Postgraduate Certificate Turnkey Projects (EPC)



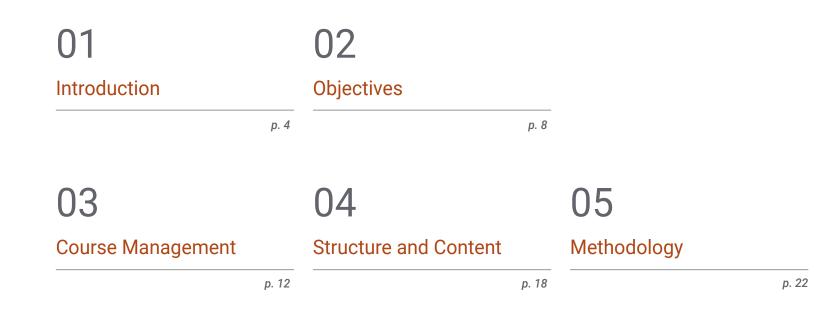


## **Postgraduate Certificate** Turnkey Projects (EPC)

- » 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/proyectos-llave-mano-epc

# Index



06 Certificate

# 01 Introduction

With this program that TECH offers to professionals, the engineer will acquire indepth training in everything related to the creation and management of Turnkey Projects (EPC). In this sense, the program will delve into the contractor's global work, which ranges from conceptual, basic and detail engineering, to the final testing of the installation and the delivery of the project to the client. This knowledge will help the professional to position themselves within a sector that increasingly demands more and more engineers properly trained in the field.



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Turnkey projects are on the rise, and engineers who manage to master all the aspects involved in this type of work will be one step closer to professional success"

## tech 06 | Introduction

With the completion of this Postgraduate Certificate, the engineering professional will deepen their knowledge of everything related to Turnkey Projects (EPC). The stages of a turnkey project will be analyzed, and the management of each one of them, as well as the coordination between each one of the support agents involved in an EPC Project will be discussed in depth.

We will also analyze the structure required for the management of each stage of the EPC Project, the existing restrictions and the different difficulties that usually arise in this type of projects.

Once they have finished the Postgraduate Certificate, the professional will have in-depth knowledge of the most important aspects of a project, and will be able to manage projects of this type in national and international environments, paying special attention to the critical points that can affect the deadlines and costs of the execution of a contract.

All this, throughout a 100% online training program that provides the student with the ease of being able to take it wherever and whenever they want. You will only need a device with internet access, and you will be able to access a universe of knowledge that will be the main basis for engineers to position themselves in a sector that is increasingly demanded by companies in various sectors.

This **Postgraduate Certificate in Turnkey Projects (EPC)** contains the most complete and up-to-date educational program on the market. The most important features of the program include:

- Practical cases presented by experts in International Projects in Construction
- 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
- Practical exercises where the self-assessment process can be carried out to improve learning
- Special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Access to content from any fixed or portable device with an Internet connection

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Control each and every phase of EPC projects with this Postgraduate Certificate and improve your daily practice"

### Introduction | 07 tech

The skills you will acquire will enable you to manage EPC projects and position yourself as a prestigious professional"

In addition, as it is a 100% online program, you can study wherever and whenever you want.

Don't miss out on this great opportunity to study with the best professionals in the sector.

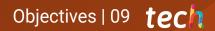
The program's teaching staff includes professionals from the sector who contribute their work experience to this specialization program, as well as renowned specialists from leading societies and prestigious universities.

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 an immersive training program designed to train in real situations.

The design of this program focuses on Problem-Based Learning, which means the student must try to solve the different real-life situations of that arise throughout the academic program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced engineers with vast experience.

# 02 **Objectives**

TECH has designed this Postgraduate Certificate with the fundamental objective of helping engineering professionals to acquire the necessary knowledge to work on Turnkey Projects, taking into consideration all the necessary aspects to carry out successful project management. This will be done through the quality content which is designed on the basis of the latest premises of the profession that will enable the student to practice in these environments with greater assurance.



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What is TECH's goal? Your professional success"

## tech 10 | Objectives



- Carry out an exhaustive analysis of EPC projects
- Manage the different stages of EPC projects
- Manage the contracts of large-scale projects







## Objectives | 11 tech



#### Specific Objectives

- In-depth breakdown of EPC Project stages
- Sound analysis and knowledge of each stage of the E: Engineering
- Sound analysis and knowledge of stage P: Procurement
- Coordination of the HR Department
- Coordination of the Contracts Department

# 03 Course Management

One of the premises that makes TECH unique is the constant search for quality. One of the aspects where this is most noticeable is in the teaching staff, which is always made up of first-rate professionals. This guarantees students that by studying here they will find the best didactic content taught by the best professionals in the sector. In this sense, this Postgraduate Certificate in Turnkey Projects (EPC) is taught by highly prestigious professionals in this field, who bring the experience of their years of work to the training, as well as the knowledge they have acquired from research in the field.

You will be able to update your knowledge first hand from the best professionals in the sector and based on the latest scientific evidence"

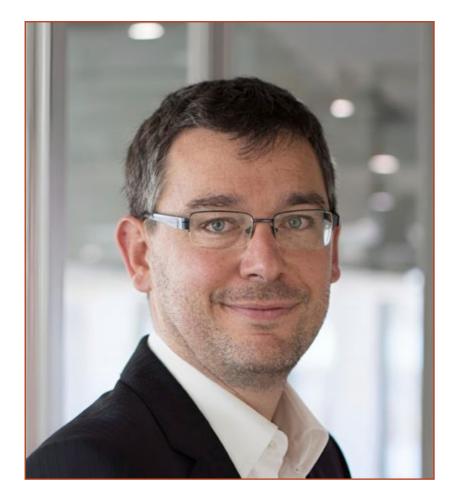
### tech 14 | Course Management

#### **International Guest Director**

With an extensive professional career of more than 20 years focused on project management and operational transformations, Pierre-Yvez Galopin is a prominent international expert in the field of Construction Engineering. He has spent most of his career in reference entities in countries such as France, Finland and Chile. In this way, he has held important positions as General Technical Director, where he has provided holistic advice to projects in the bidding, construction and operation phase on a global scale.

As such, he has worked directly in more than 40 operations, in addition to having negotiated more than 200 contracts in various sectors such as Heavy Industry, Mining, Oil and Gas. His work philosophy is based on achieving operational excellence, which has driven him to remain at the forefront of areas such as external cost maintenance, as well as the different phases of studies in construction. Thanks to this, it is considered a reference in the optimization of large investment projects through the disruptive methodology of Value Engineering.

In his constant effort to promote progress in the construction sector, he has developed multiple specialized articles on his findings and research. In fact, he is one of the people in charge of preparing press releases in the Communication Department of Boston Consulting Group. As such, he has contributed to increase the knowledge of citizens in aspects such as the applications of Artificial Intelligence in commercial activities, the management of Greenfield or Brownfield investment projects and even the most recent trends in construction materials. In this regard, he highly values networking networks and is an active participant on LinkedIn, where he takes the opportunity to make key connections, share industry knowledge and stay up-to-date on industry opportunities.



## Dr. Galopin, Pierre-Yves

- Associate Director and Partner at Boston Consulting Group, Boston, United States
- Director of Development Projects at Sembcorp Industries, Santiago de Chile
- Co-Founder and Advisor at Tellus Chile
- Operations Manager at OSD Pipelines, Chile
- EPCM Engineer at Hatch, Chile
- Area Manager and Civil Engineer at Bouygues, Finland
- Civil Engineer at Degremont, Paris
- Management Consultant at Partners in Performance, Latin America

Thanks to TECH, you will be able to learn with the best professionals in the world"

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## tech 14 | Course Management

#### Management



#### Mr. Ruiz Cid, Martin Joaquín

- Technical Director EPC Project Group EPC Project Manager Leader at Soltec Energías
- Industrial Technical Engineer specializing in Mechanics/Structures from the Polytechnic University of Cartagena.
- Industrial Engineer in Electricity from the Polytechnic University of Cartagena
- Master's Degree in Power Electronics and Adaptive Control
- MBA in Strategic Company Management from UNED (National Distance Learning University)
- Master's Degree in Renewable Energies and the Environment
- Professional Project Manager Course
- EPC Turnkey Project Management Course
- Industrial Instrumentation Course

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# 04 Structure and Content

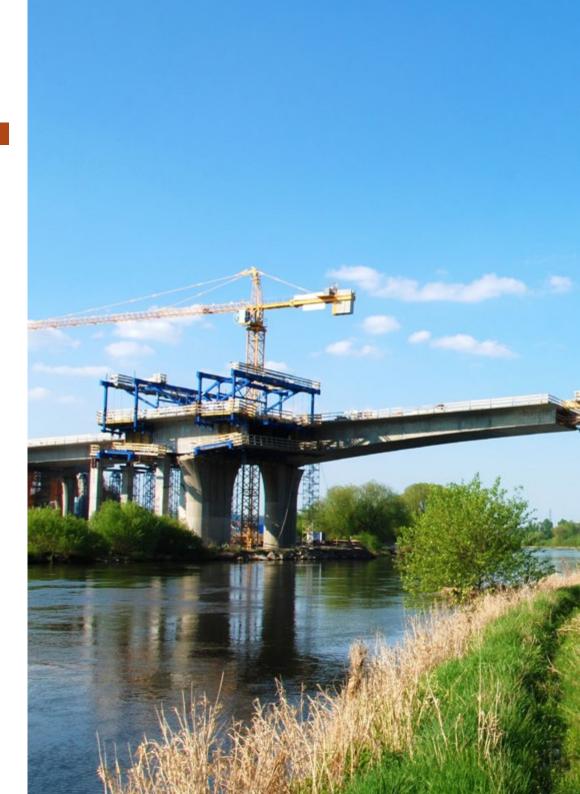
The syllabus has been built based on the intensive and high-impact specialization requirements of this Postgraduate Certificate. Through a complete course, which incorporates all the fields of work involved in the management of large Turnkey projects (EPC), the student will develop their theoretical and practical knowledge, achieving professional and personal growth that will allow them to intervene in this field of work with the confidence of an expert. You will achieve this through top-notch content designed by the best professionals in the industry.

The contents that TECH offers you with this Postgraduate Certificate will serve as a great theoretical support and will help you to face real situations in your profession"

### tech 18 | Structure and Content

#### Module 1. Turnkey Projects (EPC)

- 1.1. EPC Project
  - 1.1.1. EPC Project Context
  - 1.1.2. Project Components
  - 1.1.3. Needs Analysis
- 1.2. Stages in the EPC Project
  - 1.2.1. Identification of Stages in an EPC Project
  - 1.2.2. Identification of Initial Needs in the Stages
  - 1.2.3. Timing of Each Stage
- 1.3. Management of Stage *E Engineering* 
  - 1.3.1. Analysis of Stage E
  - 1.3.2. Timeline for Stage E
  - 1.3.3. Necessary Resources for Stage E
- 1.4. Analysis of Stage E Engineering
  - 1.4.1. Necessary Structure for the Development of Stage E
  - 1.4.2. Restrictions
  - 1.4.3. Difficulties and Risks
- 1.5. Management of Stage P Procurement
  - 1.5.1. Analysis of Stage P
  - 1.5.2. Timeline
  - 1.5.3. Resources Required
- 1.6. Analysis of Stage P Procurement
  - 1.6.1. Necessary Structure for the Development of Stage P
  - 1.6.2. Restrictions
  - 1.6.3. Difficulties and Risks
- 1.7. Management of Stage C Construction
  - 1.7.1. Analysis of Stage C
  - 1.7.2. Timeline
  - 1.7.3. Resources Required



#### Structure and Content | 19 tech



- 1.8. Analysis of Stage C Construction
  - 1.8.1. Necessary Structure for the Development of Stage C
  - 1.8.2. Restrictions
  - 1.8.3. Difficulties and Risks
- 1.9. EPC Projects: HR Department
  - 1.9.1. Main Functions
  - 1.9.2. Necessary Resources for This Department
  - 1.9.3. Coordination and Communication With the Rest of the Project
- 1.10. EPC Projects: Contracts Department
  - 1.10.1. Main Functions

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- 1.10.2. Necessary Resources for This Department
- 1.10.3. Coordination and Communication With the Rest of the Project

Welcome to the training that will mark a before and after in your professional career"

# 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"

### tech 24 | 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.

## Methodology | 25 tech



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 26 | 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 | 27 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.



### tech 28 | Methodology

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.

30%

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10%

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 | 29 tech



#### **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.



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# 06 **Certificate**

The Postgraduate Certificate in Turnkey Projects (EPC) guarantees, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Global University.

Certificate | 29 tech

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Successfully complete this training program and receive your university certificate without travel or laborious paperwork"

### tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Turnkey Projects (EPC)** 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 Turnkey Projects (EPC) 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.

tecn global university Postgraduate Certificate Turnkey Projects (EPC)

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