

# Postgraduate Certificate Quality Management and Ongoing Improvement in Industrial Contexts





## Postgraduate Certificate Quality Management and Ongoing Improvement in Industrial Contexts

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/engineering/postgraduate-certificate/quality-management-ongoing-improvement-industry](http://www.techtute.com/us/engineering/postgraduate-certificate/quality-management-ongoing-improvement-industry)

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01

# Introduction

In current society, consumers demand high-quality products. Therefore, it is important that companies not only compete on price, but also on this aspect. However, for this to be possible, it is important that all departments in the industry pursue the same quality objective, so this criterion must be managed in a global manner, taking into account the entire process and not just the final product control. For those who wish to improve their training in Quality Management and Ongoing Improvement in Industrial Contexts, TECH Global University has designed this program, which has the most relevant information on this field, prepared by a teaching team with extensive experience in the sector.



Management

# ISO 9001

Customer

“

*Achieve the highest levels of quality in production is essential to place your company among the best in the market”*

Quality Management has become a necessary and indispensable requirement in order to compete and survive. And, in the current context, quality cannot only be the responsibility of its own Fields, it is necessary to promote its importance so that each part of the company works to offer the Improvement possible level of quality to its customers. For this reason, it is important to develop a quality culture throughout the company.

This Postgraduate Certificate delves into the key issues of Quality Management in Industries, addressing key aspects that need to be developed (techniques and tools, quality systems, quality audits, certification process and maintenance of certification, business excellence, etc.). Undoubtedly, a complete and program that will be fundamental to improve the skill set engineers in this field.

The content of this program combines theoretical aspects and an eminently practical approach that provides engineers with a deep understanding of the reality of Digital companies. In this way, this Postgraduate Certificate will provide the professional with the capacity and tools necessary to efficiently manage all aspects related to industrial management in order to be able to compete adequately both in the present and in a future full of challenges, opportunities and changes. Consequently, this totally online program will bring a renewal of knowledge to engineering professionals, which will place them at the forefront of the latest developments in each of the areas of knowledge.

This **Postgraduate Certificate in Quality Management and Ongoing Improvement in Industrial Contexts** 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 Industrial Management
- 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 the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies in Industrial Management
- 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



*Continue your studies with this  
TECH Global University program  
and become a specialist in quality  
management in the industry”*

“

*This program includes lots of case studies that will be very useful for a better understanding”*

Its teaching staff includes professionals from the field of engineering, who contribute their work experience to this program, as well as renowned specialists from leading companies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will allow professionals to learn in a contextual and situated learning environment, i.e., a simulated environment that will provide immersive specialization for real situations.

This program is designed around Problem-Based Learning, whereby the engineer must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

*The online format of this program will be fundamental for you to be able to combine it with the rest of your daily obligations.*

*Become a specialist in quality management and bring all your knowledge to your company.*



# 02

# Objectives

TECH Global University is focused on higher expertise as a basic method for engineering professionals to be qualified to work in different areas of the industry. In this way, through this Postgraduate Diploma, we intend to meet their training demands and needs, providing them with the latest information on quality management and continuous improvement in the industry, which are fundamental aspects to lead a business towards success.







“

*TECH provides you with all of its academic resources at the so that you can specialize in this field"*



## General Objectives

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- Apply the main strategic keys to better compete in current and future times
- Master the tools to achieve excellence in the sector
- Define business strategies and deployment in an organization, process management, and structural typology to better adapt to changes
- Manage the projects presented with both conventional and agile methodologies.
- Better manage all the necessary steps and phases in the design and development of new products
- Perform production planning and control with the objective of optimizing resources and adapting to demand as well as possible
- Manage quality throughout the organization and apply the most important tools for continuous improvement of products and processes



*Control the quality of all processes in the industry will allow us to offer customers unparalleled products”*





## Specific Objectives

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- Establish the importance of quality management throughout all areas of the company
- Identify the quality costs associated with quality management and implement a system to monitor and improve them
- Gain detailed knowledge of the ISO 9001 quality management standard and how to implement it in a company
- Analyze the ISO 14000 environmental and ISO 450001 occupational hazard standards , and their integration within a quality system to avoid duplication ] of documentation
- Delve into the new edition of the EFQM model to develop it in a company for future success
- Apply the main quality tools that can be used in the management and improvement of product and process quality
- Establish the importance of continuous improvement and the use of the two main methodologies: the PDCA cycle to apply the implementation of Lean Manufacturing and Six Sigma
- Gain in-depth knowledge of supplier quality and how to manage it, different types of audits and how to conduct them, as well as testing and laboratory aspects
- Delve into important organizational aspects in quality management in industrial environments

03

# Course Management

The faculty of this TECH program is made up of professionals with extensive experience in the sector, who understand the importance of higher education to improve the qualification of engineers. In such a way that they become more effective in their daily practice as well. In order to do so, they use the most innovative teaching methodologies on the market and rely on new technologies to improve student learning.





“

*Faculty members of this Postgraduate Certificate have selected the best information on the subject so that you can become an expert in quality management"*

## Management



### Dr. Asensi, Francisco Andrés

- Business consultant and specialist in Industrial Management and Digital Transformation
- Production and Logistics Coordinator at IDAI NATURE
- Coach in Strategic Coaching
- Organization Manager for Talleres Lemar
- Organization and Management for Lab Radio SA
- PhD in Industrial Engineering in Business Organization from the University of Castilla la Mancha.
- Degree Industrial in Industrial Organization Engineer from the University Polytechnic of Valencia




# 04

# Structure and Content

This syllabus will be essential to improve the qualification of engineering professionals in the field of Quality Management in Industry. Specifically, it is a program that has relevant information about this field, and has been structured in such a way that the student can effectively self-guide his or her own academic journey. Undoubtedly, a first-class program for professionals seeking excellence.



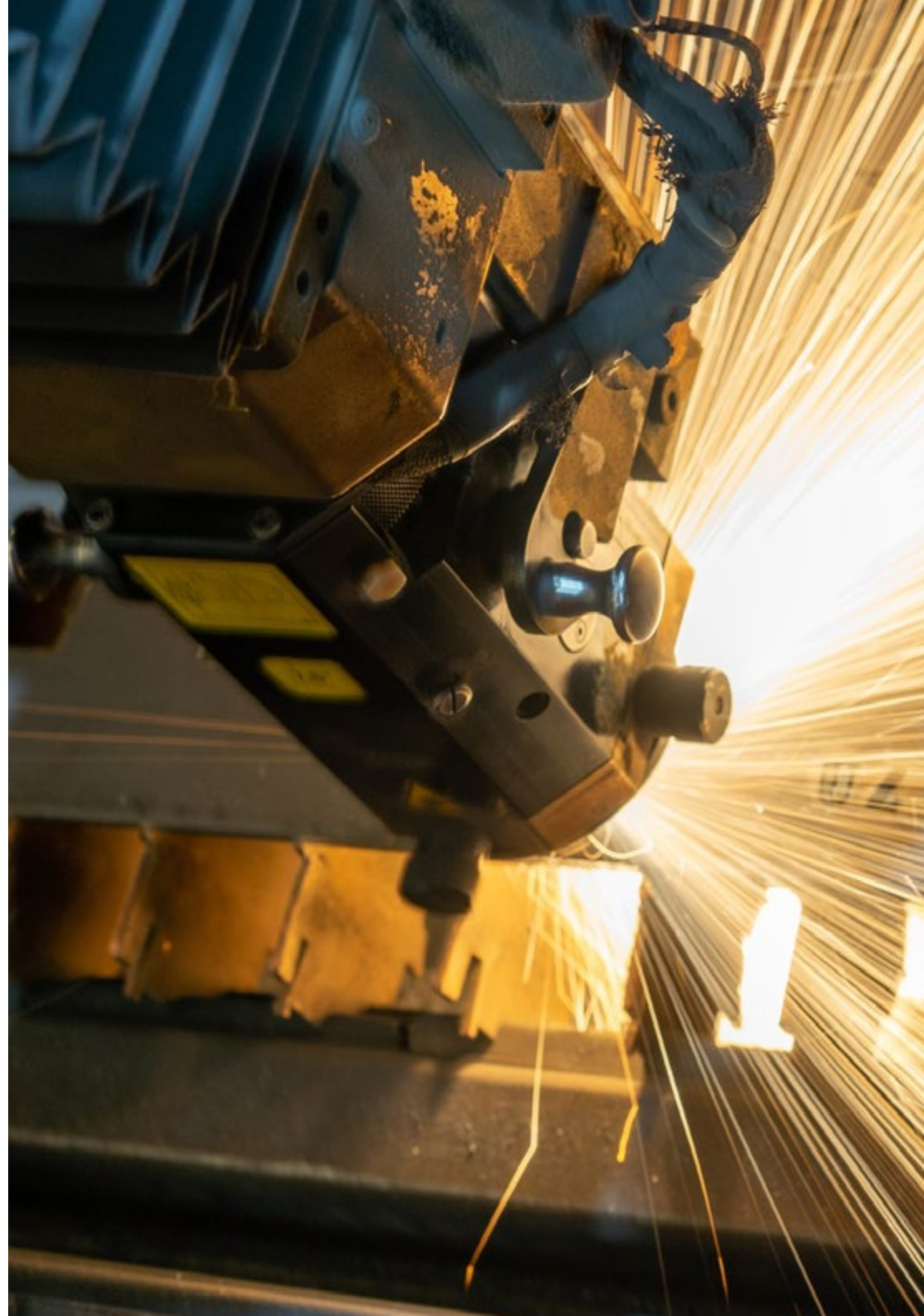




“A complete syllabus designed to improve your training in a short period of time”

## Module 1. Quality Management

- 1.1. Total Quality
  - 1.1.1. Total Quality Management
  - 1.1.2. External and Internal Customers
  - 1.1.3. Quality Costs
  - 1.1.4. Ongoing Improvement and the Deming Philosophy
- 1.2. ISO 9001:15 Quality Management System
  - 1.2.1. The 7 Principle of ISO 9001:15 Quality Management
  - 1.2.2. Process Approach
  - 1.2.3. ISO 9001: 9001 Requirements
  - 1.2.4. Implementation Stages and Recommendations
  - 1.2.5. Deployment of Targets in a Hoshin-Kanri Type Model
  - 1.2.6. Audit Certification
- 1.3. Integrated Management System
  - 1.3.1. Environmental Management Systems: ISO 14000
  - 1.3.2. Occupational Risk Management System: ISO 45001
  - 1.3.3. Integrating Management Systems
- 1.4. Excellence in Management: EFQM Model
  - 1.4.1. EFQM Model: Principles and Fundamentals
  - 1.4.2. New EFQM Model Criteria
  - 1.4.3. EFQM Diagnostic Tool: REDER Matrices
- 1.5. Quality Tools
  - 1.5.1. Basic Tools
  - 1.5.2. Statistical Process Control (SPC)
  - 1.5.3. Control Plan and Guidelines for Product Quality Management
- 1.6. Advanced Tools and Troubleshooting Tools
  - 1.6.1. FMEA
  - 1.6.2. 8D Report
  - 1.6.3. The 5 Why's
  - 1.6.4. 5W + 2H
  - 1.6.5. Benchmarking



- 1.7. Continuous Improvement Methodology I: PDCA
  - 1.7.1. PDCA Cycle and Stages
  - 1.7.2. Applying PDCA Cycle to Lean Manufacturing Development
  - 1.7.3. Keys to Success in PDCA Projects
- 1.8. Continuous Improvement Methodology II: Six Sigma
  - 1.8.1. Six Sigma Description
  - 1.8.2. Six Sigma Principles
  - 1.8.3. Six Sigma Project Selection
  - 1.8.4. Six Sigma Project Stages: DMAIC Methodology
  - 1.8.5. Six Sigma Roles
  - 1.8.6. Six-Sigma and Lean Manufacturing
- 1.9. Quality Suppliers: Audits Tests and Laboratory
  - 1.9.1. Reception Quality
  - 1.9.2. Internal Audits of the Management System
  - 1.9.3. Product and Process Audits
  - 1.9.4. Phases for Performing Audits
  - 1.9.5. Auditor Profile
  - 1.9.6. Tests, Laboratory and Metrology
- 1.10. Organization Aspects in Quality Management
  - 1.10.1. The Role of Administration in Quality Management
  - 1.10.2. Quality Area Organization and the Relationship with Other Areas
  - 1.10.3. Quality Circles



*A high-quality academic program that will allow you to improve the competitiveness of your resume”*

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.





“

*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.

“

*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 Quality Management and Ongoing Improvement in Industrial Contexts guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”*

This program will allow you to obtain your **Postgraduate Certificate in Quality Management and Ongoing Improvement in Industrial Contexts** 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 Quality Management and Ongoing Improvement in Industrial Contexts**

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.

future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitn  
personalized service innovation  
knowledge present  
development lang  
virtual classroom



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