Postgraduate Certificate

Leadership in Industry 4.0

tech global university

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Postgraduate Certificate
Leadership in Industry 4.0

- Modality: **online**
- Duration: **6 weeks**
- Certificate: **TECH Global University**
- Credits: **6 ECTS**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/pk/artificial-intelligence/postgraduate-certificate/leadership-industry-4-0

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Introduction

Digital transformation is disrupting traditional business models, rendering business practices obsolete. Faced with Industry 4.0, leaders need to think holistically and use new technologies to the companies' advantage. In this way, tools such as Artificial Intelligence can simplify industry processes, make them more efficient and even reduce costs. However, to make the most of the opportunities offered by this branch, professionals need to constantly update their knowledge. Only then will they be able to understand the intricacies of this discipline and provide the most innovative goods or services on the market. For this reason, TECH launches an online program that will delve into both the Fourth Industrial Revolution and its emerging technologies.

You will drive informed strategic decision making based on data and analysis, thanks to this 100% online Postgraduate Certificate"

In the midst of the post-covid era, there are a number of technological challenges that both society and business must address to adapt to a world that has undergone significant changes due to the pandemic. Foremost among these is the accelerated digital transformation. The coronavirus crisis accelerated the need to adopt virtual technologies in all aspects of life, from remote work to online education to telemedicine. Today, organizations continue to face the challenge of implementing fast and effective digital conversion strategies in order to remain highly competitive.

At this juncture, TECH is developing a Postgraduate Certificate in Leadership in Industry 4.0. The curriculum will delve into the future of digital production systems, analyzing their effects and challenges. In this way, students will have at their disposal the tools required to overcome any challenge that may arise during their professional activities. In turn, the agenda will analyze the keys for graduates to develop technological capabilities, achieving a holistic understanding of the digital ecosystem of the business. In line with this, the didactic materials will address in detail the Gartner Hype tool, allowing students to understand the life cycle of an emerging technology and manage expectations around its use.

One of the advantages of being part of this exclusive and unique academic opportunity is based on the convenience and adaptability it provides. TECH is a pioneer in the implementation of the Relearning pedagogical methodology, which provides didactic and multimedia content repeatedly to expand and improve the assimilation of concepts. All of this is complemented with case studies refuted by the best experts in the field. It is therefore the perfect opportunity to combine learning with personal life.

This **Postgraduate Certificate in Leadership in 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 the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

You will have a broad knowledge of key emerging technologies such as Artificial Intelligence, Advanced Robotics and Augmented Reality"

You will delve into Digital Twins, using this tool to experiment in a virtual environment before implementing changes in the real world"

You will adequately manage the complexity and uncertainty inherent in digital industrial environments.

You will enjoy a learning system based on reiteration, with organic and gradual teaching throughout the program.

The program's teaching staff includes professionals from the sector who contribute their work experience to this 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.

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Objectives

After passing the assessments of this program, graduates will have a solid understanding of the fundamental principles of Industry 4.0 and its impact on work processes. At the same time, students will develop strategic leadership skills to manage teams in highly automated industrial environments. In a simulated way, professionals will carry out the digital transformation in companies, effectively implementing disruptive technologies. In addition, they will master the architectures behind a Smart Factory in order to improve the competitiveness and profitability of institutions.

You will create added value to companies by improving operational efficiency and process optimization"

General Objectives

- 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 the success and survival of the digital transformation processes will depend, on 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

A key, determinant, and decisive learning experience to boost your professional development"

03

Course Management

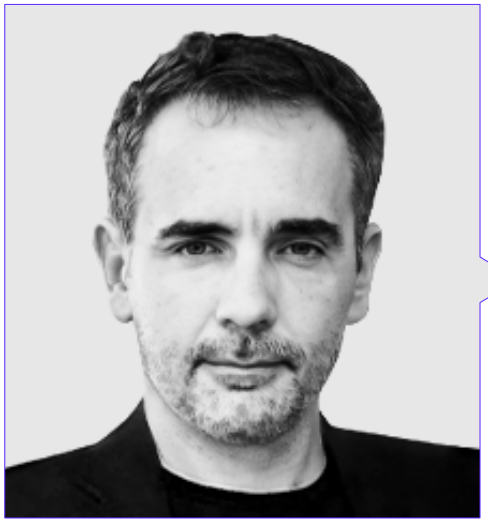
To preserve intact the quality that distinguishes its university programs, TECH brings together in this Postgraduate Certificate the best experts in Industry 4.0 and Artificial Intelligence. These professionals are part of the teaching staff, so they pour into the academic content both their deep knowledge of this technological branch and their years of professional experience in them. This is a guarantee for the students, since they will have the opportunity to take a first class educational experience and will be supported by real specialists in these disciplines.

The teaching team has designed hours of additional content for you to expand each section of the syllabus in a personalized way"

Management

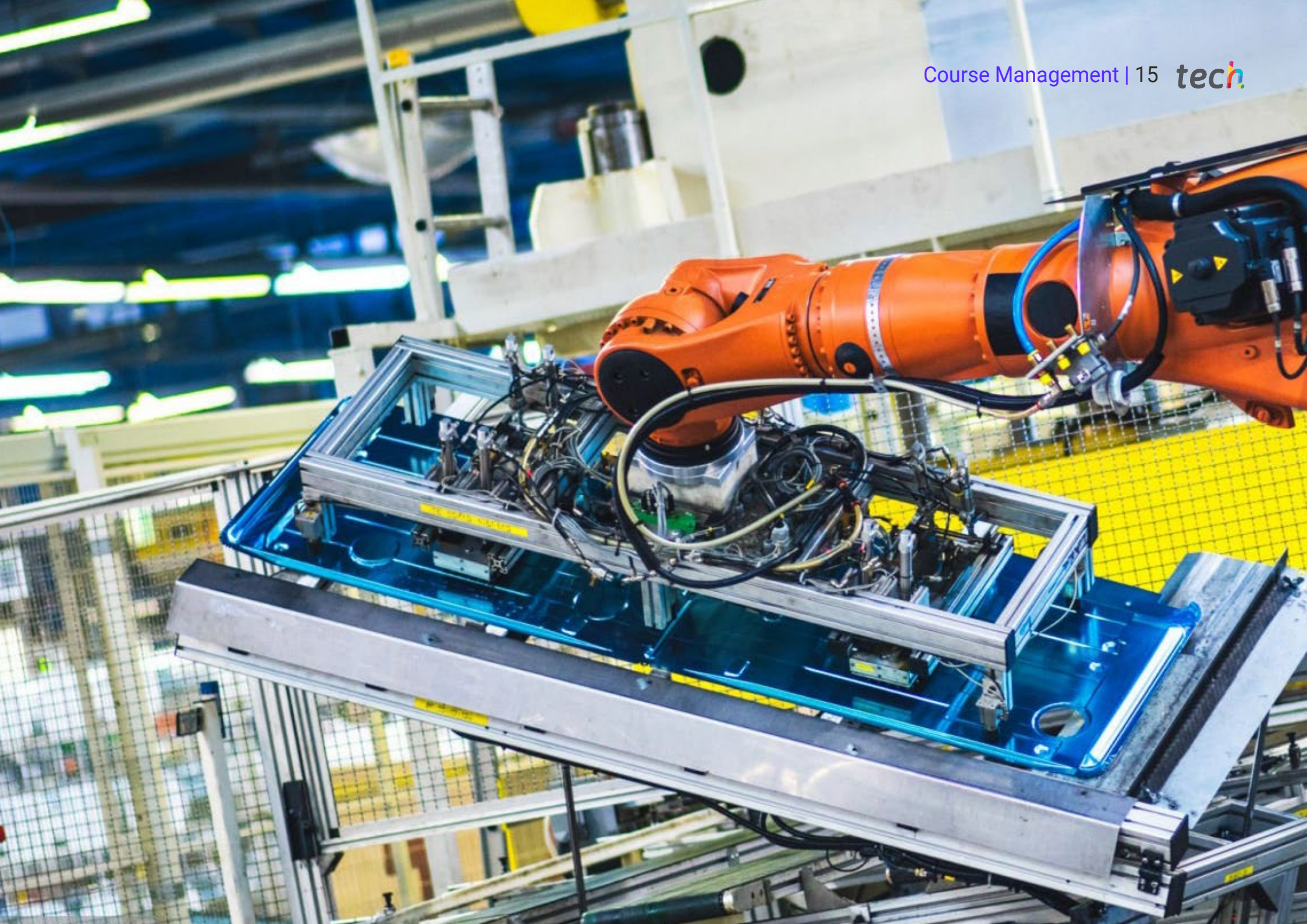
Dr. Segovia Escobar, Pablo

- 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



Dr. 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

With this Postgraduate Certificate, students will have a comprehensive approach to Industry 4.0 Leadership. During the program, students will gain advanced skills that will enable them to lead multidisciplinary work teams. The curriculum will delve into the various Production Systems, while exploring their future. At the same time, the syllabus will delve in detail into the essential technologies of the Fourth Industrial Revolution, among which the Industrial Internet of Things stands out. The materials will also provide techniques such as the Digital Twin, aimed at the exact digital representation of a real object to optimize its performance.

You will enrich your daily practice with the latest trends in the Gartner Hype Cycle model"

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

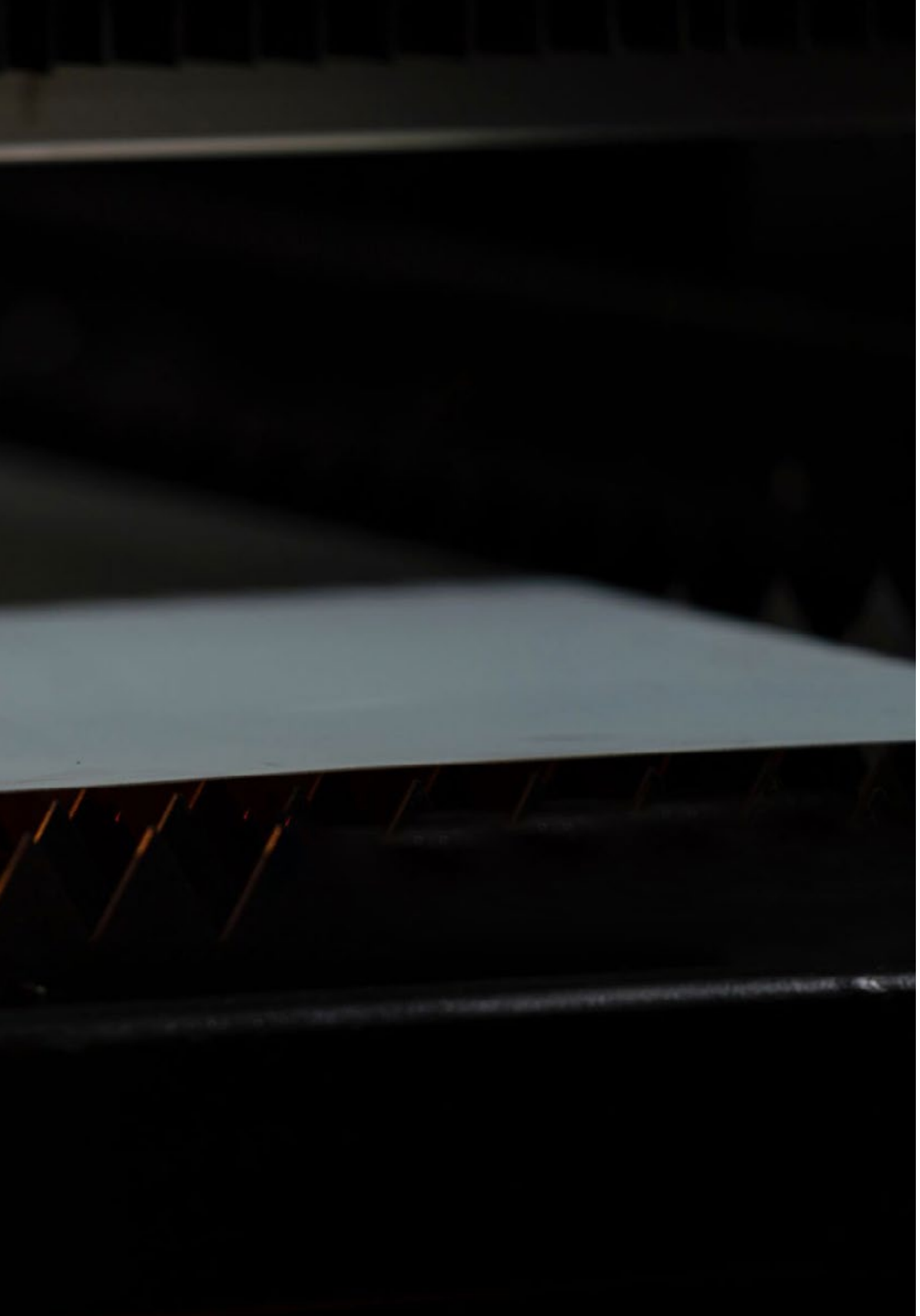
1.3. Effects of Industry 4.0
- 1.3.1. Effects and Challenges

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
- 1.2.1. 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. Virtualization
  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

This university program will prepare you to meet both present and future challenges in Industry 4.0. Enroll now!"

05

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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 has been the most widely used learning system among the world's leading Information Technology 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 that you are presented with in the case method, an action-oriented learning method. Throughout the course, students 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

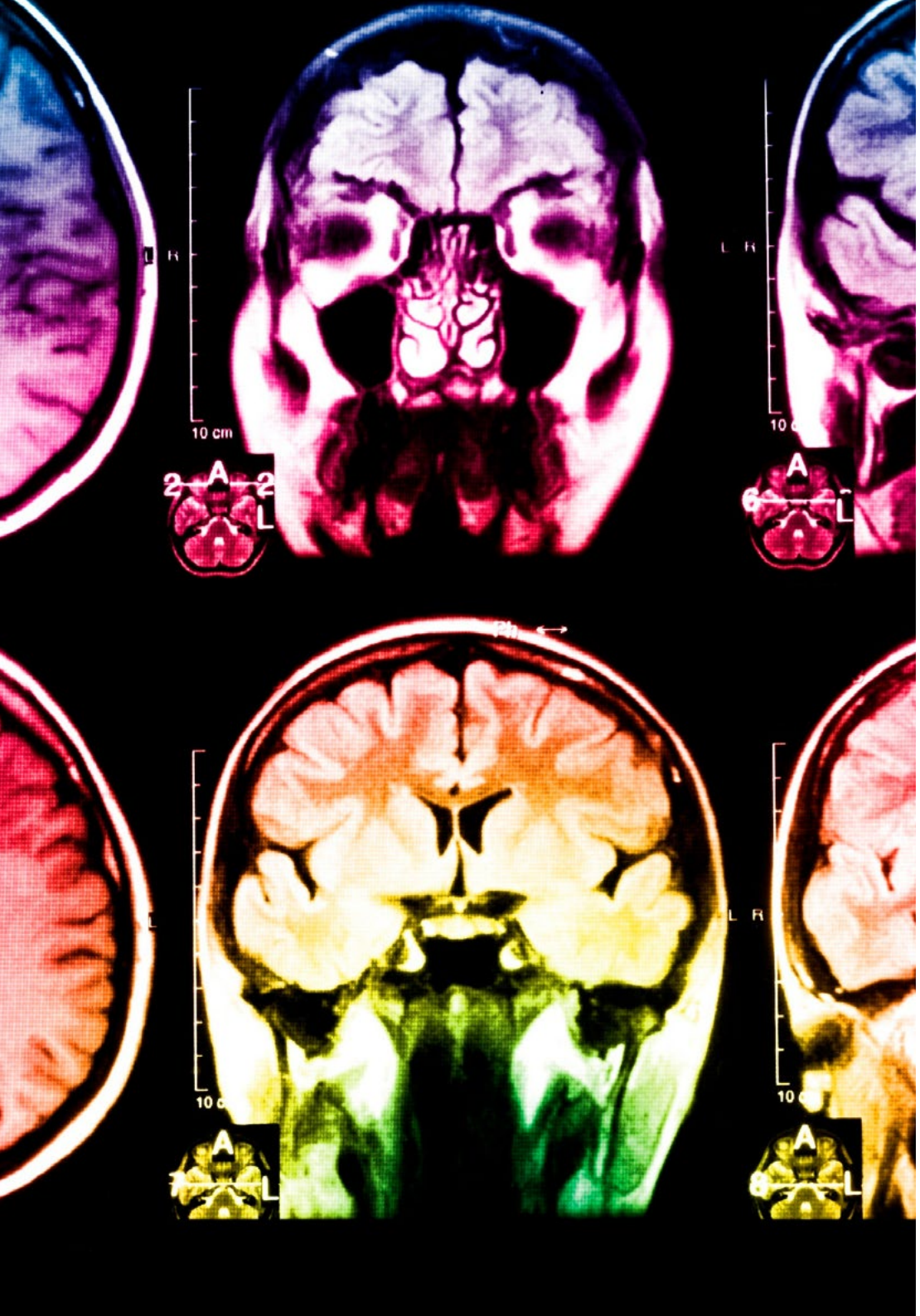
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

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.

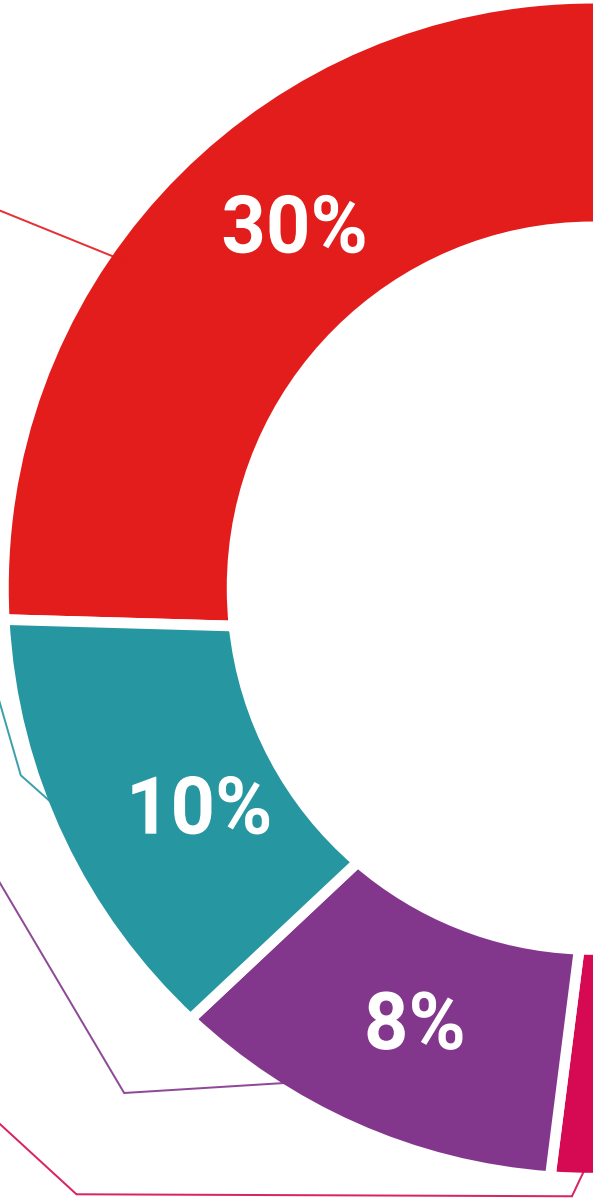
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

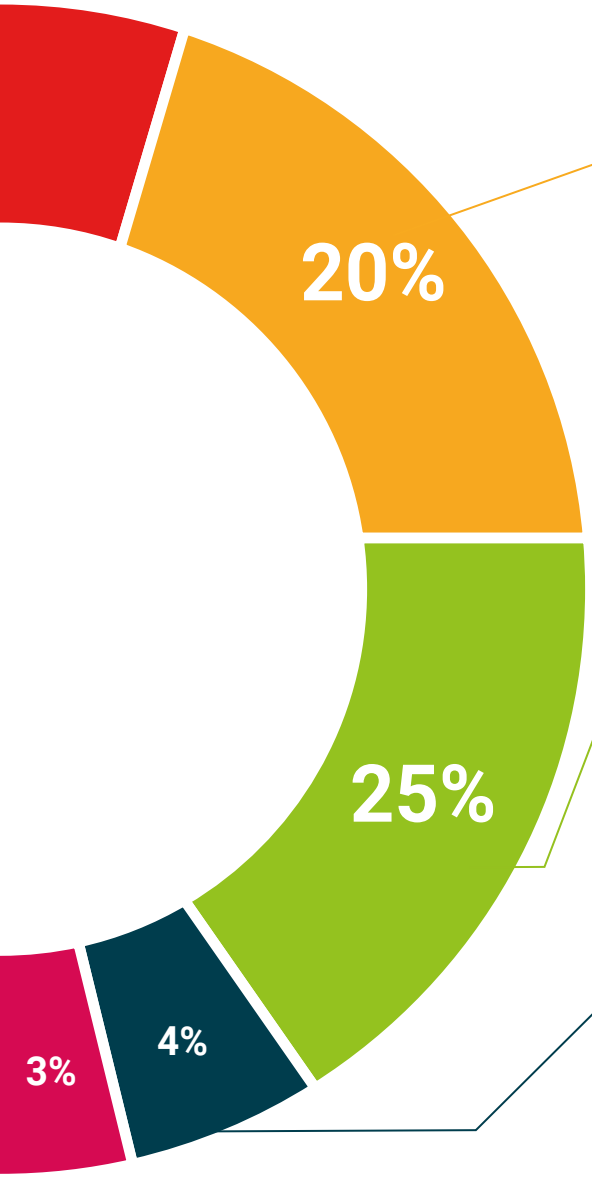
Practising Skills and Abilities

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 Industry 4.0 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 Leadership in Industry 4.0** 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 Leadership in Industry 4.0**

ECTS: **6**

Official Nº of Hours: **150 h**.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Mr./Ms. Cristian David Velasquez Granada, with identification document 31914606J has successfully passed and obtained the title of:

Postgraduate Certificate in Leadership in Industry 4.0

This is a program of 150 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Chancellor

Unique TECH Code: AFWORD23S techtitute.com/certificates

*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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