

# Postgraduate Certificate Business Intelligence Solutions



## Postgraduate Certificate Business Intelligence Solutions

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online
- » Target Group: computer engineers who wish to reorient their work towards the world of data analytics and business intelligence, or established professionals in this field who need to update, delve deeper and improve their skills and knowledge

Website: [www.techtute.com/us/school-of-business/postgraduate-certificate/business-intelligence-solutions](http://www.techtute.com/us/school-of-business/postgraduate-certificate/business-intelligence-solutions)

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# 01

# Welcome

Having tools that support business environments has been the main reason why business intelligence systems have been created. Knowledge of the different mechanisms available for data analysis is therefore essential to be able to draw the best conclusions in order to increase a company's profits. Therefore, BI allows the professional to know the keys to make his company progress quickly and taking into account the risks that may arise. This program will evaluate this and other points of interest for the student's professional development, generating specialized knowledge in the presentation of the most advanced technological solutions, widely spread, that make up the current BI ecosystem.



Postgraduate Certificate in Business Intelligence Solutions.  
TECH Technological University



“

*In order to be a BI specialist you need to know in depth the differences between the different paradigms of information storage, Data Lake, Data Warehouse and Data Mar, and this program provides them in a simple way, through a 100% online learning system"*

02

# Why Study at TECH?

TECH is the world's largest 100% online business school. It is an elite business school, with a model based on the highest academic standards. A world-class center for intensive managerial skills education.



“

*TECH is a university at the forefront of technology, and puts all its resources at the student's disposal to help them achieve entrepreneurial success"*

## 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**

executives prepared each year

**+200**

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.





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



### Analysis

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



### Academic Excellence

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TECH offers students the best online learning methodology. The university combines the Relearning method (postgraduate learning methodology with the best international valuation) with the Case Study. Tradition and vanguard in a difficult balance, and in the context of the most demanding educational itinerary.



### 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 groundbreaking price**. This way, TECH ensures that studying is not as expensive for students as it would be at another university.



### 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"*

03

# Why Our Program?

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.



“

*We have highly qualified teachers and the most complete syllabus on the market, which allows us to offer you education of the highest academic level”*

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

**01**

### 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.*

**02**

### 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.*

**03**

### 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.*

**04**

### 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.*

05

### 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.*

06

### 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.*

07

### 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.*

08

### 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.*

# 04 Objectives

TECH has created this postgraduate certificate in Business Intelligence Solutions to ensure that students achieve their professional goals, helping them to strengthen their knowledge in this field. Throughout the 150 hours of learning that this program consists of, the professional will be able to delve into the concepts of the phases of the data life cycle, the differences between storage paradigms and the different structured, semi-structured and unstructured formats. Therefore, this program will prepare you to meet all your personal objectives.



“

*This program will enable you to position yourself as an expert in business intelligence solutions, preparing you to make the best proposals in economic and business matters to any company and organization"*

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

The **Postgraduate Certificate in Business Intelligence Solutions** will enable students to:

01

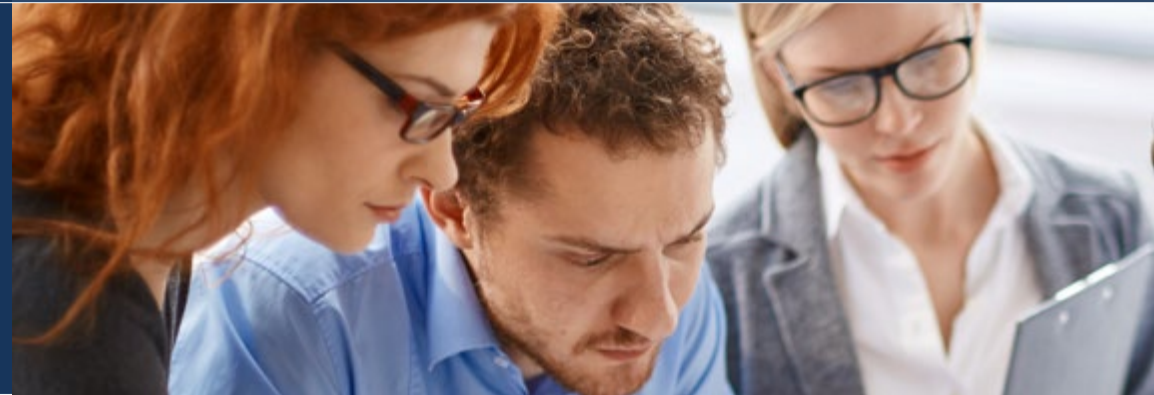
Determine data life cycle phases

04

Present the technological trends for the future in the field of Business Intelligence

02

Establish the differences between the different types of analysis



03

Evaluate, in broad terms, some of the most widely used technological solutions in use today

05

Establish the phases of the data life cycle: Data, information, knowledge and value



06

Determine the different levels of analytics: Descriptive Analytics, Prescriptive Analytics, and Predictive Analytics

08

Examine the differences between structured, semi-structured and unstructured formats



09

Develop the Extraction (E), Transformation (T) and Loading (L) Phases as well as the different ETL - ELT Paradigms

07

Analyze the differences between different data warehousing paradigms: Data Lake, Data Warehouse and Data Mart

10

Evaluate the advantages of a set of technology solutions used in business intelligence

05

# Structure and Content

The Postgraduate Certificate in Business Intelligence Solutions perfectly covers all the professional needs and requirements that the sector demands. Always thinking about the development of its students, TECH has created this program with the help of an excellent group of experts who will show, in a practical and dynamic way, the life cycle of data within this field, that is, its origins and its transformation into a valuable asset for a company. Therefore, thanks to this program, the professional will be able to better understand the business vision and the techniques of data analysis, as well as the importance it has for each of the company's departments.



“

*The most advanced content in  
business intelligence applied to  
the business environment is here"*

## Syllabus

The current situation demands from companies and individuals a thorough analysis of their economic situation. But it is not easy to have the best tools to carry out this task, so this Postgraduate Certificate in Business Intelligence Solutions brings them to the professional in a simple way and with a 100% online methodology.

Therefore, through this program, the student will learn about the latest advances in the data life cycle, data storage, types of analytics or self-consumption business intelligence.

All this, from 150 hours of learning spread over 6 weeks, time in which the professional will be prepared to respond to all the contemporary challenges of today's economy.

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

### Module 1

### Business Intelligence Solutions



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

TECH offers the possibility of developing this Postgraduate Certificate in Business Intelligence Solutions completely online. During the 6 weeks of the specialization, the student will be able to access all the contents of this program at any time, which will allow the students to self-manage their study time.

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

## Module 1. Business Intelligence Solutions

### 1.1. Data Life Cycle

- 1.1.1 Business Intelligence
- 1.1.2 Business Intelligence Concept Evolution
- 1.1.3 Data Life Cycle

### 1.2. Types of analytics

- 1.2.1 Descriptive Analytics
- 1.2.2 Prescriptive Analytics
- 1.2.3 Predictive Analytics

### 1.3. Types of Data

- 1.3.1 Structured Data
- 1.3.2 Semi-Structured Data
- 1.3.3 Unstructured Data

### 1.4. Data Storage

- 1.4.1 Data Lake
- 1.4.2 Data Warehouse
- 1.4.3 Data Mart

### 1.5. Data management

- 1.5.1 Stages: Mining, Processing and Loading
- 1.5.2 ETL Paradigm
- 1.5.3 ELT Paradigm

### 1.6. Business Intelligence Solutions: Power BI

- 1.6.1 Ecosystem
- 1.6.2 Potential Strengths and Weaknesses

### 1.7. Business Intelligence Solutions: Tableau

- 1.7.1 Ecosystem
- 1.7.2 Potential Strengths and Weaknesses

### 1.8. Business Intelligence Solutions: Qlik

- 1.8.1 Ecosystem
- 1.8.2 Potential Strengths and Weaknesses

### 1.9. Business Intelligence Solutions: Prometheus

- 1.9.1 Ecosystem
- 1.9.2 Potential Strengths and Weaknesses

### 1.10. The future of Business Intelligence

- 1.10.1 Cloud
- 1.10.2 Business Intelligence for self-consumption
- 1.10.3 Integration with Data Science: Value Creation



“

*BI is the future of companies: this Postgraduate Certificate will provide you with everything you need to become a specialist in this area"*

# 06

# 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"*

## 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.

“

*At TECH, you will experience a learning methodology that is shaking the foundations of traditional universities around the world”*



*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.

## 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.



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.





### 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 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

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.



07

# Our Students' Profiles

This Postgraduate Certificate in Business Intelligence Solutions is intended for those professionals specialized in the economic and business field who wish to become entrepreneurs, advance their own companies or help their employers to help their organizations reach their goals. In this way, this program will provide the student with skills and tools that will be useful in various contexts, whether working for other institutions or in a personal project.







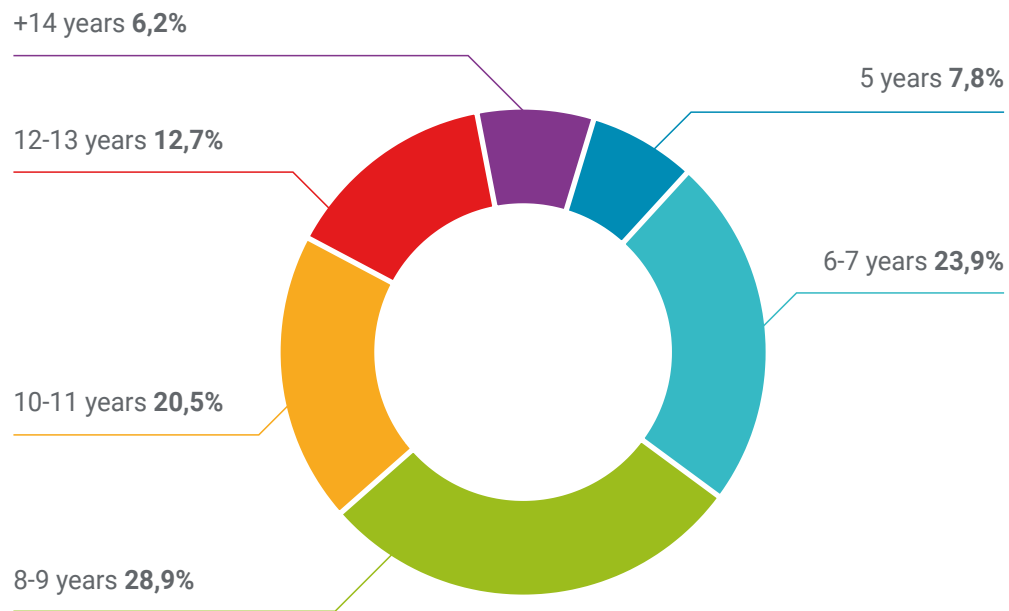
“

*This Postgraduate Certificate is what you need to advance professionally. Don't think twice and enroll"*

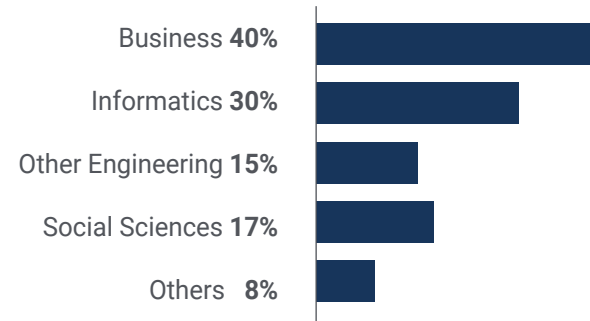
### Average Age

Between **35** and **45** years old

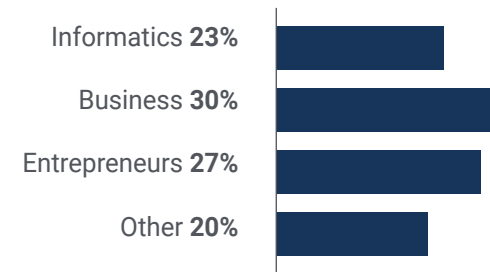
### Years of Experience



### Training

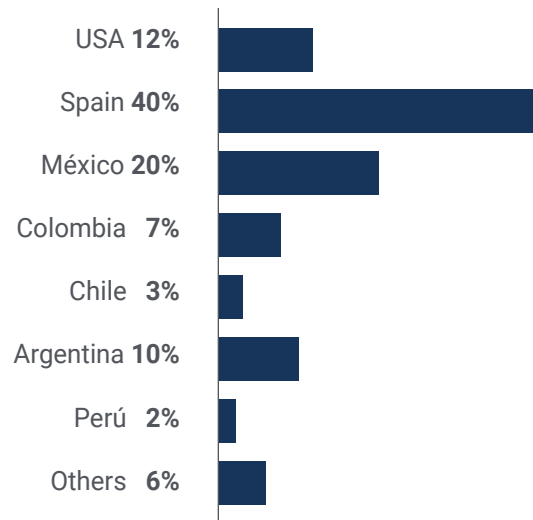


### Educational Profile



## Geographical Distribution

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## Marta Torrejón

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Businesswoman

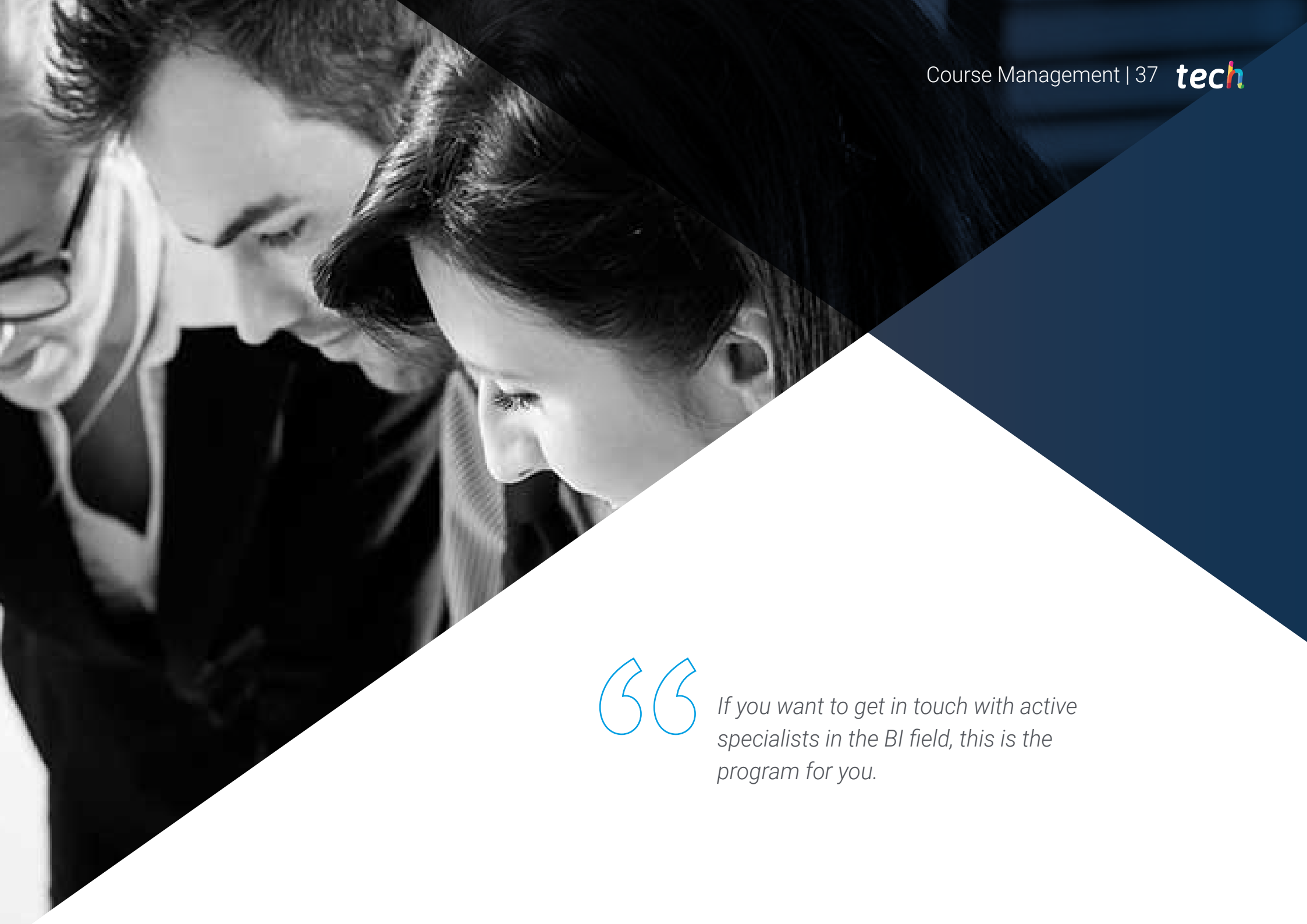
*"When I started applying all the techniques I learned in this program my company improved its business forecasts very quickly. Business intelligence is a complex field but mastering it is the key to a company's rapid progress. That's why this TECH program is essential for professionals and entrepreneurs looking to advance their organizations."*

08

# Course Management

The teaching team of this Postgraduate Certificate in Business Intelligence Solutions is composed of working professionals who are fully versed in all Business Intelligence techniques. In this way, the professional will be able to obtain the best tools in this field directly from the faculty, guaranteeing an effective learning process. Therefore, at the end of this program the student will be in the best position to offer his or her services as a BI specialist.





“

*If you want to get in touch with active specialists in the BI field, this is the program for you.*

## Management



### **Dr. Peralta Martín-Palomino, Arturo**

- ◆ CEO and CTO at Prometheus Global Solutions
- ◆ CTO en Corporate Technologies in Corporate Technologies
- ◆ CTO in AI Shephers GmbH
- ◆ Doctorate in Psychology from the University of CastillaLa
- ◆ PhD in Economics, Business and Finance from the Camilo José Cela University. Outstanding Award in her PhD
- ◆ Master's Degree in Advanced Information Technologies from the University of Castilla la Mancha
- ◆ Master MBA+E (Master's Degree in Business Administration and Organisational Engineering) from the University of Castilla la Mancha
- ◆ Associate lecturer, teaching undergraduate and master's degrees in Computer Engineering at the University of Castilla la Mancha
- ◆ Professor of the Master in Big Data and Data Science at the International University of Valencia
- ◆ Lecturer of the Master's Degree in Industry 4.0 and the Master's Degree in Industrial Design and Product Development
- ◆ Member of the SMILe Research Group of the University of Castilla la Mancha



## Professors

### Ms. Martínez Cerrato, Yésica

- ◆ Electronic Security Product Technician at Securitas Security Spain
- ◆ Business Intelligence Analyst at Ricopia Technologies ( Alcalá de Henares) Degree in Electronic Communications Engineering at the Polytechnic School, University of Alcalá
- ◆ Responsible for training new recruits on commercial management software (CRM, ERP, INTRANET), product and procedures in Ricopia Technologies (Alcalá de Henares)
- ◆ Responsible for training new scholarship holders incorporated to the Computer Classrooms at the University of Alcalá
- ◆ Project Manager in the area of Key Accounts Integration at Correos and Telégrafos (Madrid)
- ◆ Computer Technician-Responsible for computer classrooms OTEC, University of Alcalá (Alcalá de Henares)
- ◆ Computer classes teacher at ASALUMA Association (Alcalá de Henares)
- ◆ Scholarship for Training as a Computer Technician in OTEC, University of Alcalá (Alcalá de Henares)

09

# Impact on Your Career

The field of *business intelligence* is essential in today's economic and business world. More and more companies are looking for specialists in this area to provide them with the solutions they need, so delve into the subject and become a true expert will improve the future prospects of the student. Therefore, this Postgraduate Certificate in Business Intelligence Solutions has been designed with the aim of getting the student to go as far as they have always wanted.





“

*This University Program will completely transform your career thanks to its innovative content, prestigious faculty and flexible delivery methodology”*

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

TECH's Postgraduate Certificate in Business Intelligence Solutions is an intensive program that prepares you to face challenges and business decisions in the field of *business intelligence*. The main objective is to promote your personal and professional growth. Helping you achieve success.

If you want to improve, make a positive change at a professional level and network with the best, then this is the place for you.

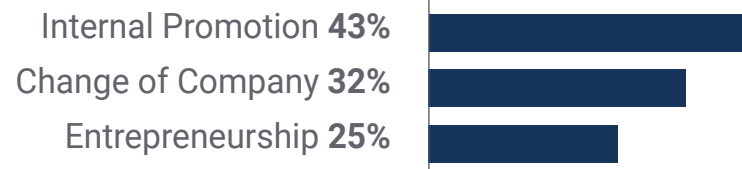
*This program will bring about a positive revolution in your career. Don't wait any longer and enroll.*

*The best business solutions are provided by Business Intelligence: when you complete this program your project will take off quickly thanks to your new knowledge.*

#### Time of change



#### Type of change



### Salary increase

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



10

# Benefits for Your Company

This Postgraduate Certificate in Business Intelligence Solutions will not only provide knowledge of high business value, but will also provide a more analytical vision to the company and to the professionals who complete it. In this way, the objective of this program is to enable organizations to apply the best business intelligence techniques to improve all their internal processes, in order to avoid risk situations and increase the benefits of each operation.



“

*Your company will maximize its benefits thanks to the knowledge contained in this Postgraduate Certificate"*

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

01

### **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.

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02

### **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.

03

### **Building agents of change**

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

---

04

### **Increased international expansion possibilities**

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



05

### **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.

---

06

### **Increased competitiveness**

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

# 11 Certificate

The Postgraduate Certificate in Business Intelligence Solutions 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 Business Intelligence Solutions** 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 Business Intelligence Solutions**

Official N° of Hours: **150 h.**



\*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.



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- » Exams: online

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