

# Postgraduate Certificate

## Procurement and Preliminary Work Phases





## Postgraduate Certificate Procurement and Preliminary Work Phases

- » Modality: online
- » Duration: 2 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/pk/engineering/postgraduate-certificate/procurement-preliminary-work-phases](http://www.techtute.com/pk/engineering/postgraduate-certificate/procurement-preliminary-work-phases)

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# 01

# Introduction

The student will be able to study the phases prior to the execution of a construction project and become the best at seeking bids and drafting contracts with this superior program. A specialization of the highest level that will propel the student to the forefront of civil engineering. Don't think twice and give your career a boost by joining our alumni community.





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*Get to know the main tools for contracting civil construction works in a comfortable way with the latest educational technology"*

The Postgraduate Certificate in Procurement and Preliminary Work Phases has been created so that the professional can approach the field of procurement and the actions to be taken for the completion of the contract. To this end, emphasis will be placed on the existing tools for the search for tenders and for the drafting of bids. In addition, international contracting through multilateral organizations and direct international contracting will be studied.

This program will set out the guidelines to be followed to determine the type of contract on which each company should focus its recruitment objectives. In order to determine the type of contract that best suits each type of company, students will be given a series of premises on which they should focus in order to reach this conclusion.

It will also explain how to determine the technical and economic solvency of each company in which the civil engineering professional will perform his or her functions.

On the other hand, this training will show how to prepare an economic offer that is faithful to the reality of the contracts being tendered and will explain a series of procedures for applying subjective criteria to be taken into account when making the decision to set a price for each offer.

In this way, TECH takes the student through theoretical and practical knowledge to a higher level of teaching, and shows him another way of studying and learning, more organic, simpler and more efficient. TECH works to keep you motivated and to create in you a passion for learning. And it will push you to think and develop critical thinking.

This program is designed to give you access to the specific knowledge of this discipline in an intensive and practical way. A great value for any professional.

It should be noted that since it is a 100% online program, the student is not conditioned by fixed schedules or the need to move to another physical location, but can access the contents at any time of the day, balancing their work or personal life with their academic life.

This **Postgraduate Certificate in Procurement and Preliminary Work Phases** contains the most complete and up-to-date educational program on the market. The most important features include:

- ◆ The development of case studies presented by experts in infrastructure and civil 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 self-assessment can be used to improve learning
- ◆ Special emphasis on innovative methodologies in Procurement and Preliminary Work Phases
- ◆ 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



*Completion of this Postgraduate Certificate will place civil engineering professionals at the forefront of the latest developments in the industry"*

“ *This program is the best investment you can make in selecting an up-to-date program in the field of civil engineering. We offer you quality and free access to content*”

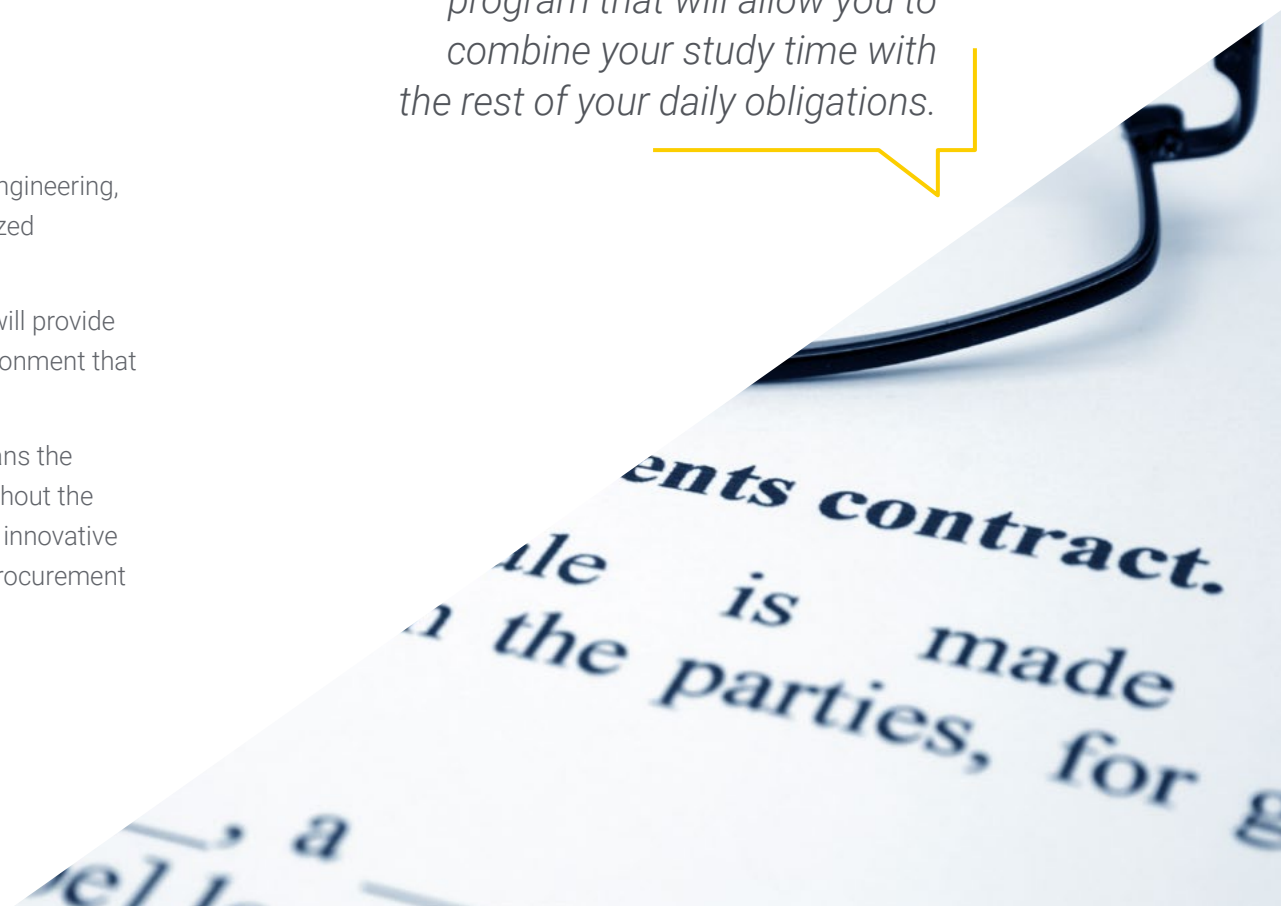
It includes, in its teaching staff, professionals belonging to the field of civil engineering, who bring to this training the experience of their work, in addition to recognized specialists from prestigious reference societies and universities.

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.

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 experts in Procurement and Preliminary Work Phases.

*This training comes with the best didactic material, providing you with a contextual approach that will facilitate your learning.*

*We offer you a 100% online program that will allow you to combine your study time with the rest of your daily obligations.*



# 02 Objectives

The Postgraduate Certificate in Procurement and Preliminary Work Phases is aimed at facilitating the professional's performance so that they can acquire and know the main novelties in this field, which will allow 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

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- ◆ Acquire new knowledge in Civil Engineering and Infrastructures
- ◆ Acquire new skills in terms of new technologies, latest machinery and software, knowledge of next steps and recycling
- ◆ Extrapolate this knowledge to other sectors of the industry, focusing on those fields that require more trained and qualified personnel year after year
- ◆ Processing the data generated in Civil Engineering activities, through the BIM environment, a mandatory reality for the drafting, construction, management and operation of infrastructures

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*Improving your skills in the field of civil engineering will allow you to be more competitive. Continue your training and give your career a boost"*





## Specific Objectives

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- ◆ Analyze the types of contracts existing in the world of Civil Engineering
- ◆ Have knowledge of the solvency analysis of each business
- ◆ Acquire skills for the preparation of technical and economic offers
- ◆ Study the use of the most suitable software for the preparation of bids
- ◆ Study in depth the role of the Contract Manager
- ◆ Prepare the necessary processes for the administrative start-up of a construction site and the latest developments in this regard
- ◆ Know the documents in the field of Health and Safety, environmental measures and waste management necessary for the development of the work
- ◆ Have the necessary knowledge for the correct implementation of auxiliary site installations
- ◆ Know the internationalization of the business in which the student carries out their functions

03

# Course Management

TECH has professionals specialized in each area of knowledge, who pour into our specializations the experience of their work. People of recognized prestige in their area of expertise who have joined forces to offer the best training in the market.





“

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

## Management



### Mr. Uriarte Alonso, Mario

- ♦ Civil Engineer from the University of Cantabria
- ♦ Professional Master's Degree in Oceanographic Engineering
- ♦ 17 years of experience in the field of Construction Management, having worked as a construction manager in projects such as highways, airports, ports, canals, railways and hydroelectric works
- ♦ In the engineering field, he is the CEO of CANDOIS INGENIEROS CONSULTORES SL, a business dedicated to the drafting of projects and construction management



### Mr. Torres Torres, Julián

- ♦ Civil Engineer from the University of Cantabria
- ♦ Professional Master's Degree in Oceanographic Engineering
- ♦ 17 years of experience in the field of Construction Management, having worked as a construction manager in projects such as highways, airports, ports, canals, railways and hydroelectric works
- ♦ In the engineering field, he is the CEO of CANDOIS INGENIEROS CONSULTORES SL, a business dedicated to the drafting of projects and construction management



04

# Structure and Content

The structure of the contents has been designed by the best professionals in the civil engineering sector, with extensive experience and recognized prestige in the profession, and aware of the benefits that the latest educational technology can bring to higher education.







“

*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. Procurement and Preliminary Work Phases

- 1.1. Choice of Type of Contracts to Be Offered and Location of Contracts
  - 1.1.1. Identification of Contracting Objectives
  - 1.1.2. Contracting Platforms
  - 1.1.3. Customer Knowledge and Analysis
  - 1.1.4. Financial Solvency Analysis
  - 1.1.5. Technical Solvency Analysis
  - 1.1.6. Choice of Contracts to Be Offered
- 1.2. Analysis of Required Solvency
  - 1.2.1. Financial Solvency Analysis
  - 1.2.2. Technical Solvency Analysis
  - 1.2.3. Analysis the Need for Joint Venture Partners
  - 1.2.4. UTE Training Negotiation
- 1.3. Preparation of the Financial Offer
  - 1.3.1. Project Budget Breakdown
  - 1.3.2. Request for Quotations for Study
  - 1.3.3. Hypothesis Statement
  - 1.3.4. Closing Economic Offer / Risk
- 1.4. Technical Drafting of Bids
  - 1.4.1. Study Bidding Terms and Conditions and Basic Bidding Project
  - 1.4.2. Technical Report Writing
  - 1.4.3. Drafting of Work Program
  - 1.4.4. SYS and PACMA Documents
  - 1.4.5. Improvement
- 1.5. Contract Analysis (Contract Manager)
  - 1.5.1. Figure of the Contract Manager
  - 1.5.2. Opportunities for the Figure of the Contract Manager
  - 1.5.3. Training of the Contract Manager
- 1.6. Drafting of PSS and Opening of Work Center
  - 1.6.1. PSS Newsroom
  - 1.6.2. PSS Approval and Opening of the Work Center
  - 1.6.3. The Incident Book
- 1.7. Drafting of the PACMA and Waste Management Plan
  - 1.7.1. Analysis of Environmental Documentation of the Project
  - 1.7.2. Analysis of the Environmental Characteristics of the Area of Action
  - 1.7.3. Knowledge of Current Environmental Legislation
  - 1.7.4. Adjustment of the PACMA of the Business to the Project.
  - 1.7.5. Elaboration of the Plan for the Management of SDWRs
- 1.8. Site Installations, Logistics, Site Layout
  - 1.8.1. Needs Analysis for Stockpiling Areas and Facilities
  - 1.8.2. Study of Materials and Facilities Required for the Implementation Area
  - 1.8.3. Implementation.
  - 1.8.4. Topographic Survey of the Site
  - 1.8.5. Drones and Surveying
  - 1.8.6. In-Cabinet Verification of Topographic Data
  - 1.8.7. Signing of the Staking Out Report
- 1.9. Multilateral International Tenders
  - 1.9.1. Multilateral Organizations
  - 1.9.2. Advantages of Multilateral Bidding
  - 1.9.3. Search for Opportunities in the Multilateral Market
  - 1.9.4. Implementation for Multilateral Bidding
    - 1.9.4.1. Countries of Interest
    - 1.9.4.2. Regulatory Framework.
    - 1.9.4.3. Local Partner
    - 1.9.4.4. Technical and Economic Solvency with a View to Internationalization
    - 1.9.4.5. Development of International Contracts
    - 1.9.4.6. Risks of Business Internationalization
- 1.10. Internationalization of the Business
  - 1.10.1. Countries of Interest
  - 1.10.2. Regulatory Framework.
  - 1.10.3. Local Partner
  - 1.10.4. Technical and Economic Solvency with a View to Internationalization
  - 1.10.5. Development of International Contracts
  - 1.10.6. Risks of Business Internationalization



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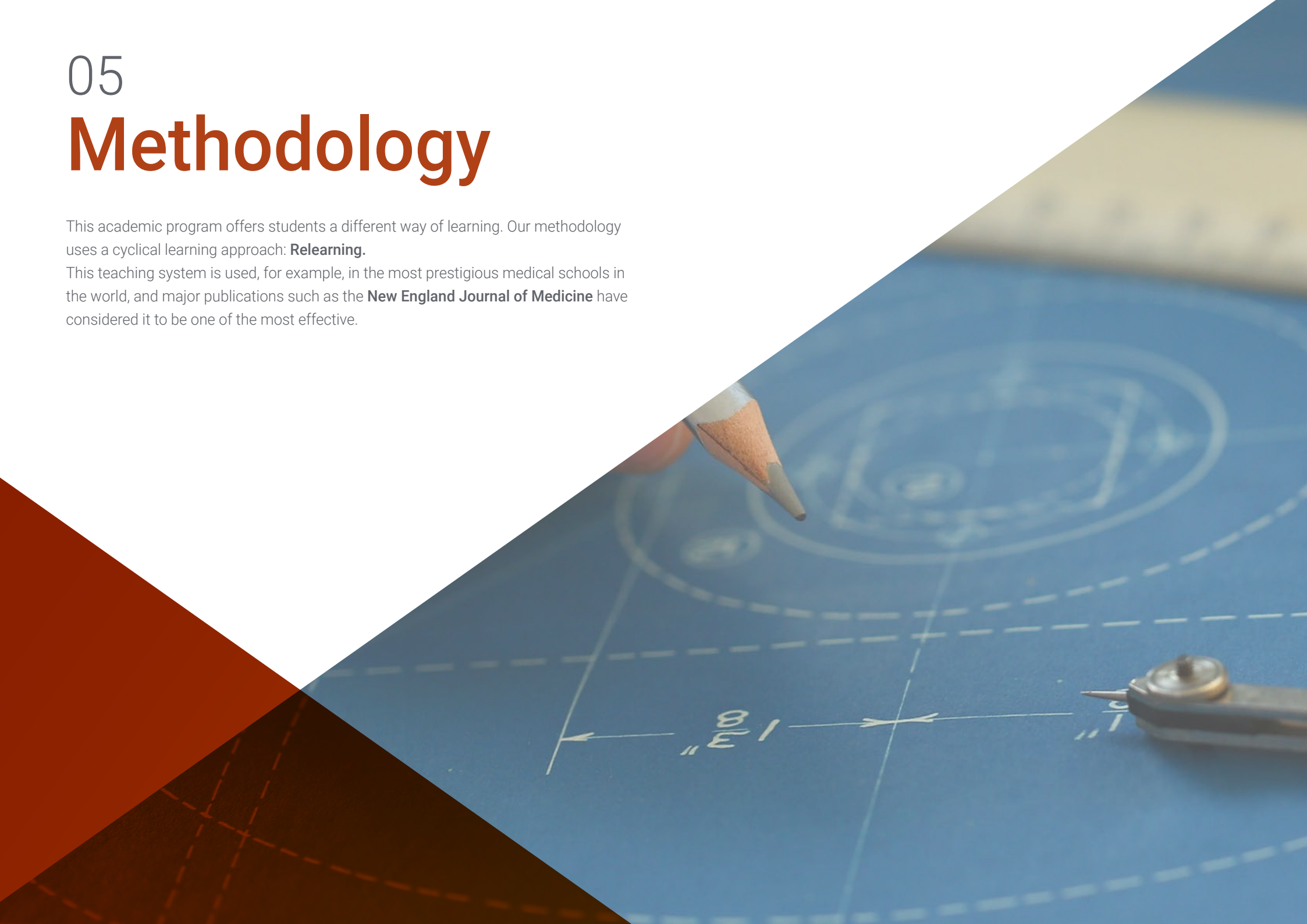
*A comprehensive and multidisciplinary program that will allow you to excel in your career, following the latest advances in the field of Civil Engineering”*

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.





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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.

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*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.*



### 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 student will learn to solve complex situations in real business environments through collaborative activities and real cases.*

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.



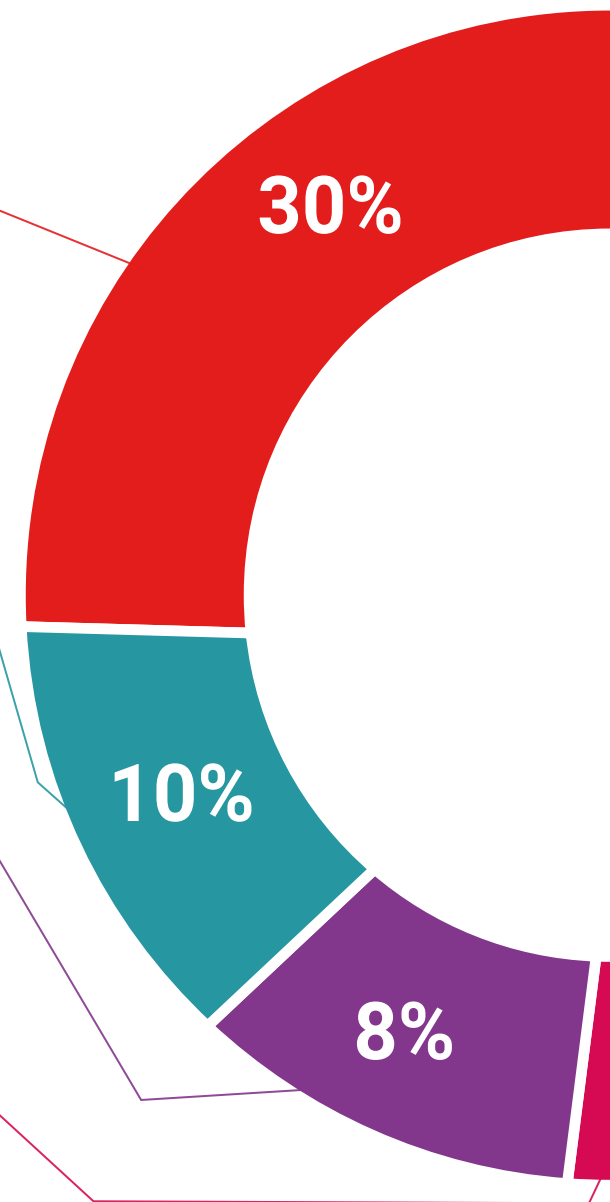
### Practising Skills and Abilities

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 Procurement and Preliminary Work Phases guarantees, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate from TECH Technological University.



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

This **Postgraduate Certificate in Procurement and Preliminary Work Phases** 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 program, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in Procurement and Preliminary Work Phases**

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

**tech** technological  
university

personalized service innovation

knowledge present  
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Work Phases

development lan  
ages

virtual classroom

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