

# Postgraduate Certificate Quality Management in Lean Manufacturing



## Postgraduate Certificate Quality Management in Lean Manufacturing

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online
- » Target Group: University Graduates who have previously completed any of the degrees in the fields of Social and Legal Sciences, Administrative and Business Sciences

Website: [www.techtitute.com/us/school-of-business/postgraduate-certificate/quality-management-lean-manufacturing](http://www.techtitute.com/us/school-of-business/postgraduate-certificate/quality-management-lean-manufacturing)

# Index

01

Welcome

---

*p. 4*

02

Why Study at TECH?

---

*p. 6*

03

Why Our Program?

---

*p. 10*

04

Objectives

---

*p. 14*

05

Structure and Content

---

*p. 18*

06

Methodology

---

*p. 24*

07

Our Students' Profiles

---

*p. 32*

08

Course Management

---

*p. 36*

09

Impact on Your Career

---

*p. 40*

10

Benefits for Your Company

---

*p. 44*

11

Certificate

---

*p. 48*

# 01 Welcome

Quality Management in Lean Manufacturing is of vital importance to ensure excellence in processes and products. It focuses on waste elimination, cost reduction and continuous improvement, with the objective of satisfying customer needs and maximizing operational efficiency. Quality is achieved through process standardization, personnel training and the implementation of tools such as statistical process control and the PDCA cycle. In a constantly evolving business environment, it is crucial to stay current on new quality management techniques and approaches to ensure long-term competitiveness and success. For this reason, TECH has created this program to provide students with the most recent knowledge that the business sector has incorporated into its different processes.



Postgraduate Certificate in Quality Management in Lean Manufacturing.  
TECH Global University



“

*You will achieve your goals thanks to the academic tools TECH has for you"*

02

# Why Study at TECH?

TECH is the world's largest 100% online business school. It is an elite business school, with a model based on the highest academic standards. A world-class center for intensive managerial skills education.



“

*TECH is a university at the forefront of technology, and puts all its resources at the student's disposal to help them achieve entrepreneurial success"*

## At TECH Global University



### Innovation

The university offers an online learning model that balances the latest educational technology with the most rigorous teaching methods. A unique method with the highest international recognition that will provide students with the keys to develop in a rapidly-evolving world, where innovation must be every entrepreneur's focus.

"*Microsoft Europe Success Story*", for integrating the innovative, interactive multi-video system.



### The Highest Standards

Admissions criteria at TECH are not economic. Students don't need to make a large investment to study at this university. However, in order to obtain a qualification from TECH, the student's intelligence and ability will be tested to their limits. The institution's academic standards are exceptionally high...

**95%** | of TECH students successfully complete their studies



### Networking

Professionals from countries all over the world attend TECH, allowing students to establish a large network of contacts that may prove useful to them in the future.

**+100000**

executives prepared each year

**+200**

different nationalities



### Empowerment

Students will grow hand in hand with the best companies and highly regarded and influential professionals. TECH has developed strategic partnerships and a valuable network of contacts with major economic players in 7 continents.

**+500**

collaborative agreements with leading companies



### Talent

This program is a unique initiative to allow students to showcase their talent in the business world. An opportunity that will allow them to voice their concerns and share their business vision.

After completing this program, TECH helps students show the world their talent.



### Multicultural Context

While studying at TECH, students will enjoy a unique experience. Study in a multicultural context. In a program with a global vision, through which students can learn about the operating methods in different parts of the world, and gather the latest information that best adapts to their business idea.

TECH students represent more than 200 different nationalities.



TECH strives for excellence and, to this end, boasts a series of characteristics that make this university unique:



### Analysis

---

TECH explores the student's critical side, their ability to question things, their problem-solving skills, as well as their interpersonal skills.



### Academic Excellence

---

TECH offers students the best online learning methodology. The university combines the *Relearning* methodology (the most internationally recognized postgraduate learning methodology) with Harvard Business School case studies. A complex balance of traditional and state-of-the-art methods, within the most demanding academic framework.



### Economy of Scale

---

TECH is the world's largest online university. It currently boasts a portfolio of more than 10,000 university postgraduate programs. And in today's new economy, **volume + technology = a groundbreaking price**. This way, TECH ensures that studying is not as expensive for students as it would be at another university.



### Learn with the best

---

In the classroom, TECH's teaching staff discuss how they have achieved success in their companies, working in a real, lively, and dynamic context. Teachers who are fully committed to offering a quality specialization that will allow students to advance in their career and stand out in the business world.

Teachers representing 20 different nationalities.



*At TECH, you will have access to the most rigorous and up-to-date case analyses in academia"*

03

# Why Our Program?

Studying this TECH program means increasing the chances of achieving professional success in senior business management.

It is a challenge that demands effort and dedication, but it opens the door to a promising future. Students will learn from the best teaching staff and with the most flexible and innovative educational methodology.



“

*We have highly qualified teachers and the most complete syllabus on the market, which allows us to offer you education of the highest academic level"*

This program will provide you with a multitude of professional and personal advantages, among which we highlight the following:

**01**

### A Strong Boost to Your Career

---

By studying at TECH, students will be able to take control of their future and develop their full potential. By completing this program, students will acquire the skills required to make a positive change in their career in a short period of time.

*70% of students achieve positive career development in less than 2 years.*

**02**

### Develop a strategic and global vision of the company

---

TECH offers an in-depth overview of general management to understand how each decision affects each of the company's different functional fields.

*Our global vision of companies will improve your strategic vision.*

**03**

### Consolidate the student's senior management skills

---

Studying at TECH means opening the doors to a wide range of professional opportunities for students to position themselves as senior executives, with a broad vision of the international environment.

*You will work on more than 100 real senior management cases.*

**04**

### You will take on new responsibilities

---

The program will cover the latest trends, advances and strategies, so that students can carry out their professional work in a changing environment.

*45% of graduates are promoted internally.*

05

### Access to a powerful network of contacts

TECH connects its students to maximize opportunities. Students with the same concerns and desire to grow. Therefore, partnerships, customers or suppliers can be shared.

*You will find a network of contacts that will be instrumental for professional development.*

06

### Thoroughly develop business projects

Students will acquire a deep strategic vision that will help them develop their own project, taking into account the different fields in companies.

*20% of our students develop their own business idea.*

07

### Improve *soft skills* and management skills

TECH helps students apply and develop the knowledge they have acquired, while improving their interpersonal skills in order to become leaders who make a difference.

*Improve your communication and leadership skills and enhance your career.*

08

### You will be part of an exclusive community

Students will be part of a community of elite executives, large companies, renowned institutions, and qualified teachers from the most prestigious universities in the world: the TECH Global University community.

*We give you the opportunity to study with a team of world-renowned teachers.*

# 04 Objectives

Aiming to train the student in the right way, TECH develops in this program the most rigorous academic contents, presented through audiovisual resources, complementary readings and practical exercises developed with the Relearning methodology. In this way, you will be confronted with real and simulated cases that will lead you to have a direct approach to the demands and needs of the current field.





“

*You will be trained in the right way  
in a field with great future projection”*

TECH makes the goals of their students their own goals too.  
Working together to achieve them.

The Postgraduate Certificate in Quality Management in Lean Manufacturing will train the student to:

01

Identify any waste in the company's processes

02

Distinguish the different types of industrial processes in which it is possible to act

03

Identify the types of demand that our industry must satisfy





04

Analyze statistical methods of process control and root cause analysis

05

Evaluate organizational, operational and management systems, based on Operational Excellence and High Performance dynamics: LEAN

06

Identify production equipment efficiency problems

# 05

# Structure and Content

The syllabus of this program has been designed following the guidelines required by the business sector. Inside, the student will find up-to-date and rigorous information on Quality Management in Lean Manufacturing. This content will be available on the Online Campus, which can be accessed from any device with an Internet connection and will be available 24 hours a day. In this way, the professional will be trained to become a specialized professional in the area.



“

*In addition to its extensive information content, it offers the most innovative technological tools in the sector"*

## Syllabus

The Postgraduate Certificate in Quality Management in Lean Manufacturing of TECH Global University is an intensive program that provides knowledge and skills to those who wish to take it. Its academic content, together with its Relearning methodology, provides evidence of the most recent advances and develops them through practical exercises and simulations.

In this way, the student has a direct approach to the demands of the current field, training in the best possible way. In addition to this, the program has a 100% online format, easily accessible from any device with an Internet connection and can be developed at the time of each person's preference.

It is also equipped with high-tech tools, making the academic experience more immersive and with a better use. Because of this, in only 6 weeks, students will update their knowledge in a sector of great future projection, in a program adapted to their needs, schedules and demands.

This Postgraduate Certificate in Quality Management in Lean Manufacturing takes place over 6 weeks and is divided into 1 module:

### Module 1

### Lean Quality Management



### Where, When and How is it Taught?

TECH offers the possibility of developing this Postgraduate Diploma in Quality Management in Lean Manufacturing completely online. During the 6 weeks of the specialization, the student will be able to access all the contents of this program at any time, which will allow the students to self-manage their study time.

*A unique, key, and decisive educational experience to boost your professional development and make the definitive leap.*

**Module 1. Lean Quality Management**

**1.1. Quality Management in Lean Manufacturing**

- 1.1.1. Quality defined as customer satisfaction
- 1.1.2. Production quality: consistency and conformity
- 1.1.3. Specifications and quality costs

**1.2. Quality measurement: quality indicators**

- 1.2.1. Definition of indicators
- 1.2.2. Construction of indicators
- 1.2.3. Examples of a quality scorecard

**1.3. Quality systems and lean quality vision**

- 1.3.1. Quality systems and regulations
- 1.3.2. Compatibility of ISO - TS with Lean Manufacturing
- 1.3.3. Compatibility of EFQM and Lean Manufacturing

**1.4. Concept of "Genchi Genbutsu" (Gemba) and Quality Management. Relevance**

- 1.4.1. Concept of "Genchi Genbutsu" (Gemba)
- 1.4.2. Application of the concept in practice. Example in the automotive sector
- 1.4.3. Application of the concept in practice. Example from the capital goods sector

**1.5. Standardization and Simplification in quality management using "Standard Work"**

- 1.5.1. Standard Work. Concept and benefits
- 1.5.2. Application of Standard Work in industry
- 1.5.3. Example of the application of Standard Work in a process

**1.6. The Jidoka philosophy for early detection of quality problems**

- 1.6.1. Detection of quality problems at source
- 1.6.2. Production line stoppage
- 1.6.3. Examples of the application of the Jidoka philosophy in industry

**1.7. Andon as a tool for Quality Management**

- 1.7.1. Definition, origin and benefits of Andon
- 1.7.2. Andon types and examples
- 1.7.3. Implementation of the Andon system

**1.8. "Poka-Yoke." Quality Technology**

- 1.8.1. PokaYoke. Types and causes of errors that prevent
- 1.8.2. Poka-yoke design process
- 1.8.3. Examples of Poka- Yoke

**1.9. Visual Management**

- 1.9.1. Process visualization
- 1.9.2. Visual signage
- 1.9.3. Visual records

**1.10. Lean and IOT quality management and Blockchain**

- 1.10.1. Benefits of combining IoT and lean quality management
  - 1.10.1.1. Sensorization for process monitoring
  - 1.10.1.2. Real-time traceability systems and data analytics for quality management

**1.10.2. Benefits of combining Lean and Blockchain in quality management**

- 1.10.2.1. Application of smart contracts for quality assurance and regulatory compliance
- 1.10.2.2. Design and implementation of a secure and scalable Blockchain infrastructure for quality management



“

*You will learn the quality processes of Lean Manufacturing to evaluate the most important products of your company”*

# 06

# 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"*

## TECH Business School uses the 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”*



*This program prepares you to face business challenges in uncertain environments and achieve business success.*



*Our program prepares you to face new challenges in uncertain environments and achieve success in your career.*

### A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch to present executives with challenges and business decisions at the highest level, whether at the national or international level. 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 business reality is taken into account.

“

*You will learn, through collaborative activities and real cases, how to solve complex situations in real business environments”*

The case method has been the most widely used learning system among the world's leading business schools for as long as they have existed. 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 we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They must integrate all their knowledge, research, 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 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

*Our online system will allow you to organize your time and learning pace, adapting it to your schedule. You will be able to access the contents from any device with an internet connection.*

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 online business school is the only one in the world licensed to incorporate 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.

With this methodology we have 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, markets, and financial 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to 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.



### Management Skills Exercises

They will carry out activities to develop specific executive competencies in each thematic area. Practices and dynamics to acquire and develop the skills and abilities that a high-level manager needs to develop in the context of the globalization we live in.



### 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 senior management 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.



07

# Our Students' Profiles

The Postgraduate Certificate is aimed at Graduates, Diploma Holders and University Graduates who have previously completed any of the following programs in the fields of Social and Legal Sciences, Administration and Economics.

This program uses a multidisciplinary approach as the students have a diverse set of academic profiles and represent multiple nationalities.

Professionals who, being university graduates in any area, have two years of work experience in the field of Lean Manufacturing can also take the program.





“

*The knowledge developed here is quickly applicable to today's work environment. Don't wait any longer and enroll now"*

### Average Age

---

Between **35** and **45** years old

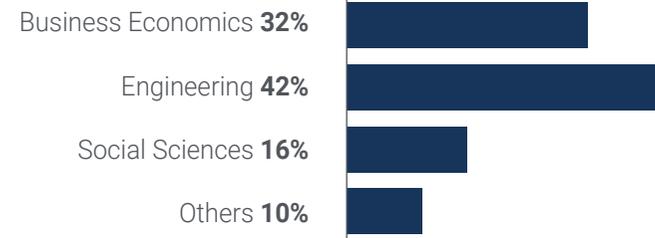
### Years of Experience

---



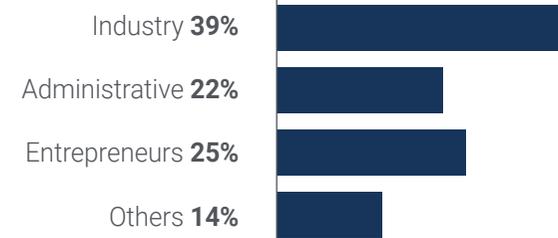
### Training

---



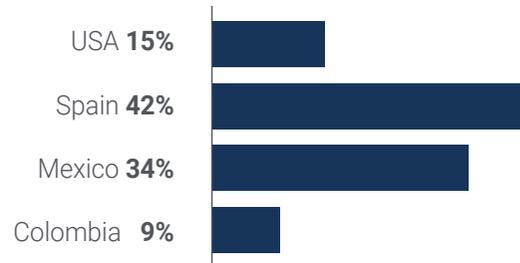
### Educational Profile

---



## Geographical Distribution

---



## Rodrigo Muñoz Sánchez

Lean Manufacturing Manager

*"After pursuing this program, my career took a transformational turn. I now have the skills to identify and eliminate waste, optimize processes and lead teams. Implementing Lean in my company has improved quality, reduced costs and increased customer satisfaction"*

08

# Course Management

To take over the direction of this program, TECH has selected a highly experienced and active faculty. They are experts and specialists in Lean Manufacturing Quality Management, who stand out due to their extensive knowledge and experience within renowned companies. In addition to this, these outstanding professionals are committed to the new generations, which is why they serve as professors in several programs in their specialty.



“

*The academic material for this program has been designed by experts, so you will have access to exclusive, high-impact content"*

## Management



### Mr. Jover Miravittles, Luis

- ♦ President and Founding Partner Grupo Quarck, S.L. Founding Partner
- ♦ Senior Partner in LOGIXS
- ♦ Vice President of €-Corp. S.L
- ♦ IQS Executive Education Director
- ♦ Associate Professor at IE Business School
- ♦ Coordinator of the Master's Degree in Integral Business Management at the Universidad Iberoamericana in Mexico City
- ♦ Advisor to the employers' association Cecot
- ♦ Chemical Engineer at the Chemical Institute of Sarria (IQS)
- ♦ Master in Business Administration MBA IESE
- ♦ Member of the Hispack organizing committee

## Professors

### Mr. Rubén Gambarte Montiel

- ♦ Industrial Consultant
- ♦ Industrial Digital Transformation Consultant and Advisor at Bestplant
- ♦ Associate Consultant in Lean Management and Lean Six Sigma at BPR goup SRL, Actio Global, AYO Consulting
- ♦ Quality Assurance Manager
- ♦ Operations Manager y Lean Manager en Solfer Componenti SRL
- ♦ Graduate in Chemical Engineering from the University of Cantabria
- ♦ Master's Degree: Executive Lean Supply Chain Management. Operations management by the Polytechnic University of Catalonia Foundation
- ♦ Master's Degree in Lean Six Sigma in Green Belt & Black Belt by Festo Academy gustavo



09

# Impact on Your Career

Taking the Postgraduate Certificate in Lean Manufacturing Quality Management has a significant impact on a professional career. It provides the necessary skills and knowledge to implement efficient practices and improve industrial processes.



“

*Once you have completed this program  
it will be easier for you to access better  
jobs in the business sector”*

*Among the most significant features of the TECH programs is the possibility of networking with colleagues from all over the world with your same professional interests.*

Are you ready to take the leap?  
Excellent professional development awaits you.

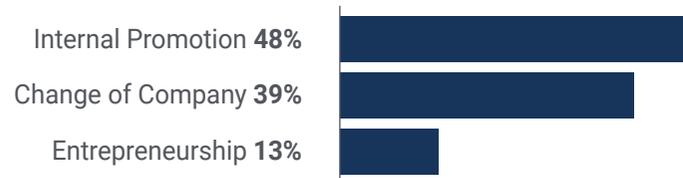
TECH's Postgraduate Certificate in Lean Manufacturing Quality Management is an intensive program that prepares you to face challenges and business decisions in the field of Lean Manufacturing Quality Management. The main objective is to promote your personal and professional growth. Helping you achieve success. If you want to improve yourself, make a positive change at a professional level, and network with the best, then this is the place for you.

*A program with which you will be able to opt for a significant job promotion that will place you in a prestigious position, in accordance with your professional quality.*

### Time of Change



### Type of change



## Salary increase

---

This program represents a salary increase of more than **27%** for our students



10

# Benefits for Your Company

This program contributes to elevating the organization's talent to its maximum potential through the instruction of high-level leaders. In addition, participating in this university option is a unique opportunity to access a powerful network of contacts in which to find future professional partners, customers or suppliers.



“

*In the digital era, managers must integrate new processes and strategies that bring about significant changes and organizational development. This is only possible through university training and updating"*

Developing and retaining talent in companies is the best long-term investment.

01

### **Growth of talent and intellectual capital**

The professional will introduce the company to new concepts, strategies, and perspectives that can bring about significant changes in the organization.

---

02

### **Retaining high-potential executives to avoid talent drain**

This program strengthens the link between the company and the professional and opens new avenues for professional growth within the company.

03

### **Building agents of change**

You will be able to make decisions in times of uncertainty and crisis, helping the organization overcome obstacles.

---

04

### **Increased international expansion possibilities**

Thanks to this program, the company will come into contact with the main markets in the world economy.



05

### **Project Development**

The manager can work on a current project or develop new projects in the field of R&D or Business Development within their company.

---

06

### **Increased competitiveness**

This Postgraduate Certificate will equip your professionals with the skills to take on new challenges and therefore drive the organization forward.

11

# Certificate

Postgraduate Certificate in Quality Management in Lean Manufacturing guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University .



“

*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 in Lean Manufacturing** 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 in Lean Manufacturing**

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.



## Postgraduate Certificate Quality Management in Lean Manufacturing

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

# Postgraduate Certificate Quality Management in Lean Manufacturing