
  - 1.2.4. Redistribution of resources between ports
- 1.3. Port space management
  - 1.3.1. Port space performance
  - 1.3.2. Port space at the service of the general interest
  - 1.3.3. Port space Digitalization
- 1.4. Infrastructures. Demand-oriented investments
  - 1.4.1. Leveraging infrastructure investments
  - 1.4.2. Economically and socially profitable infrastructures
  - 1.4.3. Infrastructure connectivity
  - 1.4.4. Respect for the environment
- 1.5. Provision of services oriented to customers and society as a whole
  - 1.5.1. Competitive services at the service of the general interest
  - 1.5.2. Efficiency in the provision of services
  - 1.5.3. Monitoring of the provision of services
  - 1.5.4. Simplification of bureaucratic procedures
    - 1.5.4.1. Border controls and inspections
    - 1.5.4.2. Streamlining of bureaucratic procedures
- 1.6. Innovation and the Digitalization of ports
  - 1.6.1. Electronic administration
  - 1.6.2. Digital ports
  - 1.6.3. Stimulating Innovation
  - 1.6.4. Innovation at the service of the general interest



### Structure and Content | 19 tech

- 1.7. International projection
  - 1.7.1. International Relations
  - 1.7.2. Brand Image
  - 1.7.3. Competitiveness of ports in the International Context
- 1.8. Environmental Sustainability
  - 1.8.1. Environmental Management
  - 1.8.2. Quality and environmental measurements
  - 1.8.3. Consumption and waste management
  - 1.8.4. Sustainable mobility
  - 1.8.5. Climate Change
  - 1.8.6. The port and the citizen
- 1.9. Security/Safety
  - 1.9.1. Industrial Safety
  - 1.9.2. Port security
  - 1.9.3. Cybersecurity
- 1.10. Ethical corporate culture and human capital
  - 1.10.1. Ethical Codes
  - 1.10.2. Supervision and Control
  - 1.10.3. Transparency
  - 1.10.4. Organizational Structure
  - 1.10.5. Equality
  - 1.10.6. Training and Career
  - 1.10.7. Communication and participation

#### Module 2. Port business plan and HR management.

- 2.1. Port's Business Plan as a Planning Instrument
  - 2.1.1. The Business Plan as a concretion of the global strategy of a port system.
  - 2.1.2. The Business Plan as a coordinating element of planning.
  - 2.1.3. SWOT
  - 2.1.4. Strategic Map
  - 2.1.5. Other Port planning instruments
- 2.2. Perspectives of a Port's Business Plan
  - 2.2.1. Port traffic
  - 2.2.2. Inversions
  - 2.2.3. Economic-financial
  - 2.2.4. Human resources.
  - 2.2.5. Environment and sustainability

- 2.3. Management control through the Business Plan
  - 2.3.1. Monitoring of objectives
  - 2.3.2. Evolution of management ratios
  - 2.3.3. Corrective Actions
- 2.4. Human capital
  - 2.4.1. Social and labor context of the Ports
  - 2.4.2. HR planning within the global and port strategy.
  - 2.4.3. Labor relations and negotiation
- 2.5. The need for change. Professionalization of Ports
  - 2.5.1. Resistance to Change
  - 2.5.2. How to Manage Changes
  - 2.5.3. Professionalizing ports
  - 2.5.4. Transparency and communication
- 2.6. Management by competences as a facilitator of change
  - 2.6.1. Knowledge competences
  - 2.6.2. "Soft" competences
  - 2.6.3. The different aspects of management by competences
- 2.7. Job positions
  - 2.7.1. Specification of the jobs
  - 2.7.2. Job evaluation
  - 2.7.3. Job classification and organizational structure
- 2.8. Training Plan
  - 2.8.1. Port system training plan
  - 2.8.2. Port level training plan
  - 2.8.3. The "corporate university"
  - 2.8.4. Virtual Classrooms
- 2.9. Compensation system
  - 2.9.1. Compensation system
  - 2.9.2. Compensation Structure
  - 2.9.3. Performance evaluation and variable compensation
- 2.10. Occupational Hazard Prevention
  - 2.10.1. Prevention reports. Prevention Strategy
  - 2.10.2. Occupational risks Prevention at a port
  - 2.10.3. Psychosocial Risks





## tech 22 | Methodology

### 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.

## tech 24 | Methodology

### 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.



### Methodology | 25 tech

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.



### Methodology | 27 tech





#### **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.





20%





### tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Strategic Port Planning** 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 Strategic Port Planning

Modality: **online** 

Duration: 12 weeks

Accreditation: 12 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Postgraduate Certificate in Strategic Port Planning

This is a program of 360 hours of duration equivalent to 12 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



<sup>\*</sup>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.



## Strategic Port Planning

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