

# Postgraduate Certificate Leadership. in the Industry 4.0



## Postgraduate Certificate Leadership. in the Industry 4.0

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

Website: [www.techtitute.com/in/engineering/postgraduate-certificate/leadership-industry-4-0](http://www.techtitute.com/in/engineering/postgraduate-certificate/leadership-industry-4-0)

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# 01

# Introduction

In an era marked by the technological revolution, the human factor continues to be key to the direction and management of projects. Therefore, in the industrial field, emotional intelligence, empathy and effective communication are still relevant in the development of the Smart Factory. In this context, the engineer, due to their knowledge and skills, acquires a relevant role in achieving optimal production goals. For this reason, TECH has designed this 100% online academic proposal that will lead the graduate to increase their leadership skills, properly implement digitization and delve into its benefits and current challenges. For this purpose, it has the best academic material, prepared by real specialists with extensive professional experience in this area.



Order Pick Time  
**09:28**





Order Pick Time

07:49

Order Pick Time

12:05



*Successfully lead any project in the Industry 4.0 ecosystem thanks to this 100% online Postgraduate Certificate"*

Digital production systems, such as the Industrial Internet of Things (IIoT), the integration of Artificial Intelligence and machine learning, are now part of the reality of Industry 4.0. In this environment, engineers are of vital importance in order to achieve effective and safe production processes.

Given the unstoppable advance of technology, it is increasingly necessary to have specialists with updated knowledge in digital transformation to lead industrial companies to success. This is why TECH has created this Postgraduate Certificate in Leadership in Industry 4.0 of only 6 weeks duration.

This program takes students over 6 weeks to delve into the effects and challenges posed by the use of disruptive technologies, as well as their characteristics, benefits or the architecture behind a Smart Factory, among other aspects necessary to lead projects in this sector. In addition, the graduate has access to innovative didactic material based on video summaries, detailed videos, specialized readings and case studies that provide greater dynamism to this learning process.

Likewise, this academic institution includes the Relearning method, focused on the continuous reiteration of the most important concepts addressed in this instruction. In this way, you will reduce the long hours of study and memorization so frequent from other teaching Systems. The professional will therefore obtain, in a short period of time, knowledge that will increase their management and leadership skills in this field.

The student has before them, then, an excellent opportunity to progress professionally through a degree that can be taken comfortably, whenever and wherever they wish. It only requires an electronic device with internet connection to access quality to its didactic content from the first day. In this way, without the need for attendance or classes with pre-set timetables, the student will have greater freedom to self-manage their study time and combine it with their daily personal activities.

This **Postgraduate Certificate in Leadership. in the Industry 4.0** contains the most complete and up-to-date program on the market. The most important features include:

- ◆ The development of case studies presented by experts in Digital Transformation and Industry 4.0
- ◆ The graphic, schematic, and practical contents with which they are created, provide 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



*A 100% online academic option that adapts to your motivations for professional growth in the industrial sector"*

“

*Do you want to keep up to date with the benefits of digitalization in manufacturing? Do it from the comfort of your home and from your cell phone with internet connection”*

*This is a Postgraduate Certificate that will give you the opportunity to organize your own study time. Enroll now.*

*Find out more about the current situation in the digital transformation and its influence on the industrial sector.*

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



# 02

# Objectives

Upon completion of this program, students will have attained a high level of knowledge on how to carry out effective leadership in Industry 4.0. To this end, the syllabus has a theoretical-practical approach that will bring them up to date with the current situation of digital transformation, the change brought about by the pandemic caused by COVID-19 and Smart Factories. To achieve this goal, the graduate will have a specialized faculty at their disposal that will allow them to resolve any doubts they may have about the content of this university proposal.





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*Empower your leadership skills within the industrial sector and develop digital capabilities within an organization”*



## General Objectives

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- ◆ Conduct a comprehensive analysis of the profound transformation and radical paradigm shift being experienced in the current global digitalization process
- ◆ Provide in-depth knowledge and the necessary technological tools to face and lead the technological leap and the challenges currently present in companies
- ◆ Mastering the digitalization procedures of companies and the automation of their processes to create new fields of wealth in areas such as creativity, innovation and technological efficiency
- ◆ Leading Digital Change





## Specific Objectives

- ◆ Understand the current virtual era we live in and its leadership capacity, on which will depend the success and survival of the digital transformation processes in which any type of industry is involved
- ◆ Develop, from all available data, the Digital Twin of the facilities/systems/assets integrated in an IoT network

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*You will integrate into your praxis a digital business vision focused on improving competitiveness and long-term survival”*

03

# Course Management

The accumulated professional experience in the field of digital transformation and in the implementation of projects in the industrial sector has been a determining factor in the choice of the faculty that has developed this Postgraduate Certificate. In this way, students will access a program specifically oriented to provide the knowledge and skills necessary for their performance in project and business management positions in this era marked by technological advances.





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*Enroll now in a Postgraduate Certificate that will be a turning point in project management in the industrial field"*

## Management



### Mr. Segovia Escobar, Pablo

- ♦ Chief Executive of the Defense Sector in the Company Tecnobit of the Oesía Group
- ♦ Corporate Project Director Indra
- ♦ Master's Degree in Companies Administration and Management by the National University of Distance Education
- ♦ Postgraduate in Strategic Management Function
- ♦ Member of: Spanish Association of People with High Intellectual Quotient



### Mr. Diezma López, Pedro

- ♦ Chief Innovation Officer and CEO of Zerintia Technologies
- ♦ Founder of the technology company Acuilae
- ♦ Member of the Kebala Group for business incubation and promotion
- ♦ Consultant for technology companies such as Endesa, Airbus or Telefónica
- ♦ Wearable "Best Initiative" Award in eHealth 2017 and "Best Technological "Solution" 2018 for occupational safety



# 04

## Structure and Content

The syllabus of this university degree brings together, over 150 teaching hours, the most current content on Leadership in Industry 4.0. In this way, students will gain an overview of the changes that have occurred with the digital transformation in the post-COVID era. They will also be able to further extend the information provided in this program with the numerous didactic materials available in the virtual library.







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*An intensive program of 150 teaching hours with the best pedagogical material on project management in Industry 4.0"*

## Module 1. Leading Industry 4.0

- 1.1. Leadership Abilities
  - 1.1.1. Leadership Factors in the Human Factor
  - 1.1.2. Leadership and Technology
- 1.2. Industry 4.0 and the Future of Production
  - 1.2.1. Definitions
  - 1.2.2. Production Systems
  - 1.2.3. Future of Digital Production Systems
- 1.3. Effects of Industry 4.0
  - 1.3.1. Effects and Challenges
- 1.4. Essential Technologies in Industry 4.0
  - 1.4.1. Definition of Technologies
  - 1.4.2. Characteristics of Technologies
  - 1.4.3. Applications and Impacts
- 1.5. Digitization of Manufacturing
  - 1.5.1. Definitions
  - 1.5.2. Benefits of the Digitization of Manufacturing
  - 1.5.3. Digital Twins
- 1.6. Digital Capabilities in an Organization
  - 1.6.1. Development Digital Capabilities
  - 1.6.2. Understanding the Digital Ecosystem
  - 1.6.3. Digital Vision of the Business
- 1.7. Architecture Behind a Smart Factory
  - 1.7.1. Areas and Operations
  - 1.7.2. Connectivity and Security
  - 1.7.3. Case Uses
- 1.8. Technology Markers in the Post-Covid Era
  - 1.8.1. Technological Challenges in the Post-Covid Era
  - 1.8.2. New Case Uses
- 1.9. The Era of Absolute Virtualization
  - 1.9.1. Virtualisation
  - 1.9.2. The New Era of Virtualization
  - 1.9.3. Advantages





- 1.10. Current Situation in Digital Transformation Gartner Hype
  - 1.10.1. Gartner Hype
  - 1.10.2. Analysis of Technologies and Their Status
  - 1.10.3. Data Exploitation

“*Delve into the new era of virtualization and its advantages within the industry*”

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.



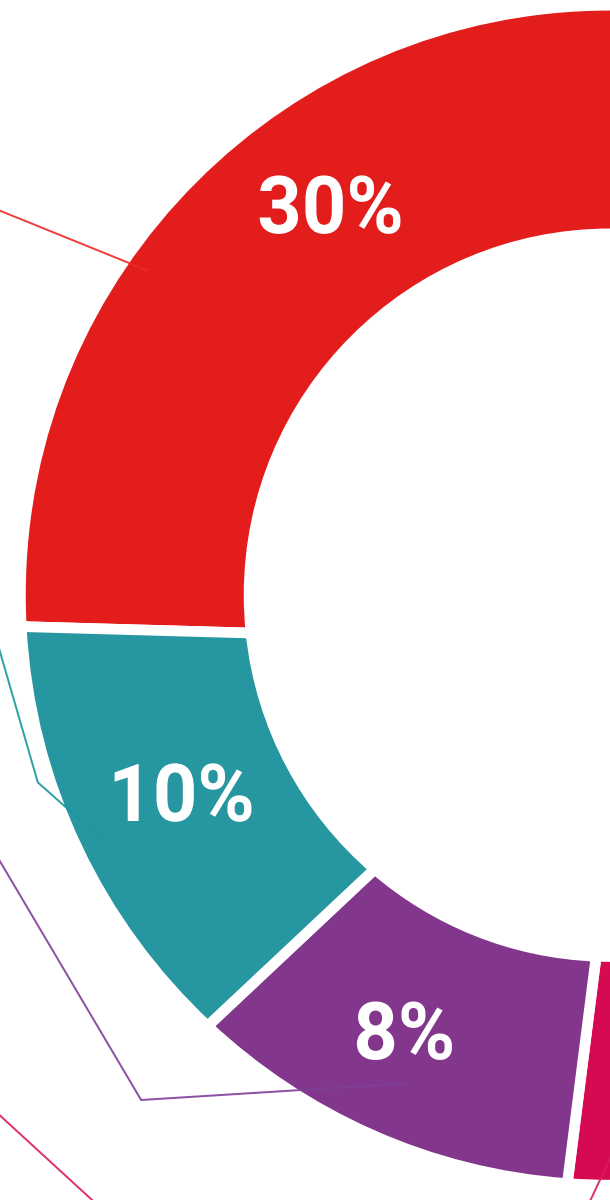
### Practising Skills and Abilities

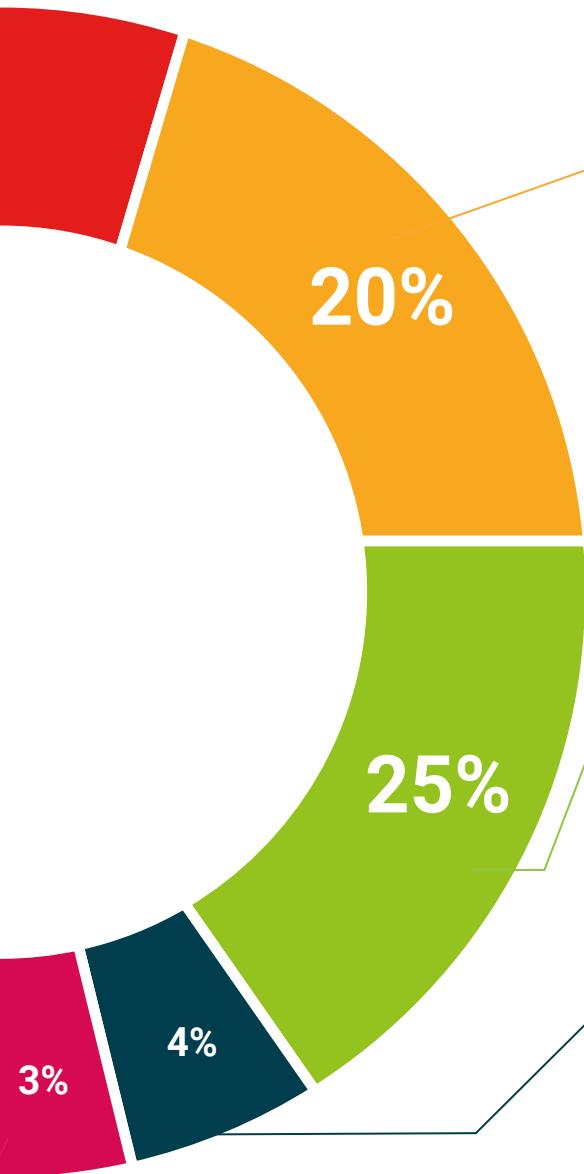
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



### 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 Leadership in the Industry 4.0 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 Leadership. in the Industry 4.0** 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 Leadership. in the Industry 4.0**

Official N° of Hours: **150 h.**



\*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.



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