

# Postgraduate Certificate Industrial Organization in Chemical Sector





## Postgraduate Certificate Industrial Organization in Chemical Sector

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

Website: [www.techtute.com/pk/engineering/postgraduate-certificate/industrial-organization-chemical-sector](http://www.techtute.com/pk/engineering/postgraduate-certificate/industrial-organization-chemical-sector)

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# 01

# Introduction

The programming of short, medium, and long-term objectives allows any company to maximize its results. In Chemical Industry, these organizational mechanisms are essential because they also allow for better control of hazardous substances and promote research and continuous innovation in this sector. TECH has integrated the essential knowledge for this professional practice in this educational program. The program addresses all the key aspects of work planning in this corporate area, its specific financial, and human resources management techniques, as well as the ethical conventions and challenges that a manager in this field must face. These contents are taught through a 100% online platform to which graduates will have access during 6 exhaustive weeks of learning.







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*Through this educational itinerary you will approach the most conventional and innovative organizational structures that coexist in the Chemical Industry"*

Supervise the efficiency of operations and lead the management of resources and personnel are some of the management skills most in demand by companies in the Chemical Industry. In an environment where the handling of hazardous substances and innovation are critical, proper organization minimizes risk and maximizes productivity. At the same time, it ensures compliance with the regulations required for its operation. These competencies must be accompanied by strong skills in communicating results, resolving conflicts, and maintaining a collaborative environment among all parties.

Engineers rarely receive training focused on planning strategies as undergraduates and this contrasts with their continuing need to update and keep abreast of the needs of this corporate sector. In response to this situation, TECH offers a very complete 6-week program. During their studies, the students will learn how to develop operational, economic-financial, or marketing syllabuses. The main agreements in the chemical sector and the rules that govern them will also be analyzed.

On the other hand, each participant will have the opportunity to examine the ethical challenges of this industry. In particular, it will delve into environmental challenges, distribution, and use of natural resources, among others. It will also delve into specific theories such as constraints and other organizational mechanisms that facilitate managerial intervention in the processes.

In this educational itinerary TECH implements its disruptive Relearning methodology. In this way, graduates will acquire practical skills in a fast and flexible manner. In addition, the program will have a 100% online mode of study, without hermetic schedules or rigid evaluation systems. For this reason, each participant will be able to choose when and where access the contents, being able to personalize their learning. All of this with the support and guidance of a faculty made up of the best experts.

This **Postgraduate Certificate in Industrial Organization in Chemical Sector** 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 Chemistry 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
- ♦ 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



*You will master the design of strategic syllabuses operations, economic-financial, and marketing plans with this TECH program"*

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*Are you looking for a program where you can improve your knowledge of business organization in the Chemical Industry? This 100% online program is the best option within your reach"*

The program's teaching staff includes professionals from the sector who contribute their work experience to this training 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 throughout the program. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*A university program with exclusive contents to which you will have access during 6 intensive weeks.*

*The Relearning system implemented by TECH guarantees the development of practical skills in a fast, flexible, and efficient way.*



# 02 Objectives

Thanks to this program, TECH students will develop a broad mastery of the latest trends and management tools focused on the Chemical Industry. All program topics have been integrated to train graduates in a theoretical and practical way on efficient work planning, management of human resources, and strategic decision-making in the production sector. In this way, by enrolling in this Postgraduate Certificate, each engineer will master the consideration of corporate social responsibility, the understanding of international conventions, and related ethical issues.





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*You will improve your management skills and will be able to make decisions in line with the reality of the chemical-industrial context”*



### General Objectives

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- ♦ Apply fundamental concepts in the design of chemical products and processes
- ♦ Raise awareness of the importance of sustainability in terms of economy, environment, and society
- ♦ Evaluate the applicability and potential advantages of new technologies
- ♦ Develop a comprehensive view of modern chemical engineering
- ♦ Analyze optimization techniques and simulation of chemical processes
- ♦ Implement simulation techniques to common unit operations in the chemical industry





## Specific Objectives

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- ◆ Explore and analyze the different tools for the development of managerial and entrepreneurial skills
- ◆ Examine the main international agreements of the Chemical Industry
- ◆ Analyze strategies for motivating and training personnel in the Chemical Industry
- ◆ Assess efficient work organization methods
- ◆ Concrete effective teamwork techniques in the Chemical Industry
- ◆ Determine corporate social responsibility in the Chemical Industry
- ◆ Promote entrepreneurship in the chemical sector

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*Over 6 weeks, you will develop a holistic understanding of the latest management and business planning tools”*



03

# Course Management

The faculty members of this Postgraduate Certificate stand out for their practical experience and expertise in industrial organization and process management in the Chemical Sector. These professionals have mastered the regulations, administrative tasks, and tools that facilitate the planning of strategies to achieve greater production performance in the manufacturing and handling of substances. Thanks to these experts, the students will achieve a thorough educational preparation and will face the main challenges of this field, exercising skills such as decision-making based on scientific evidence.





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*A tailor-made integrated faculty for you to acquire specific knowledge and boost your professional practice towards excellence"*

## Management



### Dr. Barroso Martín, Isabel

- ♦ Expert in Inorganic Chemistry, Crystallography and Mineralogy
- ♦ Postdoctoral researcher of the I Own Research and Transfer Plan of the University of Málaga
- ♦ Research Staff at the University of Málaga
- ♦ ORACLE Programmer in CMV Consultants Accenture
- ♦ PhD in Sciences from the University of Málaga
- ♦ Master's Degree in Applied Chemistry - specialization in materials characterization - from the University of Málaga
- ♦ Master's Degree in SE, High School, Vocational Training, and Language Teaching - specializing in Physics and Chemistry University of Malaga

## Professors

### Mr. Barroso Martín, Santiago

- ♦ Legal Advisor in Paralegal at Vicox Legal
- ♦ Legal Content Editor at Engineering and Advanced Integration S.A. / BABEL
- ♦ Administrative Lawyer at the Illustrious College of Lawyers of Málaga
- ♦ Paralegal Advisor at Garcia de la Vega Attorneys
- ♦ Law Degree from the University of Málaga
- ♦ Master's Degree in Corporate Legal Consultancy (MAJE) from the University of Málaga
- ♦ Expert Master's Degree in Labor, Tax and Accounting Consulting by Help T Pyme





# 04

## Structure and Content

This Postgraduate Certificate addresses human resources management, work planning, financial management, corporate social responsibility, and international agreements in the Chemical Industry. At the same time, the syllabus examines the ethical controversies, and environmental challenges faced by personnel responsible for the organization and management of companies in the sector. For this intensive learning, TECH implements a 100% online methodology and an interactive study platform where the best up-to-date contents converge in a more conventional format and through multimedia resources.





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*A program without rigid schedules and continuous evaluations you can customize your study according to your interests and responsibilities"*

## Module 1. Organization and Management of Companies in Chemical Sector

- 1.1. RRHH Management in the Chemical Sector
  - 1.1.1. Human Resources
    - 1.1.1.1. Formation and Motivation of the Human Team in the Chemical Sector
  - 1.1.2. Job Analysis: Group Organization
  - 1.1.3. Payroll and Incentives
- 1.2. Organization of Work in the Chemical Sector
  - 1.2.1. Work Planning: Taylor's Organizational Theory
  - 1.2.2. Personal Recruitment in the Chemical Sector
  - 1.2.3. Organization of the Work Team
  - 1.2.4. Teamwork Techniques
- 1.3. Organization of the Company
  - 1.3.1. Elements in the Organization of the Company
  - 1.3.2. Organizational Structure in the Chemical Industry
  - 1.3.3. Division of Labor
- 1.4. Chemical Production Management and Organization
  - 1.4.1. Strategic Decisions in Chemical Production
  - 1.4.2. Production Planning
  - 1.4.3. Theory of the Limitations
  - 1.4.4. Short-Term Programming
- 1.5. Financial Business Management
  - 1.5.1. Financial Planning
  - 1.5.2. Company Valuation Methods
  - 1.5.3. The Investment: Static and Dynamic Inversion Methods
- 1.6. Development of Manager Skills
  - 1.6.1. Creative Problem Solving
  - 1.6.2. Corporate Conflict Management
  - 1.6.3. Empowerment and Delegation: Pyramidal Structure
  - 1.6.4. Formation of Efficient Teams



- 1.7. Business Plan
  - 1.7.1. Legal-Fiscal Plan
  - 1.7.2. Operational Plan
  - 1.7.3. Marketing Plan
  - 1.7.4. Economic-Financial Plan
- 1.8. Business and Corporate Social Responsibility
  - 1.8.1. Governance in RSE and RSC
  - 1.8.2. Criteria for the Analysis of RSC in the Chemical Industry
  - 1.8.3. RSE and CSR Implications
- 1.9. International Agreements in the Chemical Sector
  - 1.9.1. Rotterdam Convention on the Export and Import of Hazardous Chemicals
  - 1.9.2. Chemical Weapons Convention
  - 1.9.3. Stockholm Convention on Persistent Organic Pollutants
  - 1.9.4. Strategic International Chemicals Management Agreement
- 1.10. Ethical Controversies in the Chemical Industry
  - 1.10.1. Environmental Challenges
  - 1.10.2. Distribution and Use of Natural Resources
  - 1.10.3. Implications of Negative Ethics



*This is your opportunity to achieve leadership and management skills for the development of the Chemical Industry. Enroll now!"*



# 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.*



*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.



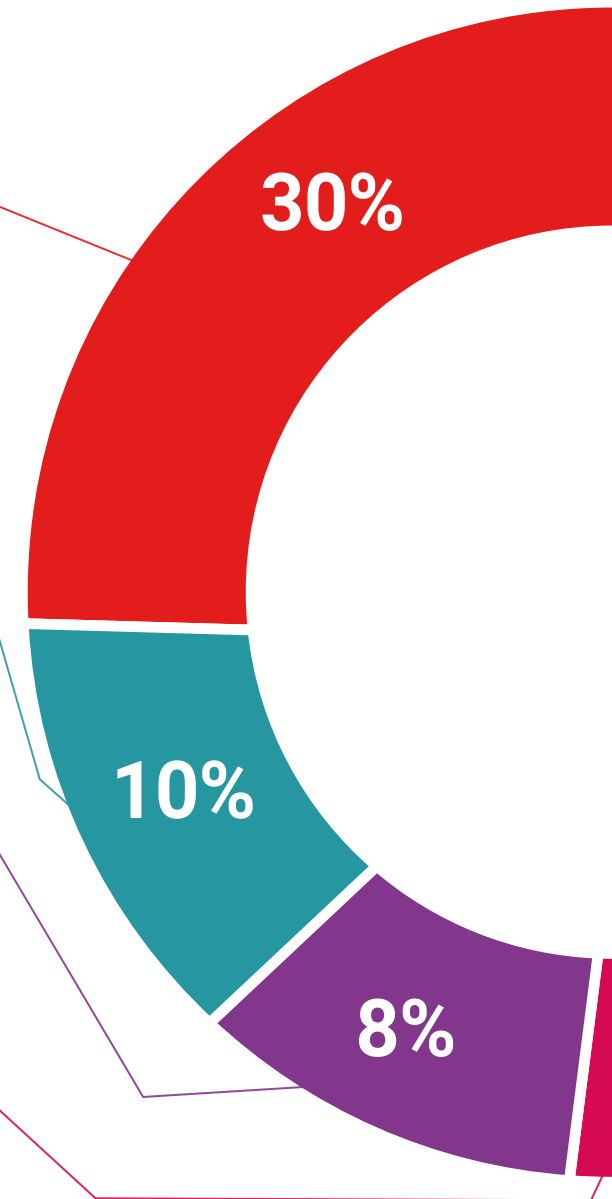
#### Practising Skills and Abilities

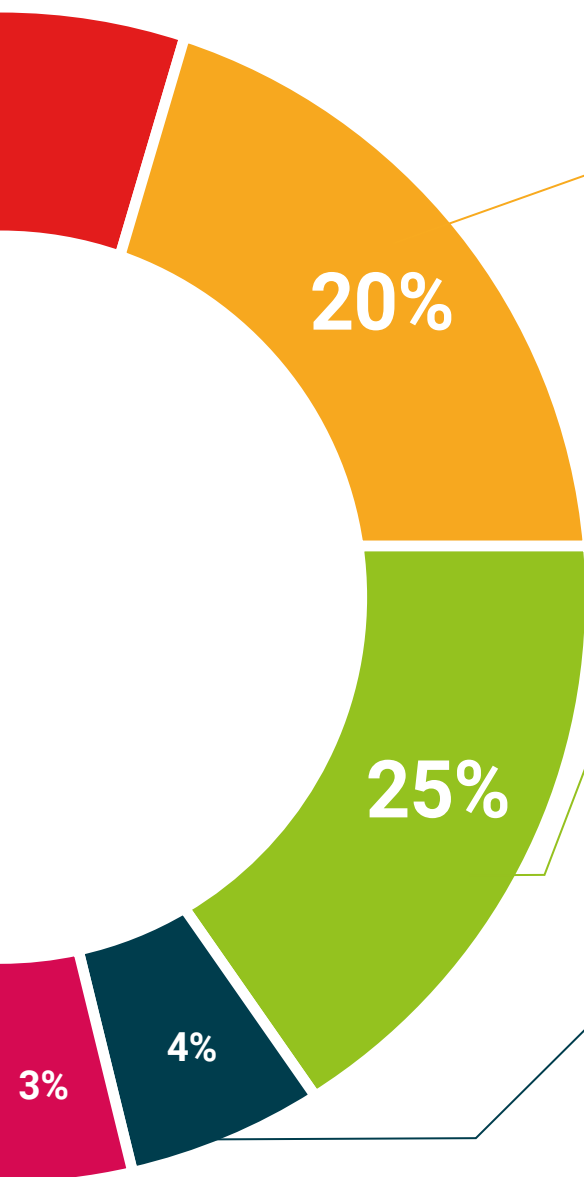
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



#### 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 Industrial Organization in Chemical Sector 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 Industrial Organization in Chemical Sector** 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 Industrial Organization in Chemical Sector**

Official N° of Hours: **150 h.**





## Postgraduate Certificate

Industrial Organization  
in Chemical Sector

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

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