



# Postgraduate Certificate Virtual, Augmented and Mixed Reality

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

» Target Group: engineers, architects and graduates who want to learn and update themselves on the latest technological trends and digitalization processes that will help them lead technological innovation and business transformation

 $We b site: {\color{blue}www.techtitute.com/us/school-of-business/postgraduate-certificate/virtual-augmented-mixed-reality} \\$ 

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Certificate

# 01 **Welcome**

The professional use of industrial applications of Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality has led to the emergence of new business models, driving the improvement of production processes in many companies and industrial sectors. This type of work is also associated with an enrichment of the user experience in the performance and execution of any activity. If you want to become an expert in this sector, do not hesitate and enroll in this exciting program.







# tech 08 | Why Study at TECH?

#### At TECH Technological 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

+200

executives prepared each year

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.

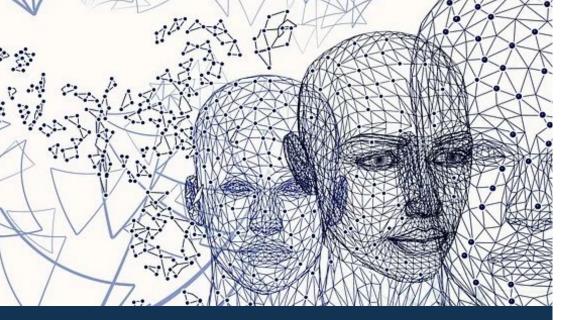
After completing this program, TECH helps students show the world their talent.



#### **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.



#### 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"

### Why Study at TECH? | 09 tech

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



#### **Analysis**

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



#### **Academic Excellence**

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



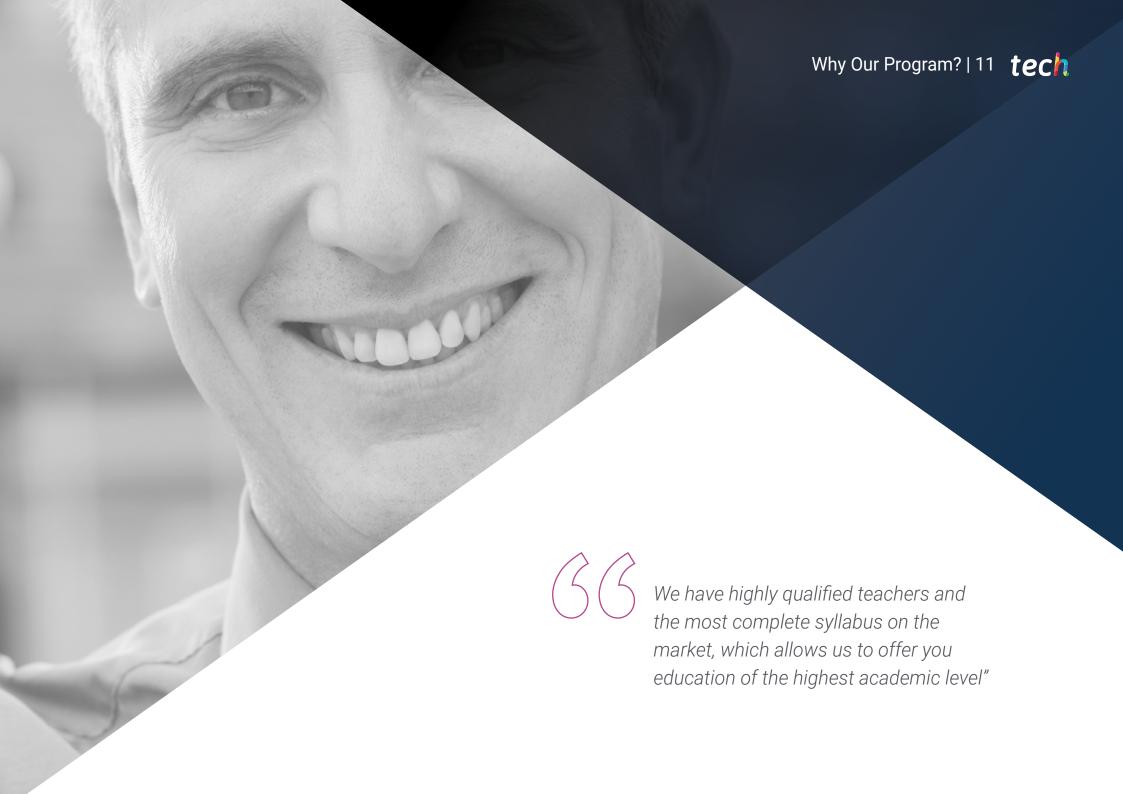
#### **Economy of Scale**

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



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.



# tech 12 | Why Our Program?

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



#### 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.



# 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.



#### 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.



### 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.



#### 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.



#### 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.



#### 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.



#### 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 Technological University community.

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





# tech 16 | Objectives

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

The **Postgraduate Certificate in Virtual, Augmented and Mixed Reality** trains students to:



Acquire expert knowledge on the characteristics and fundamentals of virtual reality, augmented reality and mixed reality, as well as their differences

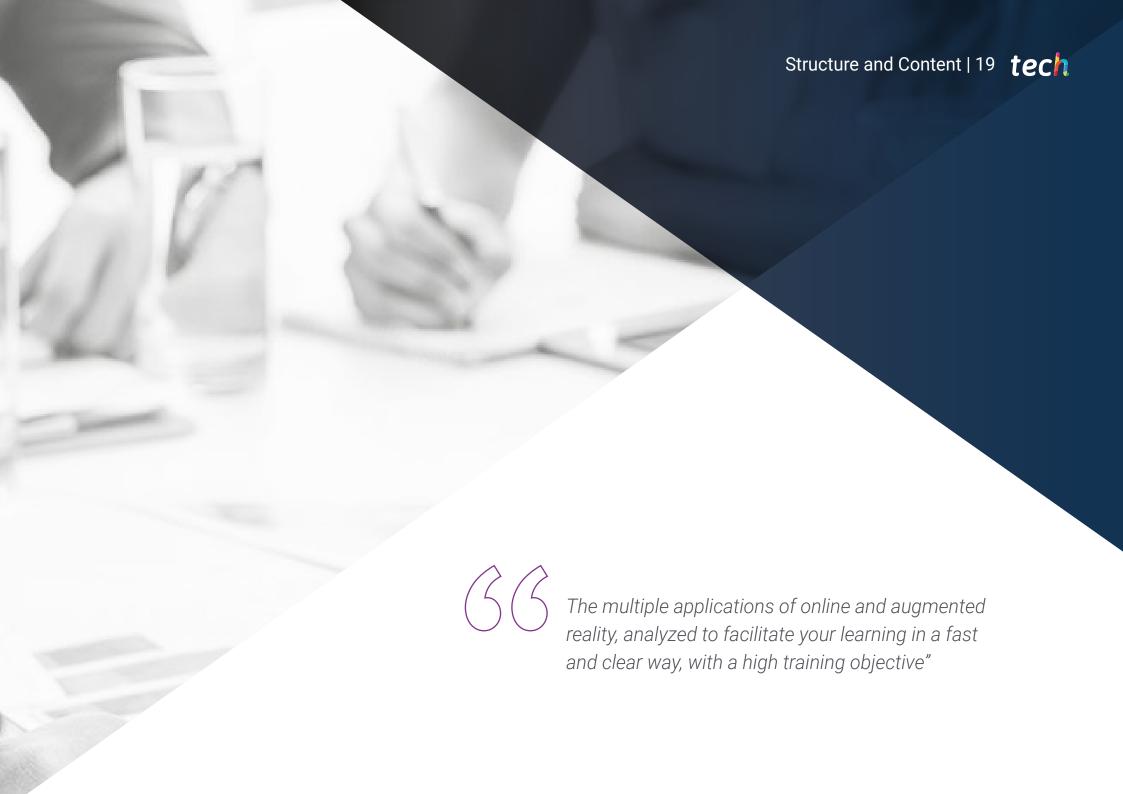




02

Use applications of each of these technologies and develop solutions with each of them individually and in an integrated manner, combining them to define immersive experiences





### tech 20 | Structure and Content

#### **Syllabus**

The Postgraduate Certificate in Virtual, Augmented and Mixed Reality of TECH Technological University is an intensive program updated to the current market reality and the new needs in digitization and automation, crisis management and incorporation of new exponential and emerging technologies.

During the Postgraduate Certificate you will not only delve into the theoretical study of Industry 4.0 and the sectorial solutions of application in relation to this field. In addition, real practices will be carried out with different technologies to enable you to be fully qualified.

Throughout 150 hours of study, students will study a multitude of practical cases through individual work, which will allow them to acquire the necessary skills to successfully develop in their daily practice. It is, therefore, a real immersion in real business situations.

This program deals in depth with different areas of the company and is designed for managers to understand project management from a strategic, international and innovative perspective.

A plan designed especially for students, focused on their professional improvement and that prepares to achieve excellence in the field of leadership and business management. A program that understands your needs and those of your company through innovative content based on the latest trends, and supported by the best educational methodology and an exceptional faculty, which will provide you with the skills to solve critical situations in a creative and efficient way.

This Postgraduate Certificate takes place over 6 weeks and it consists in 1 module:

Module 1

Virtual, Augmented and Mixed Reality



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

This Postgraduate Certificate takes place over 6 weeks and can be completed completely online, including attending our workshops and virtual conferences.

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

# tech 22 | Structure and Content

Module 1. Virtual, Augmented and Mixed Reality							
	Market and Tendencies Current Market Situation Reports and Growth by Different Industries	<b>1.2.</b> 1.2.1. 1.2.2.	Differences Between Virtual, Augmented and Mixed Reality Differences Between Immersive Realities Immersive Reality Typology		Virtual Reality Cases and Uses Origin and Fundamentals of Virtual Reality Cases Applied to Different Sectors and Industries	1.4.1.	Augmented Reality Cases and Uses Origin and Fundamentals of Augmented Reality Cases Applied to Different Sectors and Industries
<b>1.5.</b> 1.5.1. 1.5.2.	Mixed and Holographic Reality Origin, History and Fundamentals of Mixed and Holographic Reality Cases Applied to Different Sectors and Industries	<b>1.6.</b> 1.6.1. 1.6.2. 1.6.3.	Uses of 360 Images	<b>1.7.</b> 1.7.1. 1.7.2.	Virtual World Creation Platforms for the Creation of Virtual Environments Strategies for the Creation of Virtual Environments	1.8.1.	User Experience (UX) Components in the User Experience Tools for the Creation of User Experiences
1.9.1. 1.9.2.	Devices and Glasses for Immersive Technologies Device Typology on the Market Glasses and Wearables Functioning, Models and Uses Smart Glasses Applications and Evolution	1.10.1	Future Immersive Technologies . Tendencies and Evolution . Challenges and Opportunities				



The practical use of online and augmented reality in different s augmented reality in different sectors, developed in an efficient program that will allow you to act as a specialist"





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.



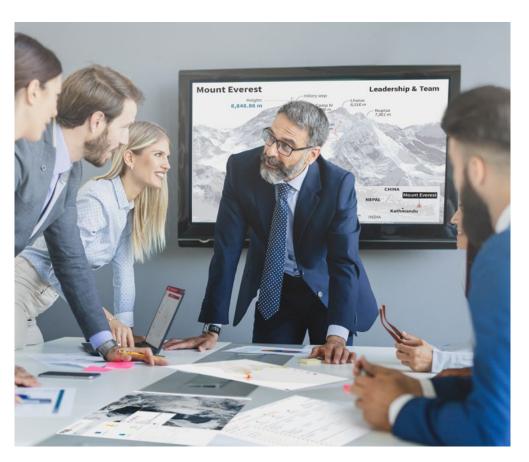


# tech 26 | Methodology

# 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.





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.

# tech 28 | Methodology

#### 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.



### Methodology | 29 tech

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.



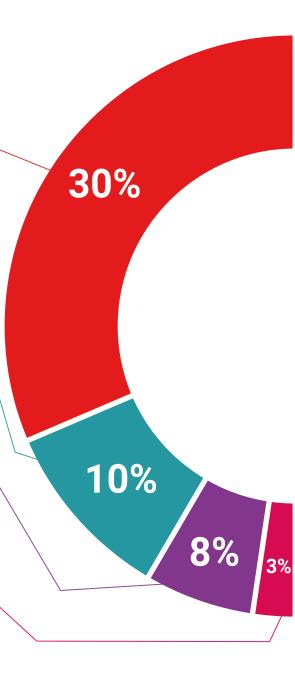
#### **Management Skills Exercises**

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.





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**

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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.

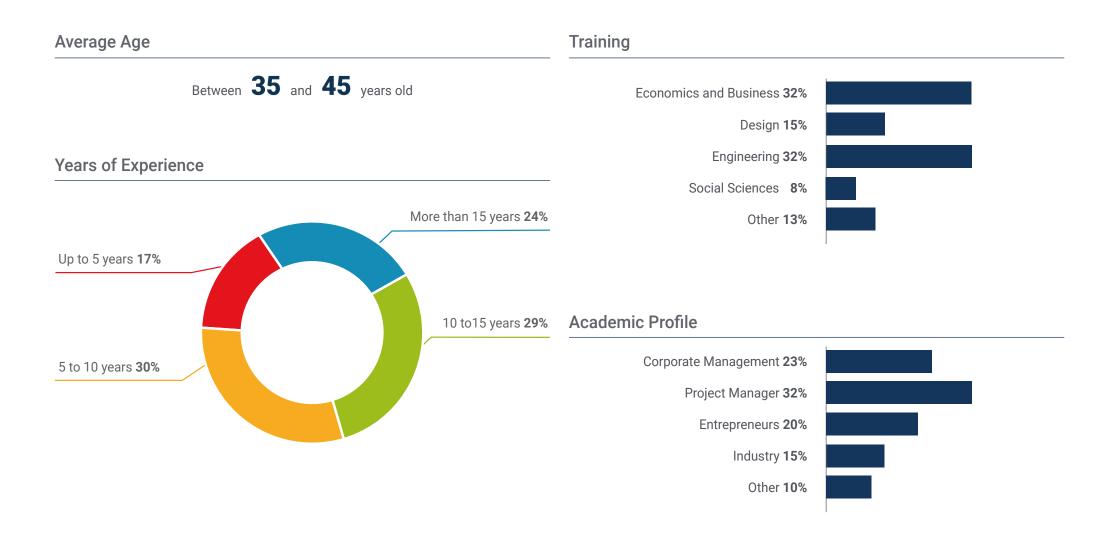


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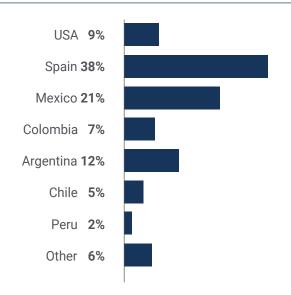




## tech 34 | Our Students' Profiles



### **Geographical Distribution**





# Lorenzo Armenteros Jorrín

**CEO Entrepreneurship** 

"This Postgraduate Certificate has opened up the possibility for me to give an incredible boost to the implementation of online reality in my company. It has been a great experience"





## Management



## Mr. Segovia Escobar, Pablo

- Industrial Engineer, Project Management Professional (PMP) por el Program Management Institute
- Master's Degree in Business Administration and Management
- Postgraduate in Strategic Management Function
- Sales Manager and Program Manager with extensive experience (more than 12 years) in project management
- Current commercial manager of the Aftermarket and Industry 4.0 area applied to the support of systems at Indra



## Course Management | 39 tech

#### **Professors**

#### Mr. Diezma López, Pedro

- Entrepreneur, writer, TEDx speaker and expert in emerging and exponential technologies
- ◆ Founder of the technology companies Acuilae (Artificial Intelligence), Ethyka and Zerintia Technologies
- ◆ Wearable "Best Initiative" Award in eHealth 2017 and "Best Technological "Solution" 2018 for occupational safety
- ◆ One of the world's leading experts (Source: Onalytica) in Wearable Technology and Internet of Things





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

The Postgraduate Certificate in Virtual, Augmented and Mixed Reality is an intensive, high-value program aimed at improving students' job skills in an area of broad competence. Undoubtedly, it is a unique opportunity to improve professionally, but also personally, as it involves effort and dedication.

Those who wish to improve themselves, achieve a positive change at a professional level and interact with the best, will find their place at TECH.

With the highest academic standards, this program will lead your career to success.

This Postgraduate
Certificate is an
invaluable opportunity
to acquire the essential
skills in digitization in the
Industry 4.0 environment.

### **Time of Change**



### Type of Change

Internal Promotion 33%
Change of Company 39%
Entrepreneurship 28%

## Salary Increase

This program represents a salary increase of more than **25.22%** for our students.

\$57,900

A salary increase of

25.22%

\$75,500





## tech 46 | Benefits for Your Company

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



### 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.



## 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.



## **Building agents of change**

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



## Increased international expansion possibilities

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







## **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.



## Increased competitiveness

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





## tech 50 | Certificate

This **Postgraduate Certificate in Virtual, Augmented and Mixed Reality** 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 diploma 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 Virtual, Augmented and Mixed Reality Official N° of Hours: **150 h**.



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



# Postgraduate Certificate Virtual, Augmented and Mixed Reality

» Modality: online

» Duration: 6 weeks

» Certificate: **TECH Technological University** 

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

