



Postgraduate Certificate
Procurement and Resource
Management in Construction
Project Management

Course Modality: Online

Duration: 6 weeks

Certificate: TECH Technological University

Official No of hours: 150 h.

We b site: www.techtitute.com/engineering/postgraduate-certificate/procurement-resource-management-construction-project-management and the site of the construction of the construction

# Index

 $\begin{array}{c|c} 01 & 02 \\ \hline & Dijectives \\ \hline & 03 \\ \hline & Course Management \\ \hline & & p.12 \\ \hline \end{array}$ 

06 Certificate

p. 28





# tech 06 | Introduction

In this Postgraduate Certificate, we will thoroughly address the role of the project manager in key aspects of project development such as procurement management and project resource management.

In this sense, the importance of controlling and managing the procurement process will be analyzed, as well as the benefits for the project of carrying out a good purchasing cycle. On the other hand, the resources in the project will be studied, as well as the importance of optimizing them to the maximum.

In this way, upon finishing the Postgraduate Certificate, the professional will have the necessary knowledge, as a project manager, to manage and control procurement and resources in such a way that they can make decisions that will allow them to fully optimize these aspects.

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

This Postgraduate Certificate in Procurement and Resource Management in Construction Project Management 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 Civil Engineering and Geotechnics
- 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 self-assessment can be used to improve learning
- 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



# Introduction | 07 tech



Develop your skills following a modality according to current times with all the guarantees to position yourself in a highly demanded 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 immersive training programmed to train 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 professional will be assisted by an innovative interactive video system created by renowned and experienced engineering experts.

You will acquire a series of basic and fundamental skills to carry out your work in an optimal way.

You will have access to a 100% online training that will allow you to combine your studies with the rest of your daily commitments.





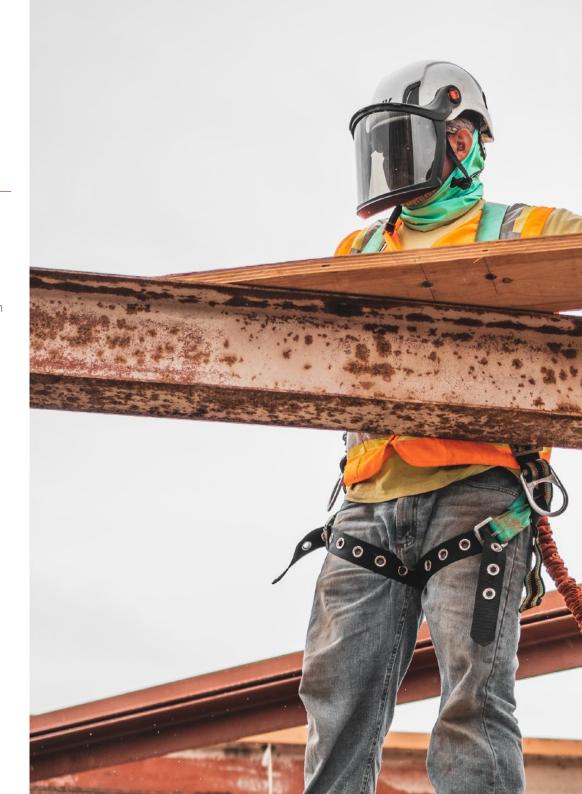


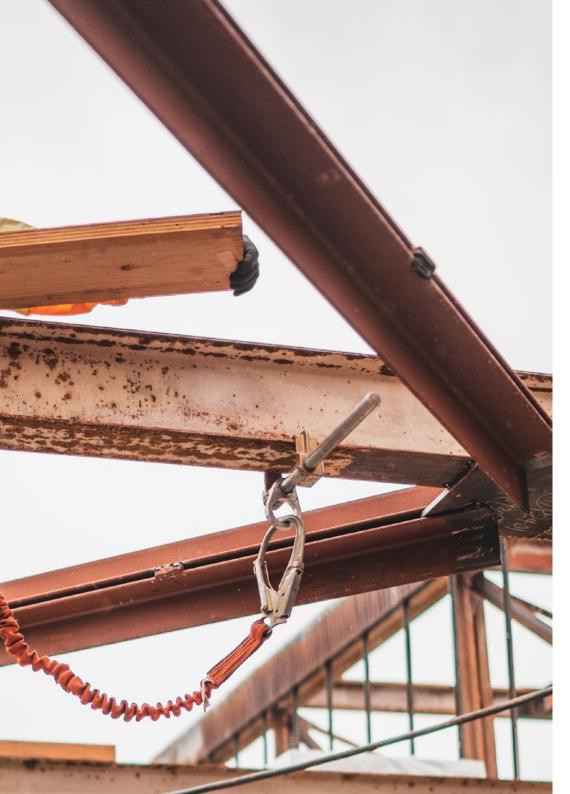
# tech 10 | Objectives



# **General Objectives**

- Carry out an exhaustive analysis of EPC projects
- Manage the different stages of EPC projects
- Manage the contracts of large-scale projects
- Perform an in-depth breakdown of guarantees, disputes and insurance in the construction industry
- Master project management on a global basis
- Carry out cost, time and resources analysis
- Gain solid knowledge of the integration phases of a project
- Manage a project with a global, interdepartmental vision
- Be able to analyze the earned value of projects







# **Specific Objectives**

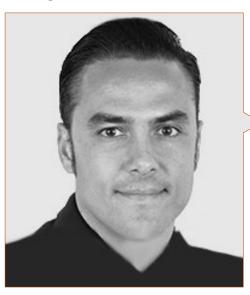
- Ability to manage project purchases
- Knowledge of the importance of making a good procurement cycle
- Analysis of necessary resources
- Ability to optimize resources







### 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







# tech 18 | Structure and Content

# **Module 1.** Project Management: Procurement and Resource Management.

- 1.1. Control of Purchases
  - 1.1.1. Purchases in the Project
  - 1.1.2. The Buyer
  - 1.1.3. The Provider
- 1.2. Procurement Cycle in Projects
  - 1.2.1. Analysis of the Procurement Cycle
  - 1.2.2. Description of Stages
  - 1.2.3. Study of Stages
- 1.3. Purchasing Contract
  - 1.3.1. Elements of the Contract
  - 1.3.2. Contractual Terminology in the Contract
  - 1.3.3. Control of Claims and Litigation
- 1.4. Procurement Management in Projects
  - 1.4.1. Types of Providers
  - 1.4.2. Category of Acquisitions
  - 1.4.3. Types of Contracts
- 1.5. Procurement Analysis in Projects
  - 1.5.1. Planning of Procurement Management
  - 1.5.2. Implementation of Purchases
  - 1.5.3. Control of Purchases
- 1.6. Resource Management
  - 1.6.1. Project Resources
  - 1.6.2. Conflict Management Capacity
  - 1.6.3. Levels of Conflict and Resolution
- 1.7. Management of Resources by Objectives
  - 1.7.1. Management by Objectives (MBO)
  - 1.7.2. Different Roles in the Projects
  - 1.7.3. Types of Leadership



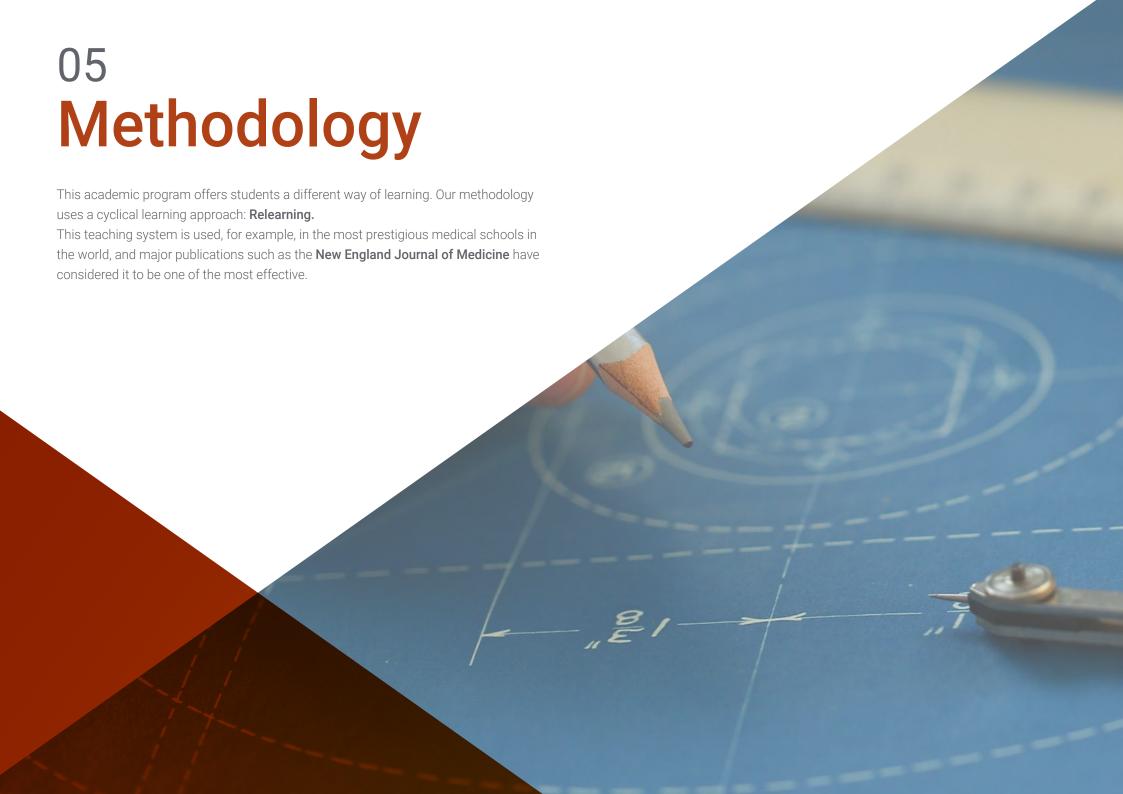


## Structure and Content | 19 tech

- 1.8. Project Resource Management
  - 1.8.1. Planning of Resource Management
  - 1.8.2. Estimation of the Resources of Activities
  - 1.8.3. Procurement of Necessary Resources
- 1.9. Analysis of Project Resources
  - 1.9.1. Development of Resources Team
  - 1.9.2. Team Management
  - 1.9.3. Team Control
- 1.10. Analysis of the Resource Interview Process from the PM
  - 1.10.1. Interview Process
  - 1.10.2. Analysis by the Project Manager
  - 1.10.3. Factors to Consider for a Successful Result



Enhance your skills as a Project Manager and position yourself at the forefront of the profession by studying at TECH"





# 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.

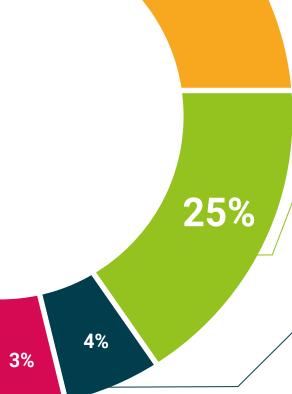


This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

#### **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 Postgraduate Certificate in Procurement and Resource Management in Construction Project Management 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 Procurement and Resource Management in Construction Project Management

Official No of hours: 150 h.



Mr./Ms.\_\_\_\_\_, with identification number\_\_\_\_ For having passed and accredited the following program

#### **POSTGRADUATE CERTIFICATE**

in

Procurement and Resource Management in Construction Project Management

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17 2020

Tere Guevara Navarro

allification must always be accompanied by the university degree issued by the competent authority to practice professionally in ea

que TECH Code: AFWORD23S techtitute.com/certifie

<sup>\*</sup>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.

technological university



# Postgraduate Certificate

Procurement and Resource Management in Construction Project Management

Course Modality: Online

Duration: 6 weeks

Certificate: TECH Technological University

Official No of hours: 150 h.

