

# Postgraduate Certificate

## Services and Solutions for the Digital Sector in Industry 4.0



## Postgraduate Certificate Services and Solutions for the Digital Sector in Industry 4.0

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

Website: [www.techtitude.com/us/engineering/postgraduate-certificate/services-solutions-digital-sector-industry-4-0](http://www.techtitude.com/us/engineering/postgraduate-certificate/services-solutions-digital-sector-industry-4-0)

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Certificate

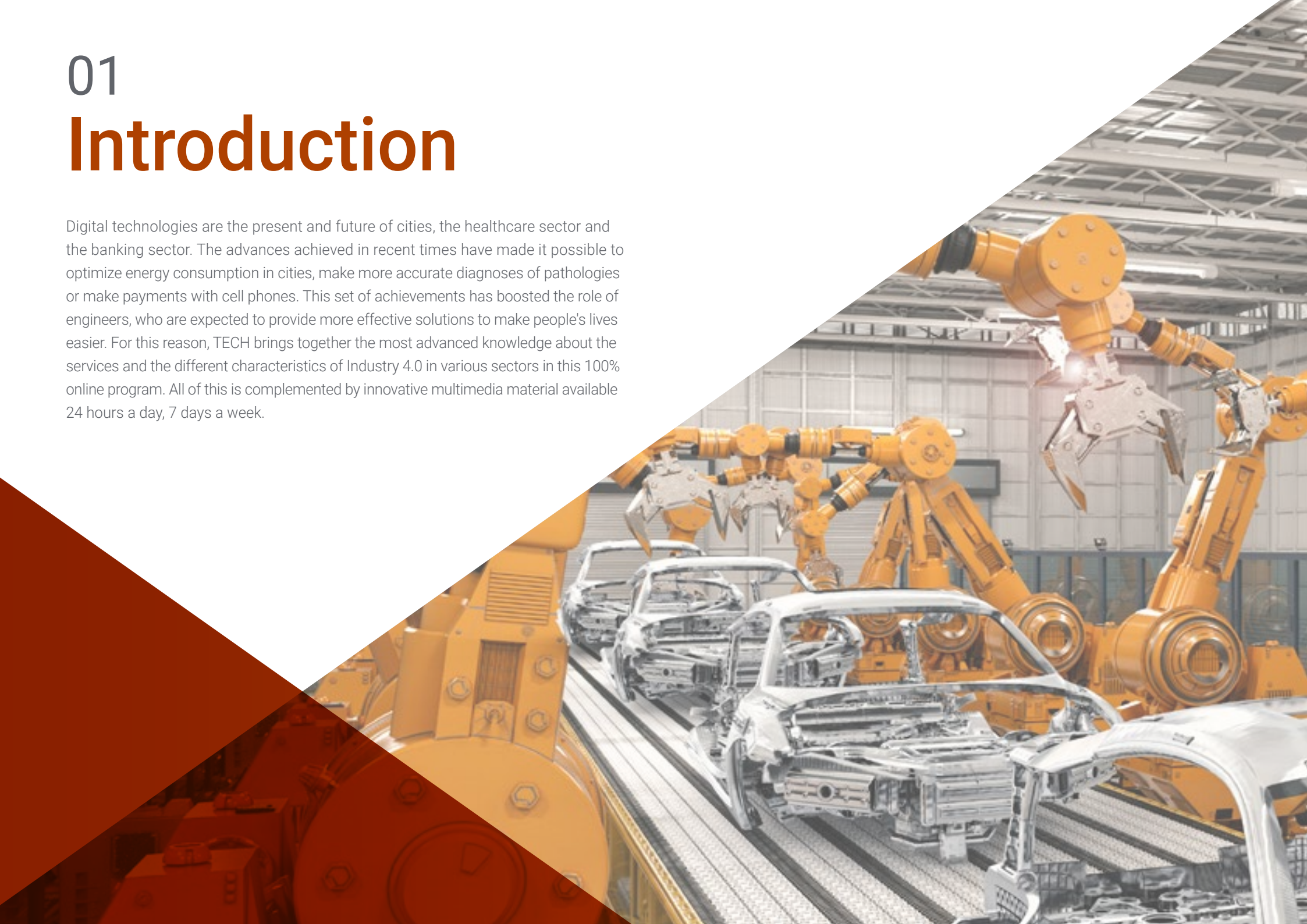
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# 01

# Introduction

Digital technologies are the present and future of cities, the healthcare sector and the banking sector. The advances achieved in recent times have made it possible to optimize energy consumption in cities, make more accurate diagnoses of pathologies or make payments with cell phones. This set of achievements has boosted the role of engineers, who are expected to provide more effective solutions to make people's lives easier. For this reason, TECH brings together the most advanced knowledge about the services and the different characteristics of Industry 4.0 in various sectors in this 100% online program. All of this is complemented by innovative multimedia material available 24 hours a day, 7 days a week.





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*A 100% online Postgraduate Certificate that will allow you to take a step further in your professional career as an engineer in the field of Industry 4.0”*

In this digital era, decision-making and efficient resource management through the use of the Internet of Things is already a reality. The applications of new technologies influence practically all sectors, with special emphasis on the tertiary sector, where health, tourism, economic-financial activity and logistics contribute to the development of both cities and people.

Given this reality, engineers have come to occupy a decisive role, given their technical knowledge and skills in the use of technological devices. In this context, this Postgraduate Certificate in Services and Solutions for the Digital Sector in Industry 4.0 was created by an excellent team of specialists with accumulated professional experience in this field.

It is an intensive program that will allow the graduate to obtain a very useful learning for their daily performance in projects focused on Smart Cities, Smart Hospitals, Fintech or E-Health, among others. In addition, it will do so through first class pedagogical tools such as multimedia pills, videos in detail, specialized readings or simulations of case studies.

All this, only 6 weeks duration and with a Relearning method that will allow the student to reduce the long hours of study and memorization, by having a continuous reiteration of the key concepts throughout the program.

In this way, the engineer has before them a unique qualification that not only provides them with knowledge, but also adapts to their daily schedule. And the fact is that, with no classroom or class timetables, the student will have greater freedom to access the program at any time of the day and from a digital device with an Internet connection.

This **Postgraduate Certificate in Services and Solutions for the Digital Sector 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 scientific and 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



*If you have a cell phone with an internet connection, you will be able to comfortably access the advanced syllabus of this university proposal"*

“

*Delve, whenever and wherever you want,  
into the main features of digitization  
in the transport sector”*

*Reduce the hours of memorization  
thanks to the Relearning method  
used by TECH in all its programs.*

*Learn more about the key factors in  
the digitization of Smart Cities with  
the best didactic material.*

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 the 150 teaching hours of this program, students will have gained advanced knowledge about Services and Solutions for the Digital Sector in Industry 4.0. In order to successfully achieve this goal, the content has a theoretical-practical approach, which will allow the student to integrate the most well-known advances in this field into their projects, as well as the most effective digitalization methodologies for Smart Cities, Fintech or Smart Hospitals, among others.





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*Increase your scope of action in digitization processes in the banking or logistics sector”*



## 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

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- ◆ Possess a thorough understanding of the technological impact and how technologies are revolutionizing the tertiary economic sector in the fields of transportation and logistics, health and healthcare (e-Health and *Smart Hospitals*), smart cities, the financial sector (*Fintech*) and mobility solutions
- ◆ Knowing the technological trends of the future



*Do you want to keep up to date with the advances in Smart Hospitals and future challenges? Enroll now in this university degree"*

03

# Course Management

TECH has brought together in this qualification an excellent teaching staff made up of specialists in Industry 4.0 and in the leadership of digital transformation projects. Thanks to their extensive knowledge in this field, the graduate will have access to a high quality syllabus, which will allow them to obtain a close and real vision of the implications of technology in the tertiary sector.







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*Solve any doubts you may have about the syllabus with the best teachers specialized in Industry 4.0"*

## 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 program provides students with an in-depth understanding of the multiple options and solutions provided by Industry 4.0 in key areas such as healthcare, tourism, and banking. To this end, the graduate also has access to high quality multimedia teaching resources and specialized readings, with which they can further extend the information provided in this program. Undoubtedly, it is a unique opportunity to obtain a learning experience that enhances the performance capabilities of engineers in this field.





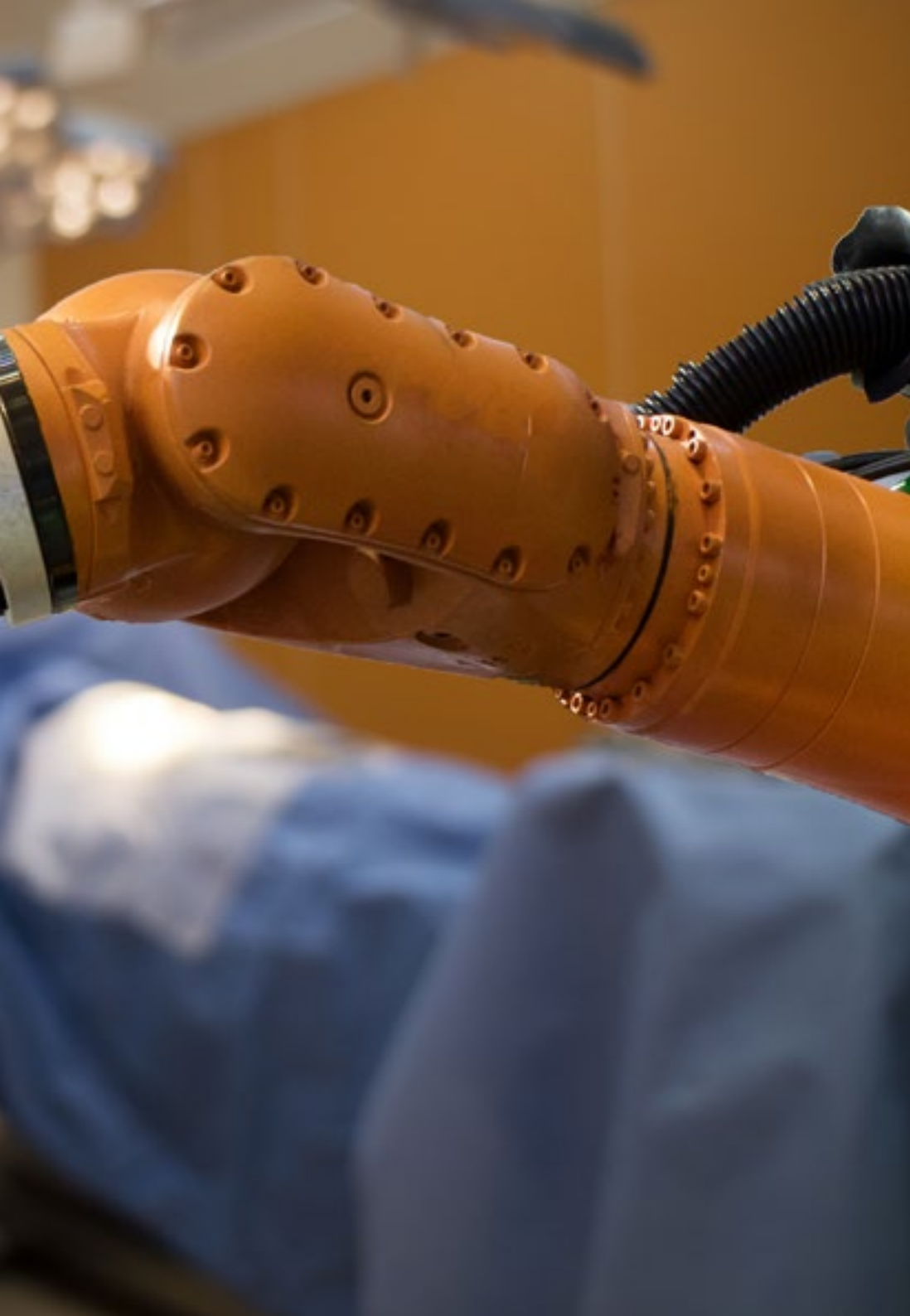
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*A complete curriculum that will allow you to be up-to-date on Industry 4.0 and the solutions it brings to the tertiary sector"*

## Module 1. Industry 4.0 Industry - Services and Solutions (II)

- 1.1. Tertiary Sector Solutions
  - 1.1.1. Tertiary Economic Sector
  - 1.1.2. Characteristics of Each Subsector
- 1.2. Digitalization of the Tertiary Sector: Transportation
  - 1.2.1. Main Characteristics
  - 1.2.2. Keys Factors of Digitization
- 1.3. Digitization of the Tertiary Sector: e-Health
  - 1.3.1. Main Characteristics
  - 1.3.2. Keys Factors of Digitization
- 1.4. Digitization of the Tertiary Sector: *Smart Hospitals*
  - 1.4.1. Main Characteristics
  - 1.4.2. Keys Factors of Digitization
- 1.5. Digitization of the Tertiary Sector: *Smart Cities*
  - 1.5.1. Main Characteristics
  - 1.5.2. Keys Factors of Digitization
- 1.6. Digitalization of the Tertiary Sector: Logistics
  - 1.6.1. Main Characteristics
  - 1.6.2. Keys Factors of Digitization
- 1.7. Digitalization of the Tertiary Sector: Tourism
  - 1.7.1. Main Characteristics
  - 1.7.2. Keys Factors of Digitization
- 1.8. Digitization of the Tertiary Sector: *Fintech*
  - 1.8.1. Main Characteristics
  - 1.8.2. Keys Factors of Digitization
- 1.9. Digitalization of the Tertiary Sector: Mobility
  - 1.9.1. Main Characteristics
  - 1.9.2. Keys Factors of Digitization
- 1.10. Future Technological Tendencies
  - 1.10.1. New Technological Innovations
  - 1.10.2. Application Trends





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*This Postgraduate Certificate will help you keep abreast of current and future technological trends. Enroll now”*

05

# Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.





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*TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”*

## The student: the priority of all TECH programs

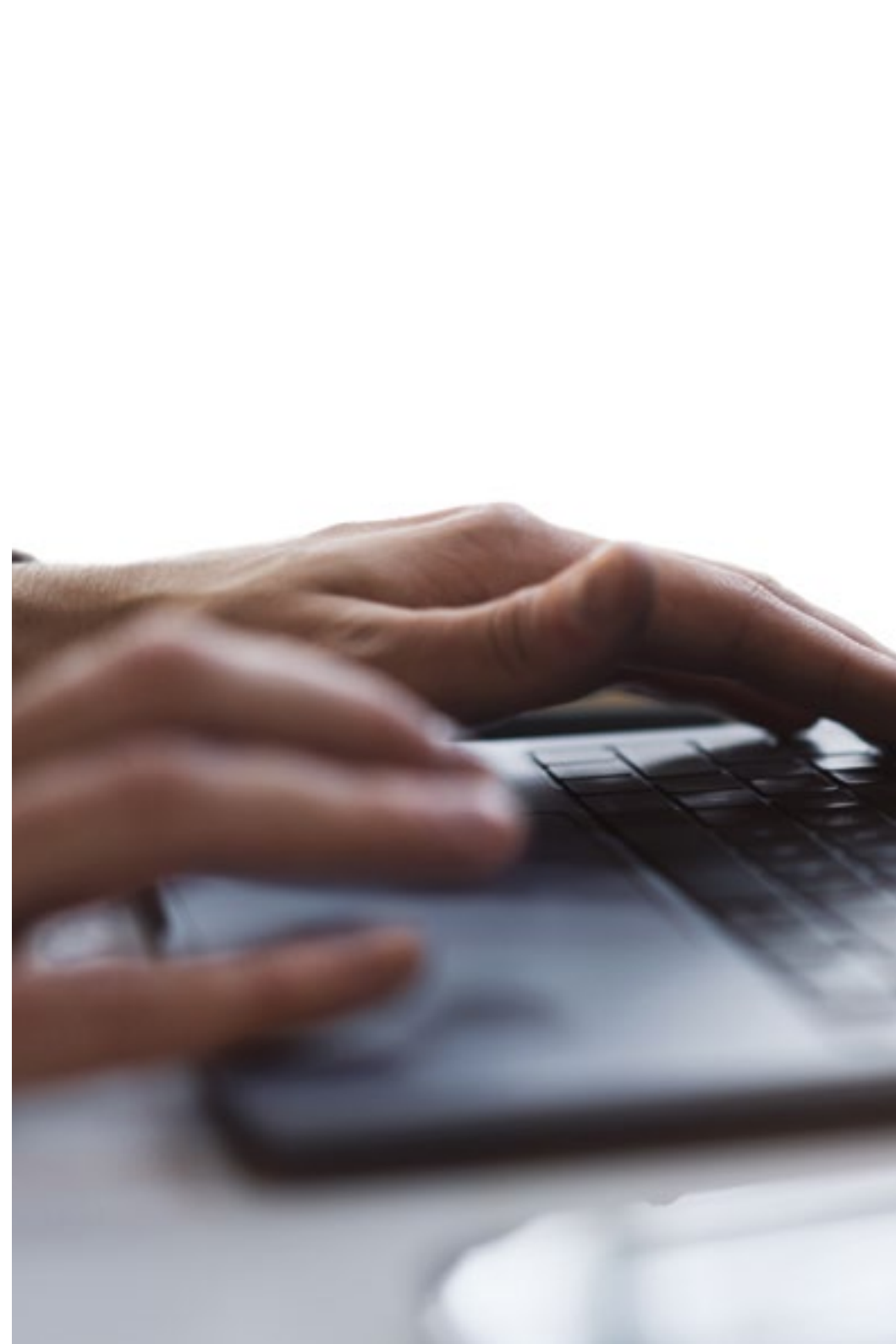
In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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*At TECH you will NOT have live classes  
(which you might not be able to attend)”*



### The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

“*TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want*”

## Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.





## Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

*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.*



## A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



*The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"*

### The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

### The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

*Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.*

*You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.*



As such, the best educational materials, thoroughly prepared, will be available in this program:



#### 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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



#### Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



#### Interactive Summaries

We present 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".

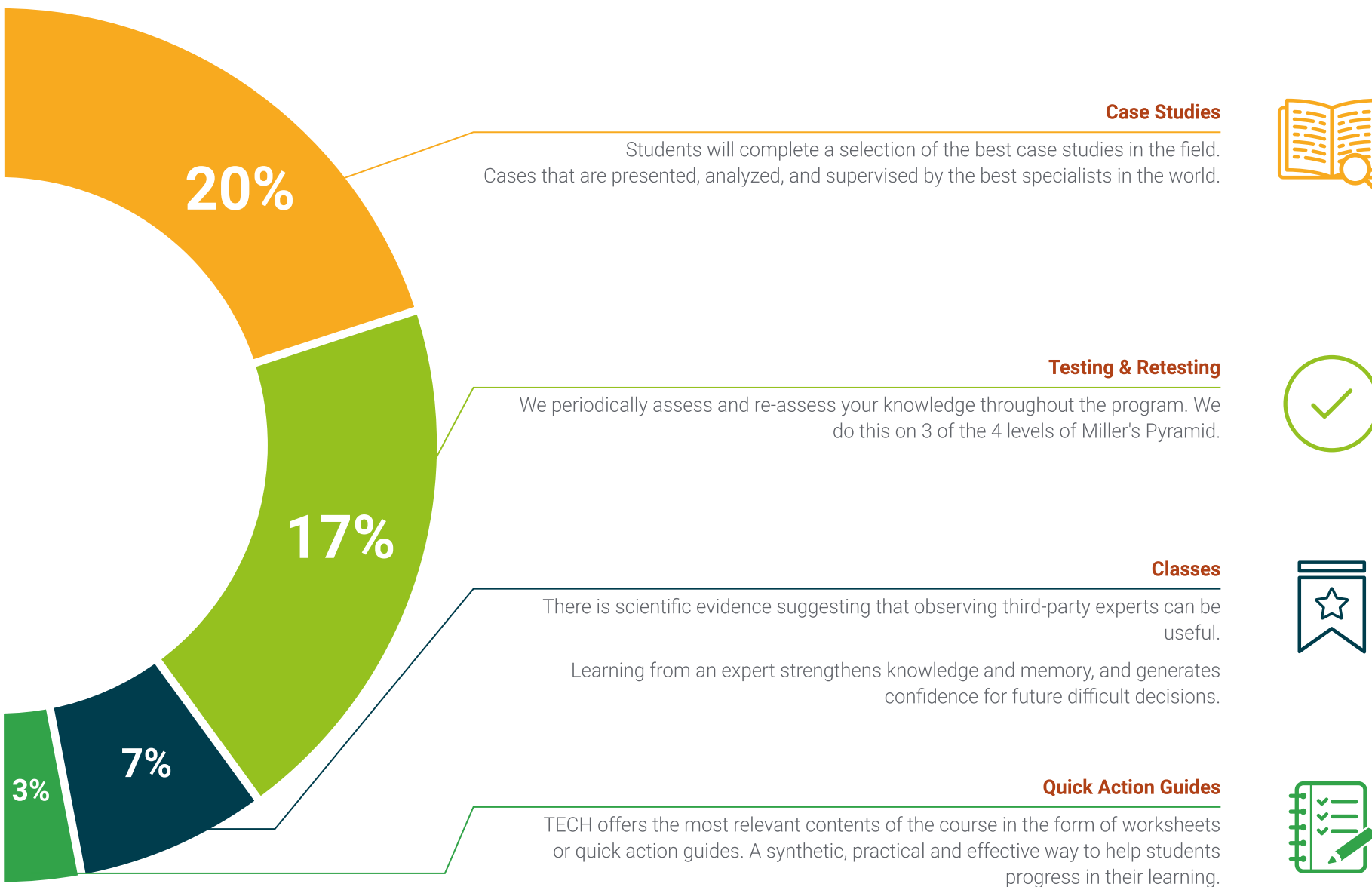


#### Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.







# 06 Certificate

The Postgraduate Certificate in Services and Solutions for the Digital Sector 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.



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

This private qualification will allow you to obtain a **Postgraduate Certificate in Services and Solutions for the Digital Sector 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** private qualification 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 Services and Solutions for the Digital Sector in Industry 4.0**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**







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