



Practical Application of BI by Business Units

» Modality: online » Duration: 12 weeks

» Certificate: TECH Global University

» Credits: 12 ECTS

» 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.techtitute.com/us/school-of-business/postgraduate-certificate/practical-application-bi-business-units

Index

01

Welcome

02

Why Study at TECH?

p. 4

03

Why Our Program?

p. 6

U4

Objectives

p. 14

05

Structure and Content

p. 20

06

Methodology

p. 26

p. 10

07

Our Students' Profiles

p. 34

08

Course Management

p. 38

09

Impact on Your Career

p. 42

10

Benefits for Your Company

p. 46

11

Certificate

01 **Welcome**

This program will allow the professional to apply the best Business Intelligence techniques according to the particularities of each business unit. This will allow you to maximize profits and reduce risk in your company, as you will be able to incorporate the most advanced and innovative *big data* analysis methods into your daily practice. Thanks to this, you will have an in-depth knowledge of your organization's financial information and will be able to propose the best solutions for each challenge that may arise. The professional, also, will have in this program the best online teaching system to delve into BI, as it will allow him to combine his work with his studies, without uncomfortable interruptions.







tech 08 | Why Study at TECH?

At TECH Global 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.



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 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 ground-breaking 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"





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 Global 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 Practical Application of BI by Business Units will enable students to:



Develop analytical skills to apply BI to new, known or recurring problems within the company



Complete information provided by the different systems with which the company works



Design business strategies, anticipating the current market in order to transform it and justify its benefits and opportunities for change





Develop judgments from information extracted on the basis of the data



Generate technical skills to develop sales plans and campaigns



Propose changes in the business model in order to be present in the current market



Determining the BI tool to be used in a company



09

Llevar a cabo análisis predictivos



Obtain results related to the strategies implemented and the management of data



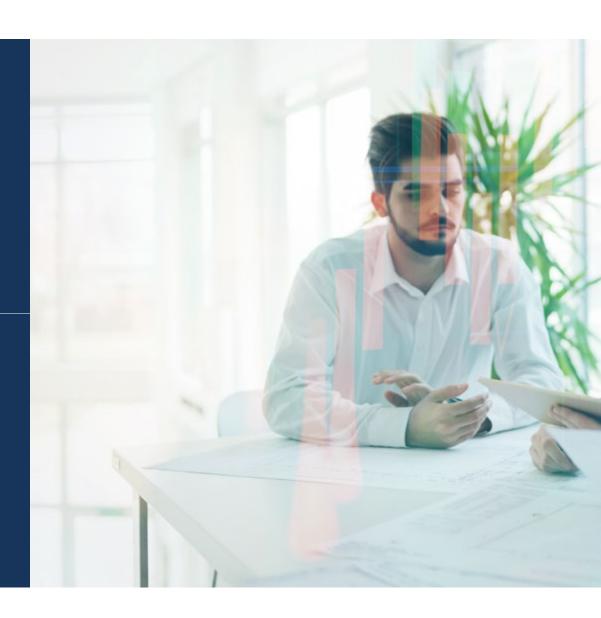
Generate technical skills, statistical and quantitative knowledge

11

Develop practical experience in business analysis



Combine techniques applicable to different departments





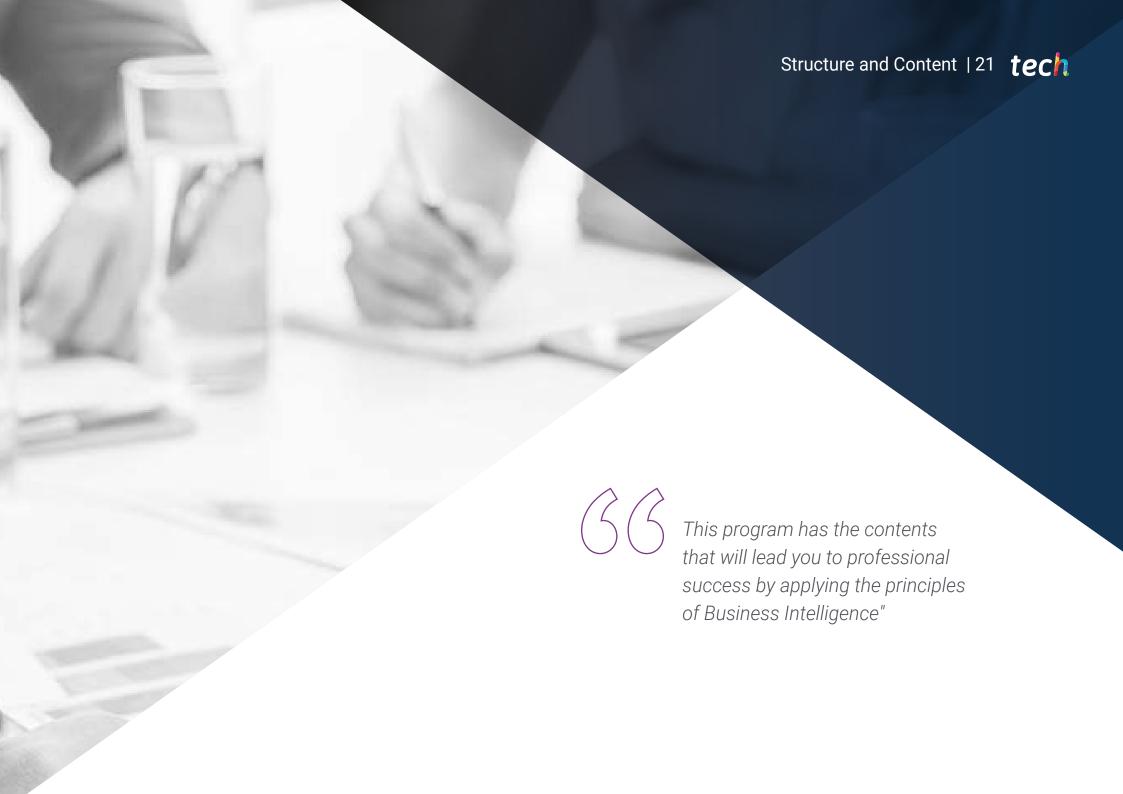


Define the strategy to be followed in the departments for their business plan



Develop customer listening and analytical and predictive decision making skills





tech 22 | Structure and Content

Syllabus

It has become essential for companies to have professionals who are capable of making accurate decisions based on solid evidence. For this reason, a set of methodologies, technologies and applications have been designed to facilitate the unification and transformation of data, turning them into quality information and knowledge. This is a strategic factor when making decisions in the company, since it allows it to anticipate possible problems and provide solutions in time.

At this juncture, the concept of big data is also born, which refers to a set of data that cannot be analyzed and processed by the usual tools due to its volume, complexity and accelerated growth. In this way, a Postgraduate Certificate has been created, focused on showing the professional the most innovative techniques that have been created in BI to work with big data.

Throughout the program, the importance of data in each of the company's departments and the advantages they can offer in the development of their activities will be addressed. All of this is designed to develop the student's analytical skills.

This syllabus, therefore, is focused on the future graduate and prepares them to achieve excellence in the field of business.

This Postgraduate Certificate takes place over 12 weeks and is divided into 2 modules:

Module 1 Data Analytics for Strategic Decision-Making

Module 2 Application of BI by departmental areas



Where, When and How is it Taught?

TECH offers the possibility of developing this Postgraduate Certificate in Practical Application of BI by Business Units completely online. During the 12 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.

tech 24 | Structure and Content

Module 1. Data analytics for strategic decision making

1.1. Data analytics for strategic decision making

- 1.1.1. Business Intelligence (BI)
- 1.1.2. Characteristics and architecture of a BI system
- 1.1.3. Data Science
- 1.1.4. Cybersecurity

1.2. Business transformation

- 1.2.1. Why Now
- 1.2.2. Design of a Bi project
- 1.2.3. Benefits of Business Intelligence (BI) in the company's departments

1.3. Data

- 1.3.1. Data Sources
- 1.3.2. Extraction, cleaning, processing and loading
- 1.3.3. Data quality and preparation
- 1.3.4. The Business Model
- 1.3.5. The Data Model
- 1.3.6. Physical model: Development and loading.

1.4. Big data storage and processing

- 1.4.1. Massive data storage
- 1.4.2. Database technologies
- 1.4.3. Storing *Big Data* in the Cloud
- 1.4.4. Massive data processing
- 1.4.5. Big data processing in the cloud

1.5. BigData Analysis

- 1.5.1. Analysis
- 1.5.2. Predictive Analyses
- 1.5.3. Pattern analysis
- 1.5.4. Machine Learning
- 1.5.5. Big data Analysis in the cloud

1.6. Data visualization and consumption

- 1.6.1. Tools for data visualization
- 1.6.2. Reports Design
- 1.6.3. Balanced scorecard and KPIs

1.7. Security and Governance

- 1.7.1. Security/Safety
- 1.7.2. Data governance

1.8. Data Science

- and machine learning
- 1.8.2. Basics of Deep Learning and Machine Learning
- 1.8.3. Uses of Deep Learning and Machine Learning

1.9. Business Intelligence Solutions

- 1.9.1. The best choice for my business
- 1.9.2. Current Market
- 1.9.3. Characteristics of a good tool
- 1.9.4. Power BI
- 1.9.5. MicroStrategy and Tableau
- 1.9.6. SAP BI. SAS BI and Olikview
- 1.9.7. Other Tools

1.10. Bl in the company

- 1.10.1. Why develop a Business Intelligence (BI) project?
- 1.10.2. First steps, requirements and objectives
- 1.10.3. Choice of the tool and selection of the work team

- 1.8.1. Differences between deep learning

Module 2. Application of BI by departmental areas

2.1. Business analytics and information management

- 2.1.1. Insights for business analysis
- 2.1.2. Instruments for analysis
- 2.1.3. Phases of analysis
- 2.1.4. Elements of analysis
- 2.1.5. Data infrastructure

2.2. BI by departmenty

- 2.2.1. Benefits of departmentally differentiated reports and scorecards
- 2.2.2. Operational, Tactical and Strategic Reports
- 2.2.3. Marketing Department
- 2.2.4. Sales Department
- 2.2.5. Customer Service Management
- 2.2.6. Purchasing Department
- 2.2.7. Economic-financial department
- 2.2.8. HR Department
- 2.2.9. Production Department

2.3. Marketing and Communication Departments

- 2.3.1. Marketing department needs
- 2.3.2. Data Warehouse and marketing systems
- 2.3.3. Applications and advantages
- 2.3.4. Challenges in implementing a BI departmental structure

2.4. Marketing and Communication Plan

- 2.4.1. KPI and ROI
- 2.4.2. Background Study
- 2.4.3. Prediction for the marketing plan
- 2.4.4. Marketing strategies
- 2.4.5. Campaign management

2.5. Sales Department

- 2.5.1. Needs of the Sales Department
- 2.5.2. Market Research
- 2.5.3. Relationship with the Customer

2.6. Customer Service Management

- 2.6.1. Customer service department needs
- 2.6.2. Personal Coaching and Emotional Intelligence
- 2.6.3. Customer Satisfaction
- 2.6.4. Loyalty

2.7. Purchasing Department

- 2.7.1. Purchasing department needs
- 2.7.2. Market studies and competencies
- 2.7.3. Applications

2.8. Economic-financial department

- 2.8.1. Needs of the economic-financial department
- 2.8.2. Data Warehouse and Financial Risk Analysis
- 2.8.3. Data Warehouse and Credit Risk Analysis
- 2.8.4. Otras áreas de aplicación

2.9. HR Department

- 2.9.1. HR department needs
- 2.9.2. Advantages of using BI tools
- 2.9.3. Applying Business Intelligence to HR

2.10. IT Department

- 2.10.1. IT department needs
- 2.10.2. Data Analysis and Digital Transformation
- 2.10.3. Productivity
- 2.10.4. Innovation



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 28 | 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 30 | 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.

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.



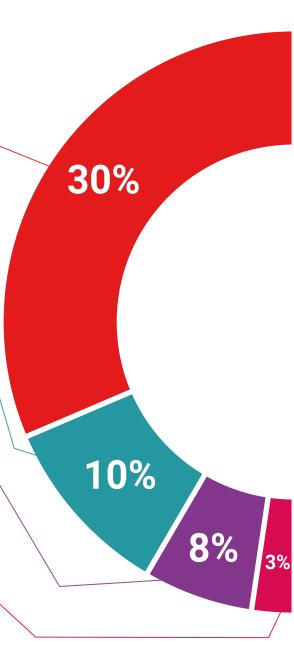
Management Skills Exercises

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

 $\langle \rangle$

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.

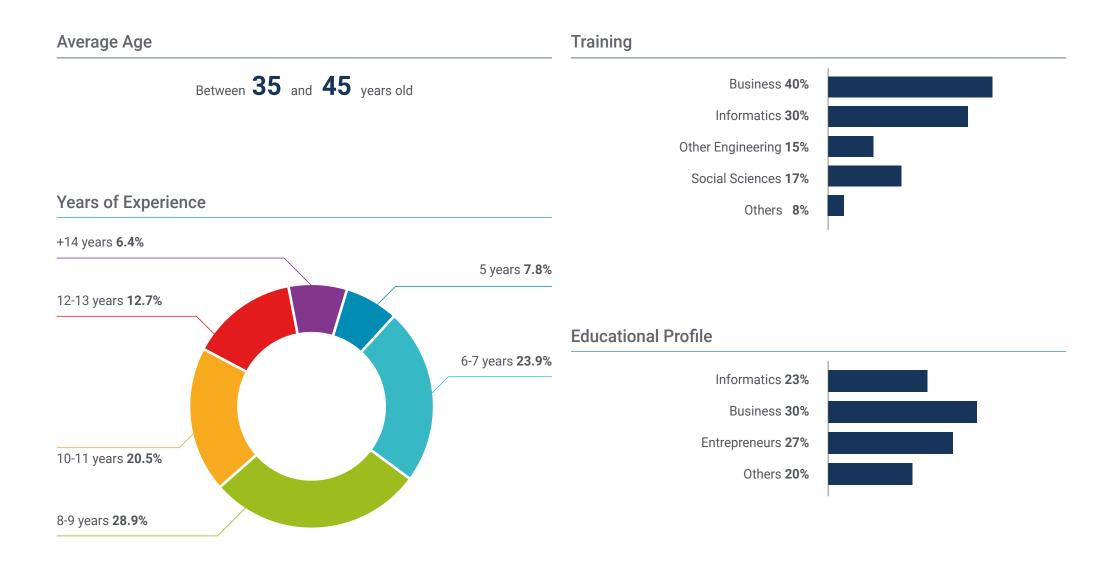


30%

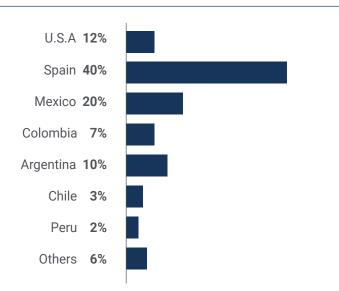




tech 36 | Our Students' Profiles



Geographical Distribution





Enrique Albertos

Entrepreneur

"Since I finished this program I was able to apply Business Intelligence to my business and its benefits have increased rapidly. Enrolling in this program is one of the best decisions I have made in my professional life."





Management



Dr. Peralta Martín-Palomino, Arturo

- CEO and CTO at Prometeus Global Solutions
- CTO en Corporate Technologies in Corporate Technologies
- CTO in Al 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

Course Management | 41 tech

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 Alcala (Alcalá de Henares)





tech 44 | Impact on Your Career

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

The Postgraduate Certificate in Practical Application of BI by TECH Business Units is an intensive program that prepares you to face challenges and business decisions in the field of business. The main objective is to promote your personal and professional growth. Helping you achieve success.

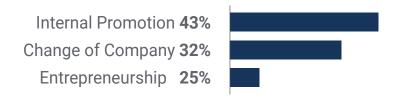
If you want to improve, make a positive change at a professional level and network with the best, then this is the place for you. Don't wait any longer, the change you were looking for in your career is here.

This Postgraduate Certificate will allow you to improve your salary prospects immediately.

Time of Change



Type of change



Salary increase

This program represents a salary increase of more than **25%** for our students.

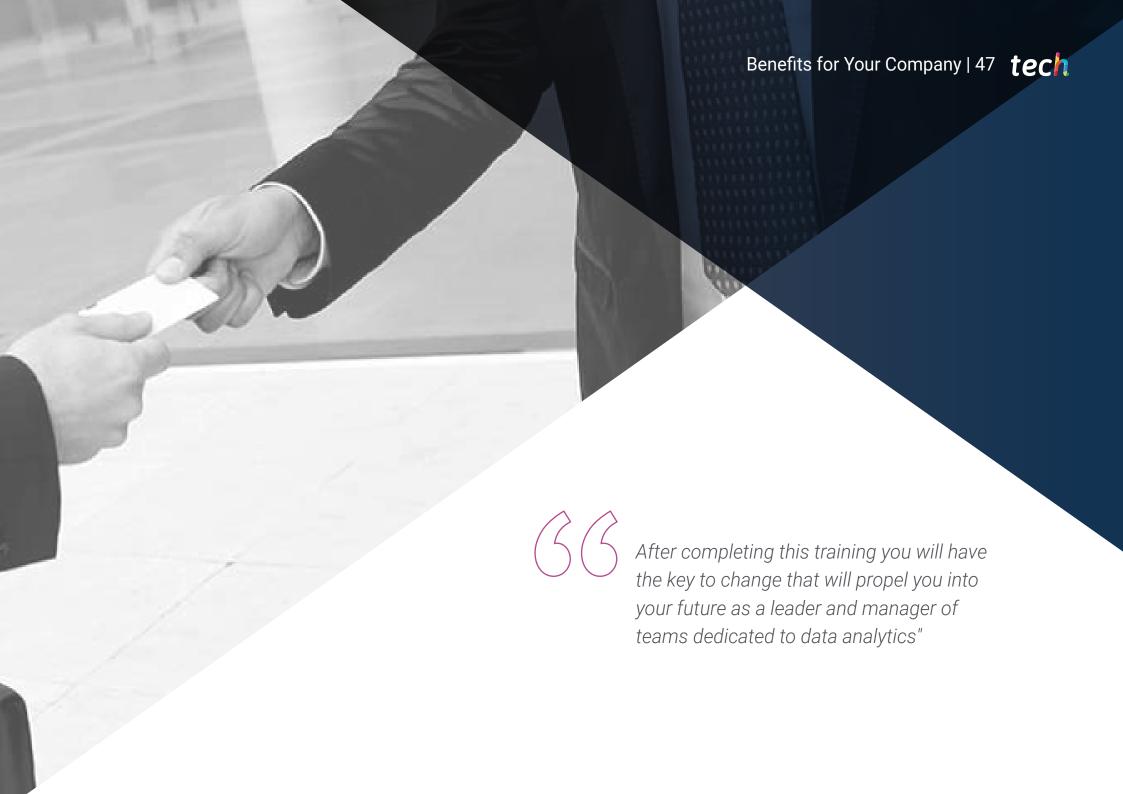
\$32,900

A salary increase of

25.22%

\$41,200





tech 48 | 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 52 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Practical Application of BI by Business Units** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Certificate in Practical Application of BI by Business Units

Modality: online

Duration: 12 weeks

Accreditation: 12 ECTS



has successfully passed and obtained the title of:

Postgraduate Certificate in Practical Application of BI by Business Units

This is a program of 360 hours of duration equivalent to 12 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



^{*}Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.



Postgraduate Certificate Practical Application of BI by Business Units

» Modality: online

» Duration: 12 weeks

» Certificate: **TECH Global University**

» Credits: 12 ECTS

» Schedule: at your own pace

» Exams: online

