

Postgraduate Certificate

Airport strategy and
commissioning of
a new airport



Postgraduate Certificate

Airport strategy and commissioning of a new airport

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

Website: www.techtitute.com/pk/engineering/postgraduate-certificate/airport-strategy-commissioning-new-airport

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01

Introduction

The 9/11 attacks marked a turning point in civil aviation and the security measures implemented for both aircraft and airport infrastructures. For this reason, from the conception of new facilities, their remodeling or in the daily management, both the existing regulations and the indispensable elements to guarantee them are taken into account. For this reason, the engineers must be aware of the evolution in the attacks suffered, as well as the corrections made in equipment, as well as in the air cargo or in the aircraft themselves. Thus, this 100% online program was born, which offers students a unique learning opportunity in this field through a syllabus prepared by real specialists in the sector.



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Enroll now in a 100% online Postgraduate Certificate that will allow you to update your knowledge in Airport strategy and commissioning of a new airport”

In the development of the aeronautical sector, it has had to face numerous challenges that go beyond aerodynamics or the reduction of polluting gas emissions into the atmosphere. The acts of hijacking of airplanes or attacks as transcendental for the world as the one that happened in the United States in 2001 have led to a continuous evolution and adaptation of security measures both in the airlines themselves and in the equipment and facilities.

A reality, where the engineering professional contributes an essential value in the design and planning of airport infrastructures, manufacture and maintenance of aircrafts. A deep knowledge that will be easier to obtain thanks to this Postgraduate Certificate in Airport strategy and commissioning of a new airport of only 6 weeks of duration.

It is an academic itinerary of 150 teaching hours that brings together the most important information on national and international regulations on security, how to integrate it into the different airports and airlines, as well as the promotion of security culture and the involvement of all industry players.

An advanced syllabus that is complemented with video summaries, specialized readings and scenario simulations, available 24 hours a day, from an electronic device with an Internet connection. In addition, thanks to the *Relearning* method, based on the reiteration of key concepts, students will not invest a large number of hours of study time. of study hours.

TECH offers a unique opportunity to obtain a first class education through a flexible program. The fact is that, with no classroom attendance or fixed class schedules, the graduates will have greater autonomy to manage their time to access the program and reconcile their professional and/or personal activities with a quality academic proposal.

This **Postgraduate Certificate in Airport strategy and commissioning of a new airport** contains the most complete and up-to-date program on the market. The most important features include:

- ◆ Development of case studies presented by experts in Aeronautical Engineering
- ◆ 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



A unique, key, and decisive educational experience to boost your professional development”

“

An academic itinerary of 150 hours of the most relevant information on special measures and regulations of reference in Airline Security”

The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will provide the professionals with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professionals must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned experts.

Do you want to be aware of the promotion of safety culture and its promotion in the aeronautical sector? Do it now with this Postgraduate Certificate.

With this program, delve into the influence of safety in the design of airports and integrate it into your engineering practice.



02

Objectives

TECH provides the graduates with first level pedagogical tools that will allow them, throughout 6 weeks, to increase their knowledge on Security against Unlawful Acts against Civil Aviation and integrate it in their future professional projects. In this way, this academic institution provides an education with a theoretical-practical perspective that will lead the engineers to enhance, in a short time, their skills and abilities in this booming sector.





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The simulated scenarios in this program will allow you to learn the methods used to ensure quality in the application of safety”



General Objectives

- ◆ Provide the professionals with the specific and necessary knowledge to perform, with a critical and informed opinion, in any phase of planning, design, manufacture, construction or operation in the various companies of the aviation sector
- ◆ Identify the problems in aeronautical designs and projects in order to know how to propose effective, viable and sustainable overall solutions
- ◆ Acquire the fundamental knowledge of existing technologies and innovations under development in transport systems, in order to be able to conduct research, development and innovation studies in aeronautical companies and technology centers
- ◆ Analyze the main conditioning factors involved in the aeronautical activity and how to efficiently apply the latest techniques used in the aviation sector today
- ◆ Acquire a specialized approach and be able to monitor the management of any aeronautical department, as well as to execute the general management and the technical management of designs and projects
- ◆ Delve into the knowledge of the different critical aeronautical areas according to their different relevant actors, as well as achieve the knowledge, understanding and ability to apply the applicable aeronautical or non-aeronautical legislation and regulations





Specific Objectives

- ◆ Examine the structure of the airport industry, as well as its operating environment
- ◆ Identify the functional elements of the airport infrastructure
- ◆ Analyze airport business and strategic planning in airports
- ◆ Generate specialized knowledge on the key concepts associated with traffic demand analysis and airport capacity calculation
- ◆ Establish measures to avoid airport congestion
- ◆ Planning the treatment of stakeholders involved in airport operations
- ◆ Understand the airport certification process
- ◆ Establish the framework for airport economic regulation
- ◆ Develop the operational transition process for new infrastructures

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Scenario simulations will allow you to integrate existing methodologies for calculating airport capacity”

03

Course Management

Students who access this Postgraduate Certificate will have at their disposal a syllabus prepared by distinguished professionals within the aeronautical and airport sector. Their excellent knowledge of this industry is a guarantee for the graduate who seeks to obtain the most current information on Security through the best experts. In addition, thanks to their proximity, you will be able to resolve any questions you may have about the content of this program.





“

TECH has selected a unique faculty with accumulated experience in the aeronautical sector that are a guarantee for the students”

Management



D. Torrejón Plaza, Pablo

- ♦ Engineering Technician at ENAIRE
- ♦ Head of the Regulatory Unit of the National Airports Autonomous Organization
- ♦ Head of the Analysis Section of the National Airports Autonomous Organization Cabinet of the General Director
- ♦ Head of the Operations Section, Head of the Airport Security Office and Service Executive at Tenerife Sur Airport
- ♦ Head of the Procedures and Organization Section in the Office of the General Director of Aena Airports
- ♦ Head of the Programming Department and in the Office of the President of Aena
- ♦ Head of the Institutional Coordination and Parliamentary Affairs Division
- ♦ Associate Professor and Collaborator in the Aeronautical Management Degree at the Universidad Autónoma de Madrid
- ♦ Head of the Regulatory Unit of the National Airports Autonomous Organization
- ♦ Head of the Analysis Section of the National Airports Autonomous Organization Cabinet of the General Director
- ♦ Head of the Operations Section, Head of the Airport Security Office and Service Executive at Tenerife Sur Airport
- ♦ Master's Degree in Airport Systems from the Polytechnic University of Madrid
- ♦ Master in Organizational Management in Knowledge Economy from the Universitat Oberta de Catalunya (Open University of Catalonia)
- ♦ Master's Degree in Executive MBA from the Instituto de Empresa in Madrid
- ♦ Aerospace Engineer from the University of León
- ♦ Aeronautical Technical Engineer by Universidad Politécnica de Madrid
- ♦ Aeronautical Manager from the Autonomous University of Madrid
- ♦ Honorary decoration "Alférez Policía Nacional del Perú Mariano Santos Mateos gran General de la Policía Nacional del Perú" for exceptional services in aeronautical consultancy and training



Professors

Dr. Rodríguez Sanz, Álvaro

- ◆ Aeronautical Operations and Services Technician in the Direct and Special Plans Division of Aena's Airport Planning and Regulatory Control Directorate
- ◆ Engineer and project manager at ENAIRE's air traffic management research and development subsidiary (CRIDA)
- ◆ Participant as researcher in European Union projects associated with the Horizon 2020 program
- ◆ Strategic planning and route and market development analyst for LATAM airline
- ◆ Consultant engineer for airport and air transport projects at INECO, a company attached to the Ministry of Transport, Mobility and Urban Agenda
- ◆ Associate Professor in the Department of Aerospace Systems, Air Transport and Airports at the Polytechnic University of Madrid
- ◆ PhD in Aerospace Engineering from the Polytechnic University of Madrid
- ◆ Master's Degree in Airport Planning and Management, Cranfield University
- ◆ Winner of the Madrid City Council Talent and Technology Award, 2022 edition, for the best doctoral thesis in the Research and Technological Development category
- ◆ Winner of the Luis Azcárraga Award of the XXV edition of the ENAIRE Foundation Awards, call 2020, in recognition of research and technological innovation in aerospace matters
- ◆ Winner of the Aeronautical Innovation Award 2020 of the Official College of Aeronautical Engineers of Spain (COIAE)

04

Structure and Content

The academic itinerary of this Postgraduate Certificate leads students to know in detail all the material and human safety elements that influence Civil Aviation and the design of airport infrastructures. To this end, not only does it have an advanced syllabus, but the graduates also have access to numerous additional materials integrated in a very complete Virtual Library, accessible 24 hours a day, from an electronic device with Internet connection.



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An advanced syllabus on Airport Strategy and commissioning of a new airport based on the most comprehensive and up-to-date information”

Module 1. Airport strategy and commissioning of a new airport

- 1.1. Airports within the transportation system
 - 1.1.1. The airport as a fundamental node
 - 1.1.2. The structure of the airport industry
 - 1.1.3. The airport operating environment
- 1.2. Physical characteristics of the Infrastructure
 - 1.2.1. The movement area of an aerodrome
 - 1.2.2. Passenger terminal buildings
 - 1.2.3. Ancillary facilities for airport activities
- 1.3. Business models and airport strategy
 - 1.3.1. Airport business and operating models
 - 1.3.2. Commercial activity
 - 1.3.3. Development of new routes
- 1.4. Airport Demand Analysis
 - 1.4.1. Air Transport Demand
 - 1.4.2. Variables involved in demand analysis
 - 1.4.3. Fundamental methodologies for airport traffic forecasting
- 1.5. Airport Capacity Analysis
 - 1.5.1. Airport infrastructure capacity
 - 1.5.2. Variables involved in airport capacity
 - 1.5.3. Fundamental methodologies for calculating airport capacity
- 1.6. Congestion, delay and capacity-demand management
 - 1.6.1. Quality of service and delay
 - 1.6.2. Strategies for airport capacity and demand management
 - 1.6.3. Slot coordination





Check-in E

- 1.7. Stakeholders in the airport environment
 - 1.7.1. Identification of stakeholders
 - 1.7.2. Characterization of stakeholders
 - 1.7.3. Stakeholder management and treatment
- 1.8. Aerodrome certification
 - 1.8.1. The Importance of Aerodrome Certification
 - 1.8.2. The aerodrome certification process
 - 1.8.3. Aeronautical safety studies
- 1.9. Airport economic regulation
 - 1.9.1. Airport economic regulation models
 - 1.9.2. Performance measures and airport *benchmarking*
 - 1.9.3. Airport competition and the role of Marketing
- 1.10. Start-up of a new airport and operational transition
 - 1.10.1. The chain of actions in a new airport infrastructure
 - 1.10.2. Start-up of a new infrastructure
 - 1.10.3. Operational transition and systems integration

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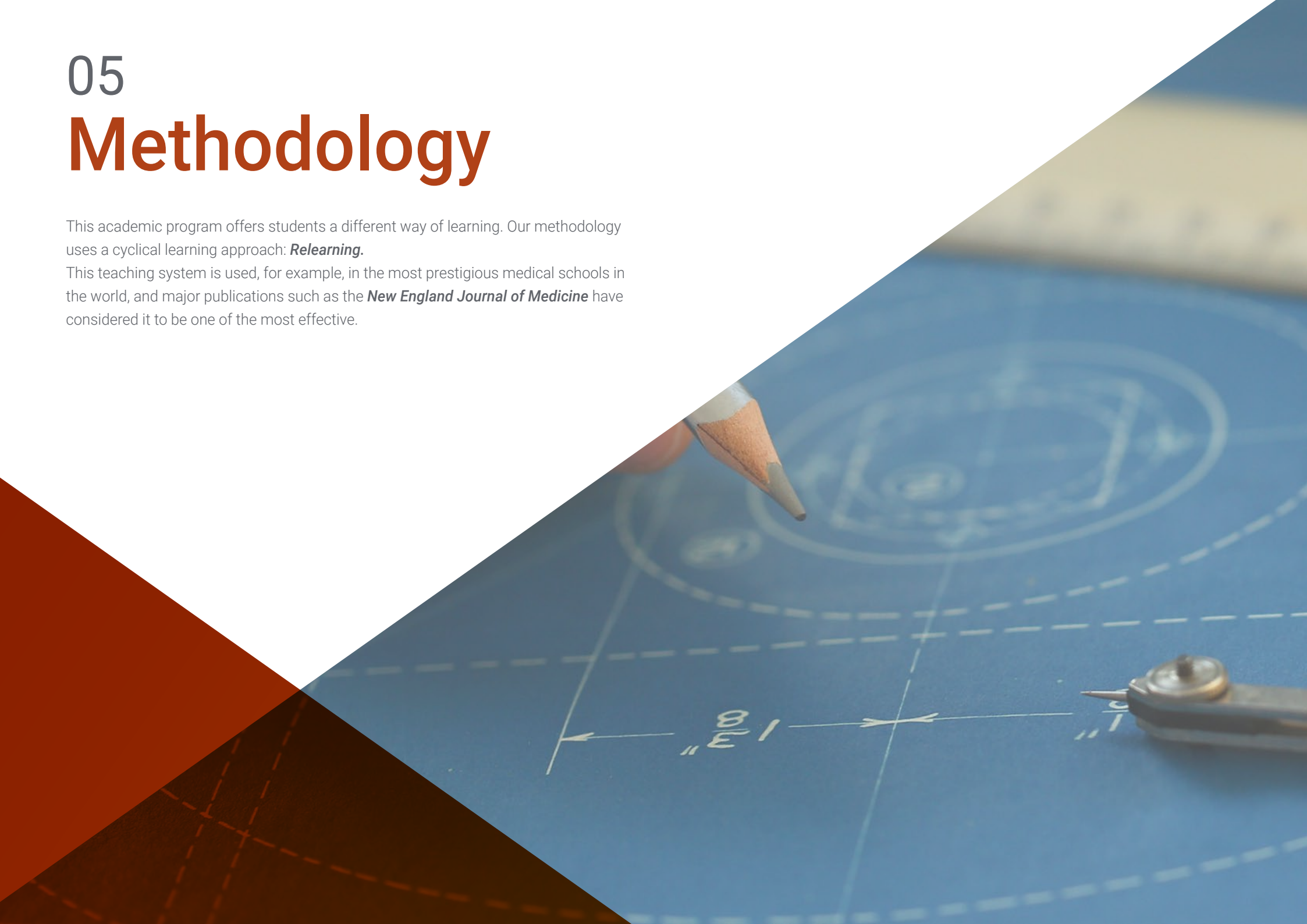
Thanks to this university program, you will be aware of the entire process required for aerodrome certification”

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 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 Airport Strategy and the commissioning of a new airport 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 Airport strategy and commissioning of a new airport** contains the most complete and up-to-date scientific 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 Airport strategy and commissioning of a new airport**

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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