

# Postgraduate Certificate

## Value and Waste in Lean Manufacturing





## Postgraduate Certificate Value and Waste 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, diploma and degree holders who have previously completed any of the degrees in the field of Social and Legal Sciences, Administration and Business Administration

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

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# 01 Welcome

Value and waste are two fundamental concepts in the Lean Manufacturing approach. The former refers to any activity or process that adds value to the product or service from the customer's perspective, while the latter is summarized as any activity or process that does not add value and should therefore be eliminated. This has an impact on cost reduction, quality improvement and increased efficiency in business processes. To carry out these procedures, it is necessary to have trained professionals with extensive knowledge in this field, which has prompted TECH to create the following program with the aim of training students in this sector with great professional opportunities.



Postgraduate Certificate in Value and Waste in Lean Manufacturing  
TECH Global University



“

*Once you have completed this program, you will be qualified to work in large industrial companies”*

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

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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

This program has been designed to bring together the most up-to-date academic content in the industry with a high-impact methodology that enables the acquisition of new knowledge and skills. For this reason, TECH guarantees that, after completing this Postgraduate Certificate, the professional will have been trained in a sector with a great future projection and with a wide labor demand.



“

*You will face real and simulation cases, having to perform product evaluations to identify their usefulness and acceptance in the market”*

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

The **Postgraduate Certificate in Value and Waste in Lean Manufacturing** will enable the student to:

01

Analyze and be able to distinguish the lean philosophy from other approaches to operations improvement

02

Identify any waste in the company's processes

03

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

04

Identify the types of demand that our industry must satisfy





05

Develop the tools and techniques used in Lean Manufacturing quality management

06

Analyze statistical methods of process control and root cause analysis

07

Analyze the keys to implement the Lean Manufacturing philosophy in a company

08

Delve into the best practices for the successful implementation of Lean Manufacturing in an organization

# 05

# Structure and Content

The syllabus of this program has been designed by TECH together with its team of Lean Manufacturing experts. Over the course of 6 weeks, students will be presented with the most up-to-date and rigorous information, delving into aspects such as value and waste, always prioritizing the needs of customers. This entire conglomerate will be housed in the online campus, which can be accessed from any device with an Internet connection, without pre-established schedules or transfers to on-site centers.



“

*In just 6 weeks you will have become  
an outstanding expert in solvency and  
dividend policy”*

## Syllabus

This program is a high-impact informative conglomerate that brings together the most up-to-date knowledge of the sector and presents it through audiovisual resources, complementary readings and practical exercises developed with the Relearning methodology. In this way the student will be trained and will acquire new skills and abilities to enhance their professional profile.

In this way, during the following weeks, the student will be introduced to the study material designed by TECH together with its teaching team and will be equipped with essential knowledge to implement it in their practice. In addition to this, it will have a 100% online format, which can be accessed from any device with an Internet connection, at your preferred time and without having to travel to on-site centers.

In conclusion, this is an academic opportunity designed specifically for those with previous knowledge or who want to enter the business sector and Lean Manufacturing. A program that understands the needs of the student and the company, and unifies them in a rigorous and cutting-edge curriculum.

This Postgraduate Certificate takes place over 6 weeks and is divided into 1 single module:

### Module 1

**Value and Waste (Duration): Identification and elimination of non-value-added activities**



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

TECH offers the possibility of developing this Postgraduate Certificate in Value and Waste 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. Value and Waste (Duration): Identification and elimination of non-value-added activities**

**1.1. Concept of "Value" from the Customer's Perspective**

- 1.1.1. Satisfaction of customer needs
- 1.1.2. Perceived value vs. Tangible value
- 1.1.3. Value for money

**1.2. Quality Function Deployment**

- 1.2.1. Quality Function Deployment. Concept and Definition
- 1.2.2. Techniques for identifying customer needs
- 1.2.3. Quality deployment

**1.3. Mura in Lean Manufacturing**

- 1.3.1. Demand Variability
- 1.3.2. Production Variability
- 1.3.3. Supply Variability

**1.4. Muri in Lean Manufacturing**

- 1.4.1. Equipment overload
- 1.4.2. Overloading people
- 1.4.3. System overload

**1.5. Mudras related to Manufacturing**

- 1.5.1. Overproduction
- 1.5.2. Types and Causes of Overproduction
- 1.5.3. Unnecessary processing

**1.6. Quality-related mutations**

- 1.6.1. Quality Defects for rework or scrap
- 1.6.2. Causes of Quality Defects
- 1.6.3. Scrap vs. rework

**1.7. Transportation related mutations**

- 1.7.1. Unnecessary Transportation
- 1.7.2. Causes of Waiting Times
- 1.7.3. Strategies to avoid/minimize waiting times

**1.8. Excess Inventory-related debts**

- 1.8.1. Excess inventories of PM
- 1.8.2. Excess of in-process inventories
- 1.8.3. Excess inventories of finished product

**1.9. Mudras related to the waiting/social times**

- 1.9.1. Types of waiting time
- 1.9.2. Causes of waiting times
- 1.9.3. Strategies to avoid/minimize waiting times

**1.10. New Mudras defined**

- 1.10.1. Lack of Staff Training
- 1.10.2. Poor utilization of Staff Skills and Abilities
- 1.10.3. Resources dedicated to non-strategic or priority processes



“

*You will stand out in a booming sector with great projection towards the future and with great opportunities at international level”*

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.

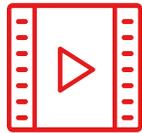
*Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

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.



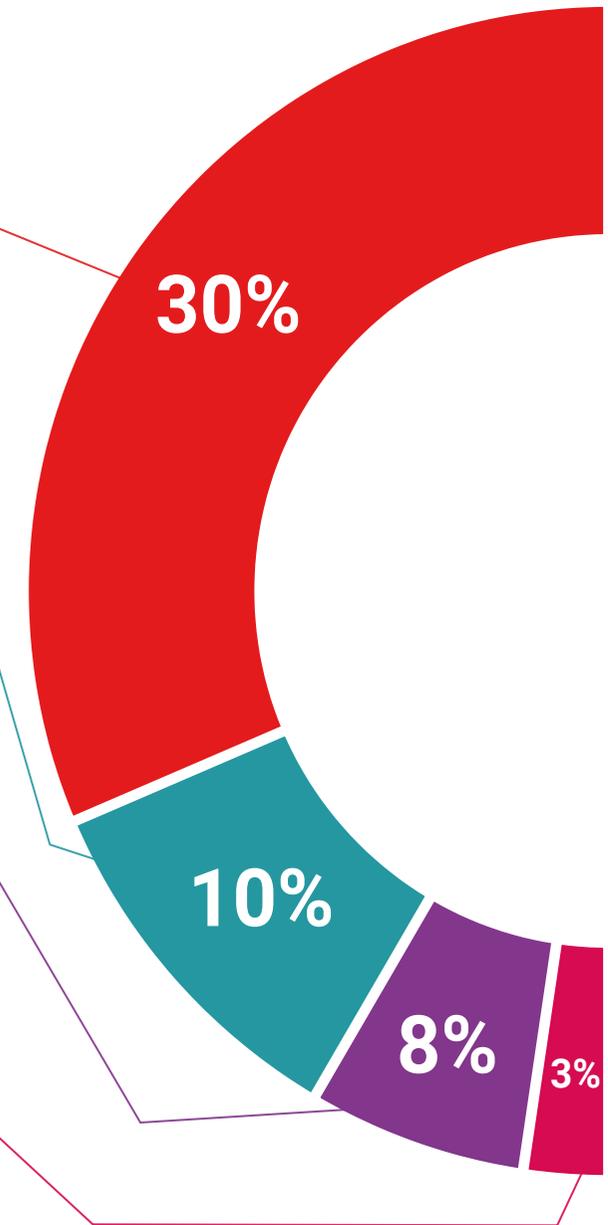
### Management Skills Exercises

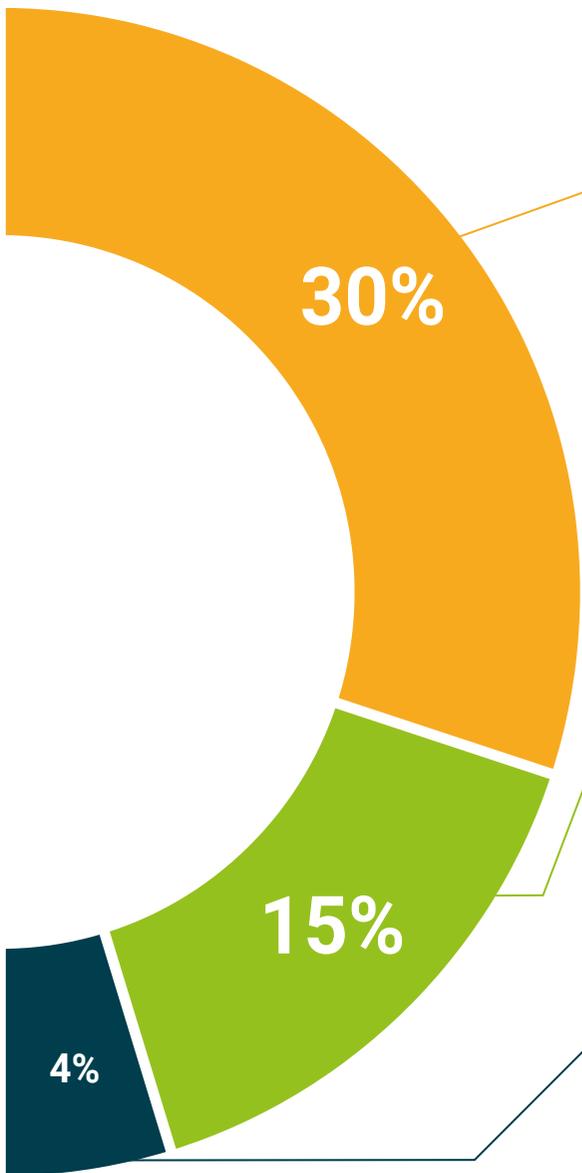
They will carry out activities to develop specific executive competencies in each thematic area. Practices and dynamics to acquire and develop the skills and abilities that a high-level manager needs to develop in the context of the globalization we live in.



### 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 business and Lean Manufacturing fields, may also take the Postgraduate Certificate.





“

*This program becomes your best academic option for professional updating due to its content and renowned faculty”*

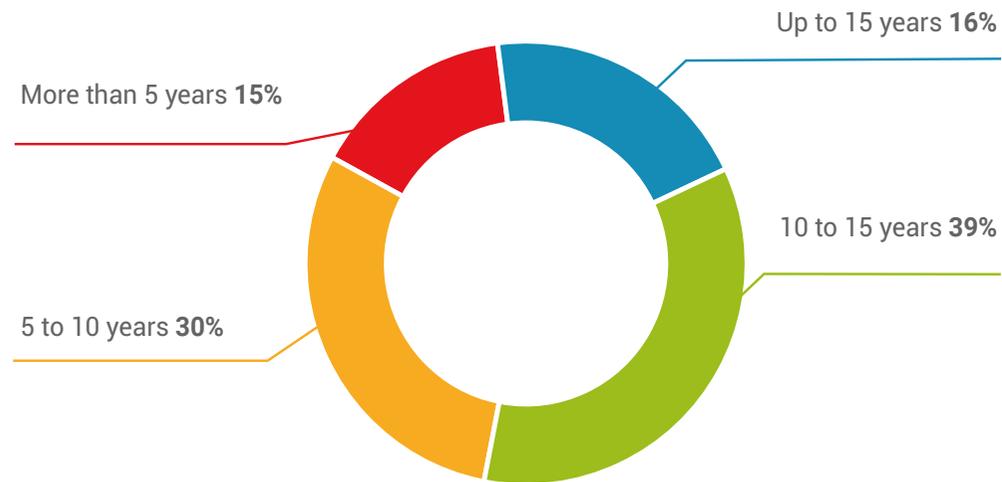
### Average Age

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

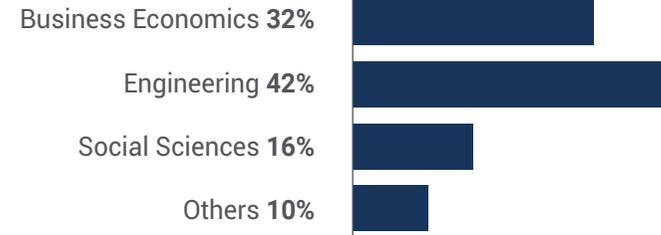
### Years of Experience

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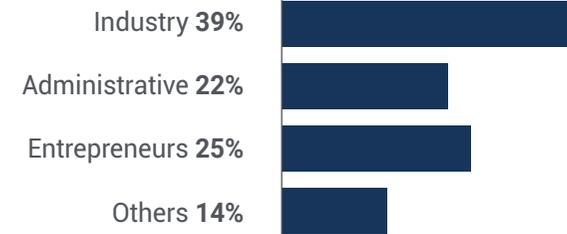
### Training

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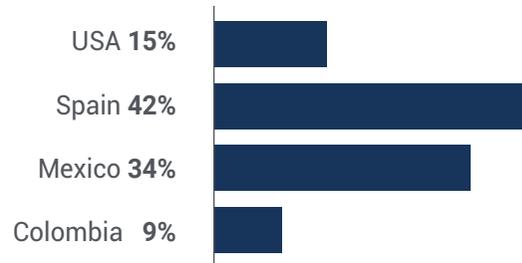
### Educational Profile

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## Geographical Distribution

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## Carmen Rodríguez Gómez

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**Business Analyst**

*The Postgraduate Certificate in Value and Waste in Lean Manufacturing has been a very enriching experience for me. I have learned the importance of identifying and eliminating waste in business processes, which will allow me to contribute to the improvement of efficiency and quality in any organization"*

08

# Course Management

Undoubtedly, a determining element in the achievement of the objectives of the professionals who take this Postgraduate Certificate is the program prepared by the best professionals in the field of Financial and Tax Law. Their experience in this field, as well as their long career in the field of teaching, further enhance this unique teaching in the university panorama.



“

*Renowned specialists in Financial and Tax Law  
will be responsible for expanding your scope of  
action in Family Wealth Management”*

## Management



### Mr. Luis Jover Miravittles

- President and Founding Partner Grupo Quarek, 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's Degree in Business Administration MBA IESE Member of the Hispack Organizing Committee

## Professors

### Mr. Panaggio, Marcos Andrés

- Independent and Academic Operations Manager
- Operations Manager and Branch Manager at Transportes Malvinas
- Operations Manager at Supertrans
- Corporate Manager of Operational Excellence at InterCement - Camargo Corrêa
- Master's Degree in Education and Digital Pedagogical Development by the European Graduate Institute
- Master's degree in Logistics and Supply Chain Management from the University of Barcelona
- Diploma in Financial and Stock Market Technical Analyst from National Technological University
- Diploma of the Leadership Development Program, Universidad de San Andrés
- Mechanical Engineer from the National University of Mar del Plata
- Master of Works from the National School of Technical Education



09

# Impact on Your Career

This Postgraduate Certificate provides specialized training in a methodology widely recognized in the industry for its ability to improve the efficiency and quality of business processes. Professionals who have completed this program acquire skills in the identification of waste and the application of continuous improvement techniques, allowing them to optimize processes and reduce costs in any organization.





“

*The knowledge presented here is readily applicable in today's workplace. Don't wait any longer and enroll now"*

*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 Value and Waste in Lean Manufacturing is an intensive program that prepares you to face business challenges and decisions in Lean Manufacturing. The main objective is to promote your personal and professional growth. Helping you achieve success.

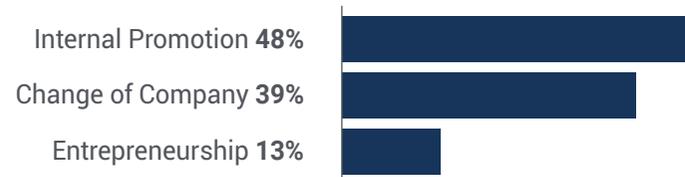
If you want to improve yourself, make a positive change at a professional level, and network with the best, then this is the place for you.

*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

Thanks to this program, the student will be able to expand their knowledge and skills, which will lead them to contribute in a great way within the company and its valorization process for the improvement of production and quality. In this way, companies that incorporate professionals specialized in this field will achieve a leap of distinction in their sector.



“

*In addition to its broad informative content, it offers the most innovative audiovisual resources, developed with the latest technology”*

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 professional can work on a real project or develop new projects in the field of R & D or business development of your company.

---

06

### Increased competitiveness

This program will equip students with the skills to take on new challenges and drive the organization forward.

# 11 Certificate

The Postgraduate Certificate in Value and Waste 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 Value and Waste 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 Value and Waste in Lean Manufacturing**

Modality: **online**

Duration: **6 weeks**

Credits: **6 ECTS**





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