Postgraduate Certificate

Robotics, Drones and Augmented Workers

tech technological university

tech technological university

Postgraduate Certificate

Robotics, Drones and Augmented Workers

- Modality: **online**
- Duration: **8 weeks**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/pk/information-technology/postgraduate-certificate/robotics-drones-augmented-workers

Index

01

Introduction

Robots, drones and Augmented Workers are tools increasingly used in companies in different sectors of activity to facilitate the performance of tasks and optimize productivity. As a result, computer scientists specialized in the design, development and maintenance of these devices are essential to meet the technological demands of companies. For this reason, TECH Technological University has carried out this program, which provides students with a deep knowledge of Robotics and the operation of autonomous vehicles to boost their professional growth in this sector. All this, 100% online and without the need to leave your own home.

Learn, through this Postgraduate Certificate, the keys to undertake the design and development of the most advanced industrial robots"

The unstoppable digital development has led many companies to incorporate new technologies into their production processes to reduce costs and streamline a wide range of tasks. Along these lines, the demand for tools such as robots, drones or Augmented Workers is increasing in areas such as industry, logistics management, mapping or healthcare. Therefore, computer scientists with high skills in the design, creation and continuous monitoring of these devices have high career prospects in the short, medium and long term.

Faced with this situation, TECH has focused its efforts on creating this program, which offers students a complete specialization in the field of Robotics, Drones and Augmented Workers to promote their development in this growing sector. Through 6 intensive weeks of learning, you will be able to delve into the operability of simulators and cobots, as well as the design and operation of drones and autonomous vehicles. Likewise, you will master the phases for the prototyping of these devices.

Thanks to the fact that this Postgraduate Certificate is taught through a completely online modality, students will be able to develop their own study schedules in order to enjoy effective teaching. In the same way, this program is designed and developed by the best specialists in the area of Digital Transformation and technology project management. Therefore, the knowledge that you will assimilate will preserve full applicability in your professional experiences.

This **Postgraduate Certificate in Robotics, Drones and Augmented Workers** contains the most complete and up-to-date program on the market. The most important features include:

- Practical cases presented by experts in digital Transformation
- 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 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

the program enables you to delve into the operation of drones and autonomous vehicles used in different sectors of activity"

Specialize in Robotics, Drones and Augmented Workers in only 150 hours and with the best study facilities in the pedagogical panorama"

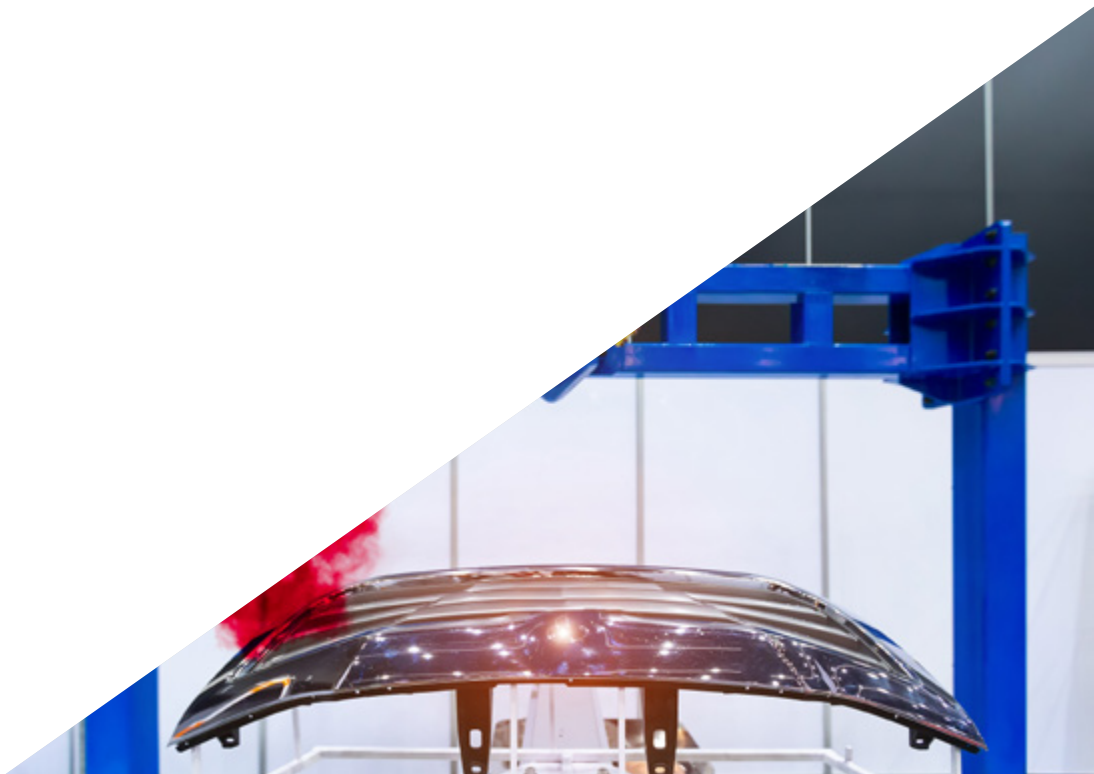
Learn in a resolute and enjoyable way through comprehensive videos and evaluative exercises.

Thanks to this Postgraduate Certificate, you will learn about the different prototyping phases of robots and drones used in the business environment.

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 educational year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.



02

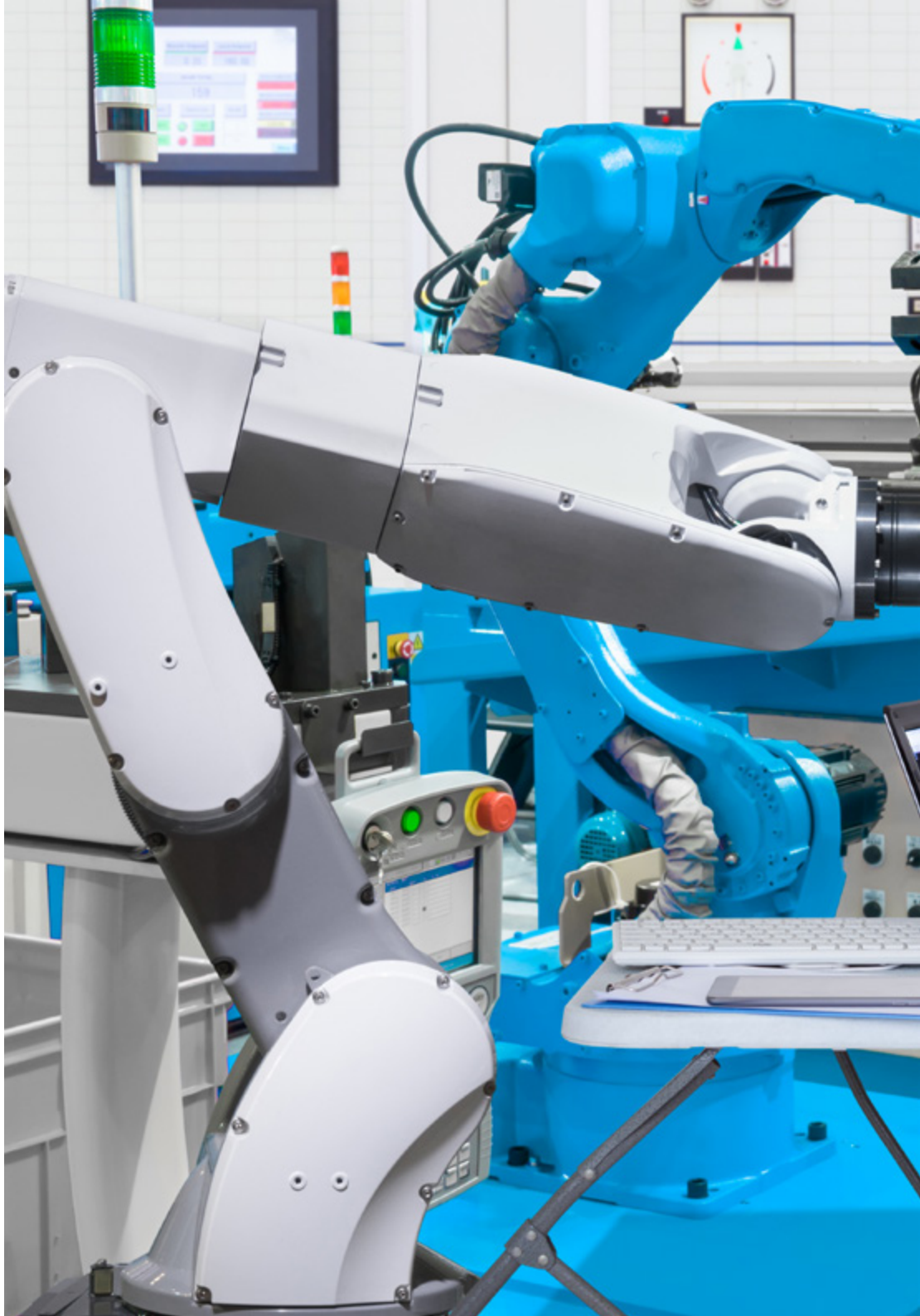
Objectives

This Postgraduate Certificate has been developed to provide the student with the most up-to-date and relevant knowledge regarding the use of robots, drones and Augmented Workers in the business world. In this way, it will delve into its different applications and analyze its impact on the optimization of the industrial production process. In addition, it will ensure your learning by following the objectives that TECH has outlined for this program.

Expand your career prospects as a computer scientist by specializing in the design and operation of robots, drones and Augmented Workers"

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

- Delve into the main automation and control systems, their connectivity, the types of industrial communications and the type of data they exchange
- Deepen the understanding of the main automation and control systems, their connectivity, the types of industrial communications and the type of data they exchange
- Be able to deal with large amounts of data, define their analysis and derive value from them
- Define continuous monitoring, predictive and prescriptive maintenance models

Through this program, you will delve into the design and control of industrial automation systems"

03

Course Management

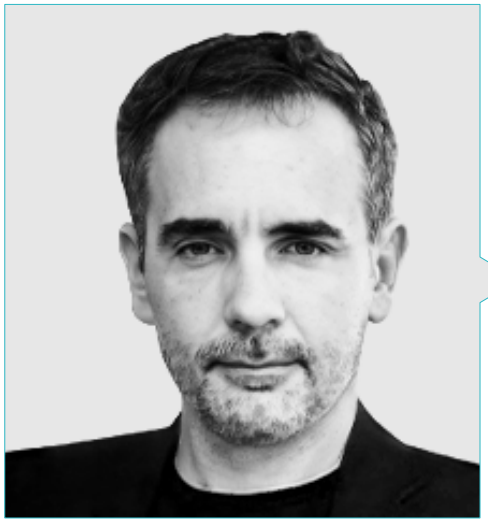
Motivated by TECH's relentless commitment to raising the quality of its programs, the faculty of this program is composed of professionals with extensive experience in Digital Transformation and technology project management. These experts, who are actively practicing in these fields, are in charge of preparing the Postgraduate Certificate's didactic materials. Therefore, the contents that the student will receive will be in tune with the most current challenges of the sector.

In order to provide you with the most professionally applicable knowledge, this Postgraduate Certificate is taught by experts in the field of Digital Transformation for companies"

Management

Mr. Segovia Escobar, Pablo

- Chief Executive of the Defense Sector in the Company Tecnobit of the Oesía Group
- Project Manager at Indra
- Master's Degree in Business Administration and Management from the National University of Distance Education
- Postgraduate in Strategic Management Function
- Member of the Spanish Association of People with High Intellectual Quotient



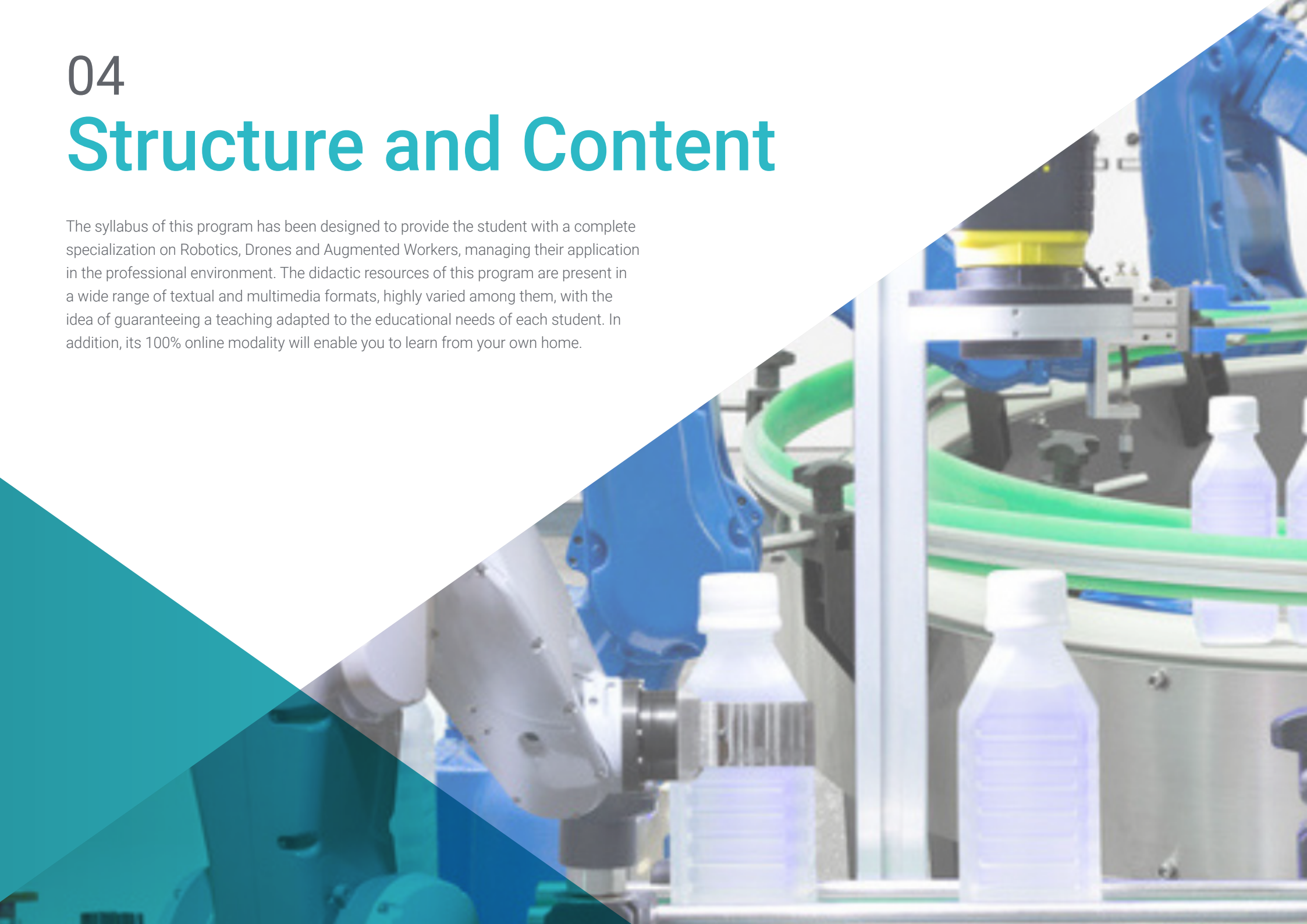
Mr. Diezma López, Pedro

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

04

Structure and Content

The syllabus of this program has been designed to provide the student with a complete specialization on Robotics, Drones and Augmented Workers, managing their application in the professional environment. The didactic resources of this program are present in a wide range of textual and multimedia formats, highly varied among them, with the idea of guaranteeing a teaching adapted to the educational needs of each student. In addition, its 100% online modality will enable you to learn from your own home.



Choose the didactic formats that best suit your educational needs and optimize your learning process"

Module 1. Robotics, Drones and *Augmented Workers*

1.1. Robotics
- 1.1.1. Robotics, Societies and Cinema
- 1.1.2. Components and Parts of Robot

1.2. Robotics and Advanced Automation: Simulators, Cobots
- 1.2.1. Transfer of Learning
- 1.2.2. Cobots and Case Uses

1.3. RPA (Robotic Process Automatization)
- 1.3.1. Understanding RPA and its Functioning
- 1.3.2. RPA Platforms, Projects and Roles

1.4. Robot as a Service (RaaS)
- 1.4.1. Challenges and Opportunities for Implementing RaaS Services and Robotics in Enterprises
- 1.4.2. Operation of a Raas system

1.5. Drones and Automated Vehicles
- 1.5.1. Components and Drones Operation
- 1.5.2. Uses, Types and Applications of Drones
- 1.5.3. Evolution of Drones and Autonomous Vehicles

1.6. The Impact of 5G
- 1.6.1. Evolution of Communications and Implications
- 1.6.2. Uses of 5G Technology

1.7. Augmented Workers
- 1.7.1. Human-Machine Integration in Industrial Environments
- 1.7.2. Challenges in Worker-Robot Collaboration

1.8. Transparency, Ethics and Traceability
- 1.8.1. Ethical Challenges in Robotics and Artificial Intelligence
- 1.8.2. Monitoring, Transparency and Traceability Methods

1.9. Prototyping, Components and Evolution
- 1.9.1. Prototyping Platforms
- 1.9.2. Phases to Make a Prototype

1.10. Robotics Future
- 1.10.1. Trends in Robotization
- 1.10.2. New Types of Robots

Thanks to the 100% online mode of this program, you will become a specialist in Robotics, Drones and Augmented Workers without depending on pre-established schedules"

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

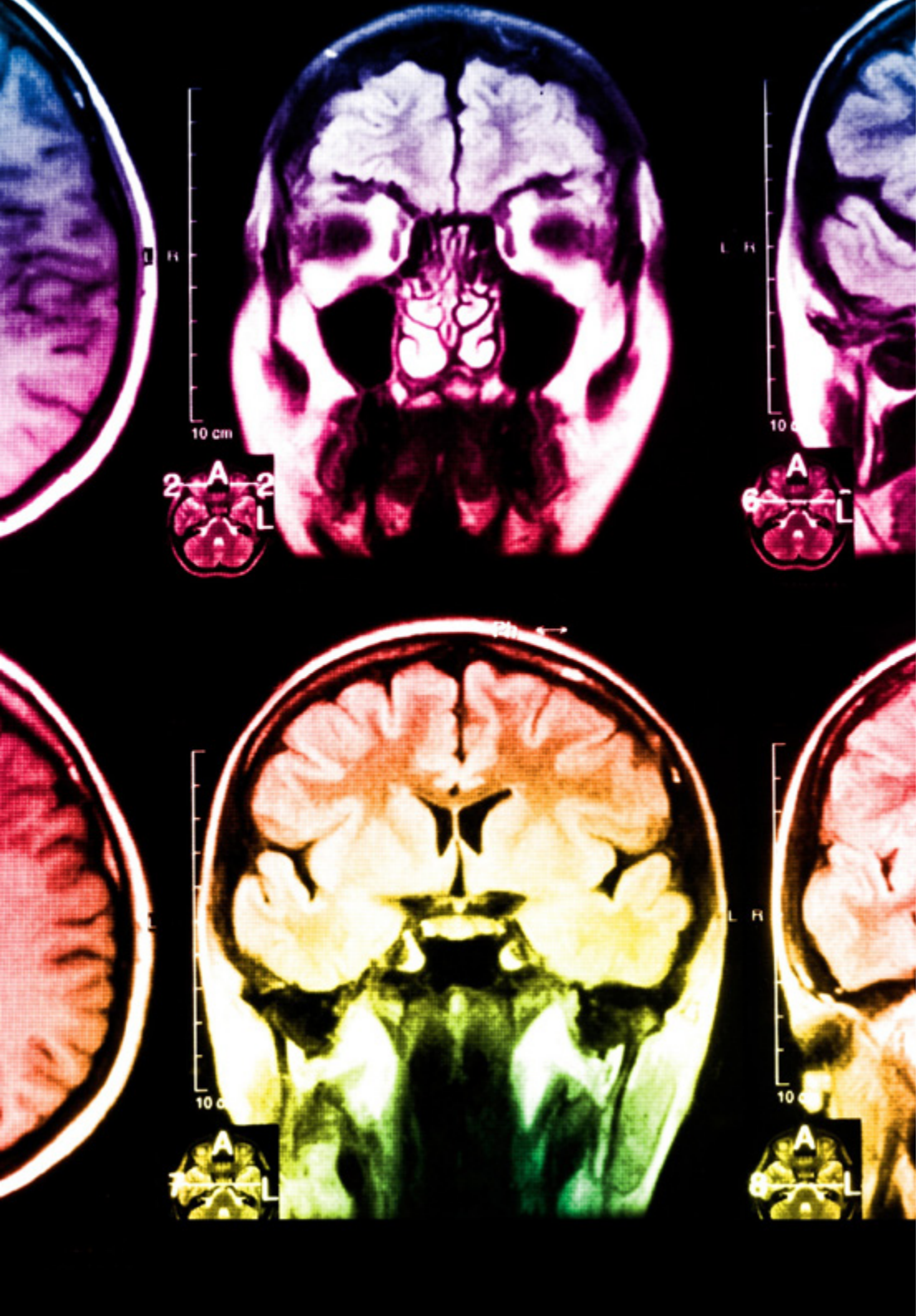
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

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.

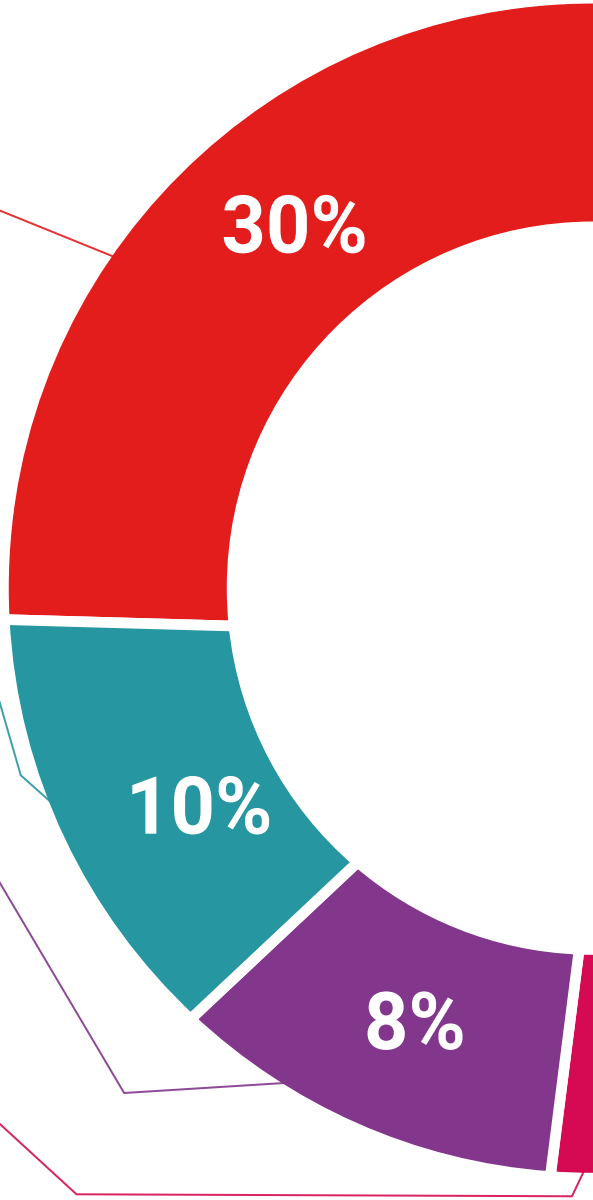
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

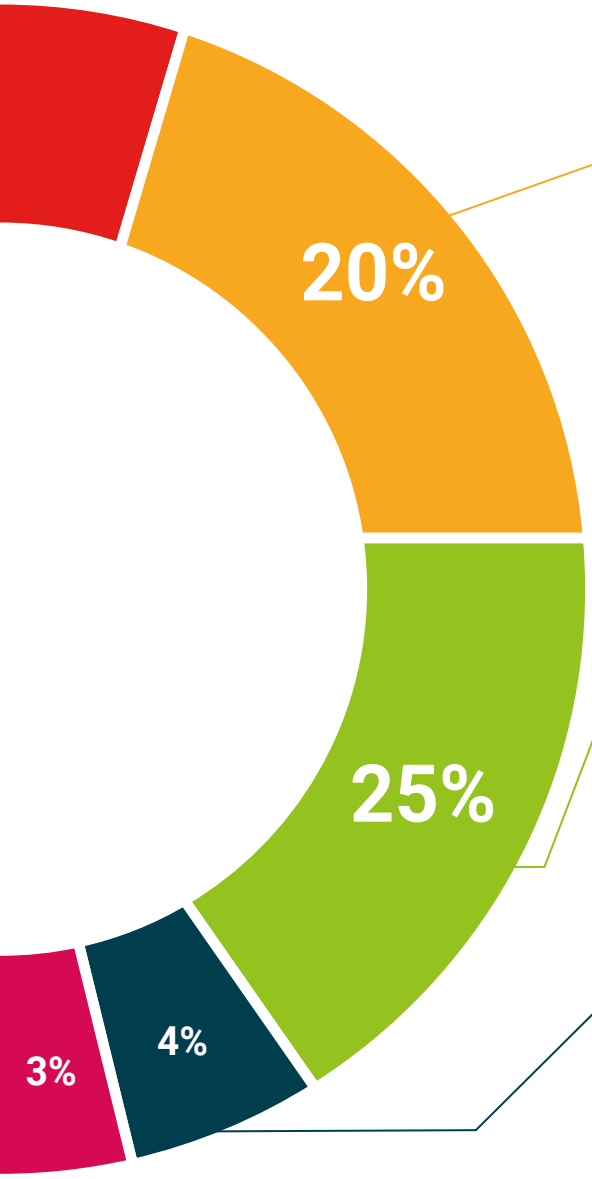
Practising Skills and Abilities

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 Robotics, Drones and Augmented Workers guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

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

This **Postgraduate Certificate in Robotics, Drones and Augmented Workers** 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 Robotics, Drones and Augmented Workers**

Official Nº of Hours: **150 h.**


tech technological university

Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Robotics, Drones and Augmented Workers

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

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.

tech technological university

Postgraduate Certificate

Robotics, Drones and Augmented Workers

- Modality: **online**
- Duration: **8 weeks**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Postgraduate Certificate

Robotics, Drones and Augmented Workers

tech technological university