



# Postgraduate Diploma

Operations Management through Business Analytics

» Modality:Online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 18 ECTS

» Schedule: at your own pace

» Exams: online

» Target Group: Computer engineers who wish to reorient their work towards the world of business intelligence, or established professionals in the field of BI who need to update, deepen and improve their skills and knowledge

 $We bsite: {\color{blue} www.techtitute.com/us/school-of-business/postgraduate-diploma/postgraduate-diploma-operations-management-business-analytics} \\$ 

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# 01 **Welcome**

Today, the world has undergone a radical change in the treatment of information. Companies are competing to transform the information extracted from data into results that add up and are important for their development. Those that succeed lay the foundations for an organization-wide analysis that allows significant changes to be made, intelligent decisions to be adopted, quick action to be taken and results to be optimized. For this reason, TECH has designed this program in Operations Management through Business Analytics to address the importance of data in each of the company's departments. In this way, professionals who take this program will gain in-depth knowledge that they will be able to apply with ease and confidence to their daily practice, achieving greater benefits in the short term.









# 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.



#### 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 the academic setting"

## Why Study at TECH? | 09 **tech**

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



#### **Analysis**

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



#### **Academic Excellence**

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



#### **Economy of Scale**

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





# 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 themdevelop 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 Diploma in Operations Management through Business Analytics will enable students to:





Develop customer listening, analytical and predictive skills for decision making



Determine the different levels of analytics: descriptive analytics, prescriptive analytics and predictive analytics



09

Analyze the differences between the different information storage paradigms: data lake, data warehouse, and data mart



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



Examine the differences between structured, semistructured and unstructured formats



Evaluate the technological solutions most commonly used today



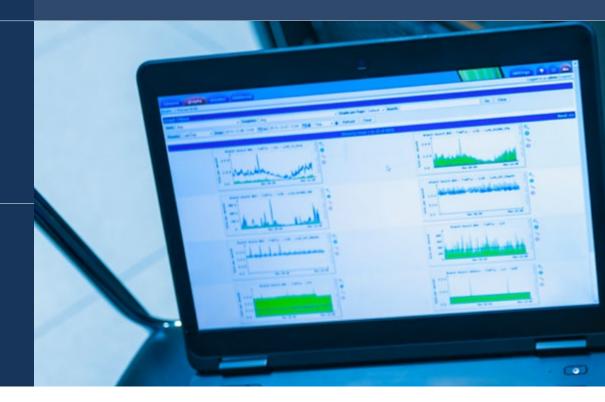
Evaluate the advantages of a set of technology solutions used in business intelligence



Develop the process of managing a customer, implementing digital marketing strategies according to the phases



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

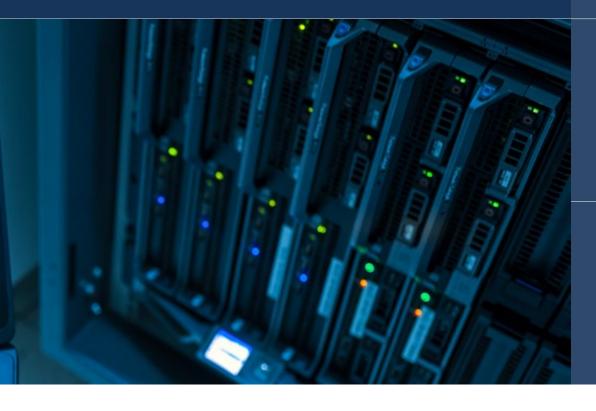




Examine the life cycle of a customer (pre-sale, delivery and post-sale)



Determine the "Robinson" client, examine what GDPR is, as well as the exclusions to be applied to mitigate risks in the processing of campaign data



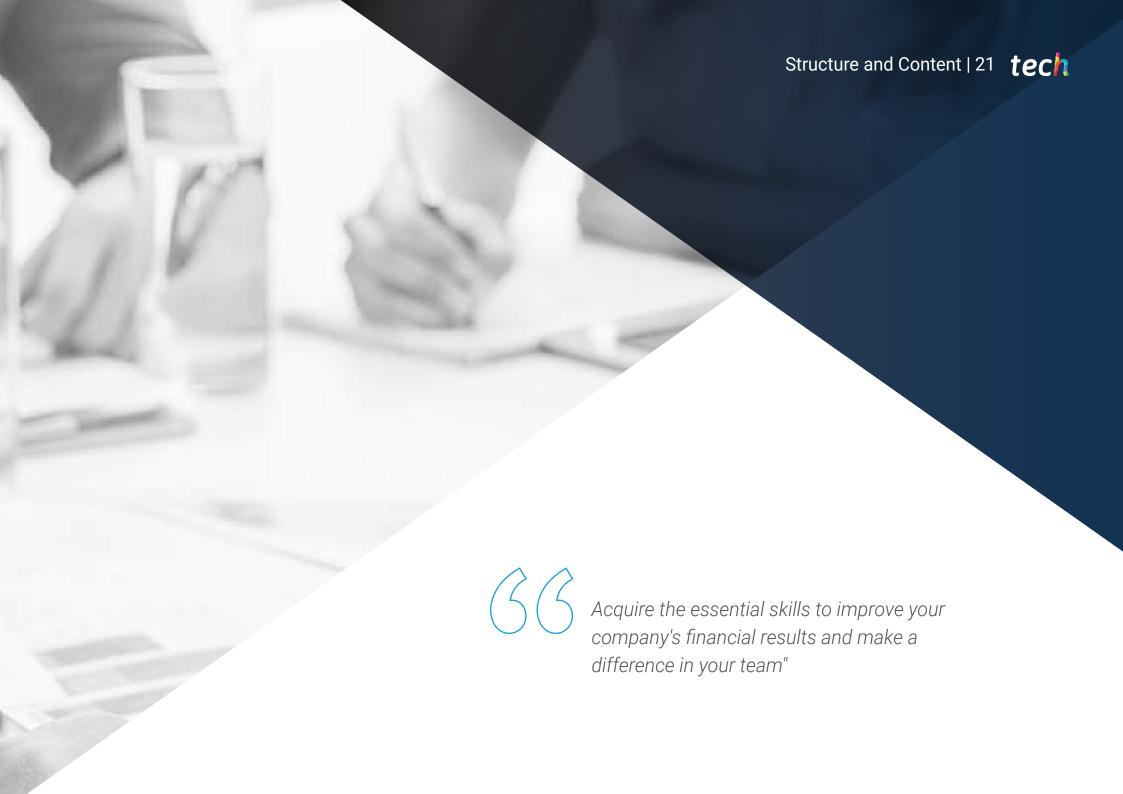


Associate the most important indicators of a business with a digital marketing strategy, and be able to visualize them in *dashboards* 



Apply the described methodologies and techniques to the reality of each student





## tech 22 | Structure and Content

#### **Syllabus**

As companies compete to transform information into data that is easy to understand and generates value, it is essential to have programs that qualify professionals in the analysis, organization and interpretation of data. In this way, understanding the importance of data in each of the company's departments and the benefits it can bring will be the central focus of this program on operations management through business analytics.

In this way, an expanded vision of the life of data within BI will be offered, from its origins to its transformation into an asset of value for the business. This will allow to generate specialized knowledge in the presentation of the most advanced technological solutions, widely extended, that make up the ecosystem of this field in today's world.

Throughout each lesson, we will explore the most advanced techniques for analyzing and managing data to help achieve an effective and reliable

marketing tool. All of the above will be supported by the presentation of practical cases by the experts in charge of the development of each module, guaranteeing an immersive experience in situations that can occur in a real business environment. This has been planned in this way to develop analytical skills when applying solutions to emerging or recurring problems in the company.

In conclusion, the syllabus is designed for the students, focusing on the future graduate and preparing them to achieve excellence within a business team. By understanding the needs of the student and the companies, it is possible to present valuable content, based on the latest technological trends and supported by an excellent teaching staff. In this way, it provides the necessary competencies to solve critical situations in a creative and efficient way.

This Postgraduate Diploma takes place over 6 months and is divided into 3 modules:

Module 1 Application of BI by Departmental Areas

Module 2 Business Intelligence Solutions

Module 3 Strategic Management through Data Analytics



Where, When and How is it

Taught?
TECH offers you the possibility to study
this Postgraduate Diploma in Operations
Management through Business Analytics
completely online. Throughout the 6
months of the educational program, you
will be able to access all the contents of
this program at any time, allowing you to
self-manage your study time.

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

# tech 24 | Structure and Content

Mod	lule 1. Application of BI by Departmenta	al Area	S				
1.1. 1.1.1 1.1.2 1.1.3 1.1.4 1.1.5	Instruments for Analysis Phases of Analysis Elements of Analysis	1.2. 1.2.1. 1.2.3. 1.2.4. 1.2.5.	BI by Department  Benefits of Departmentally Differentiated Reports and Scorecards Operational, Tactical and Strategic Reports Marketing Department Sales Department Customer Service Management	1.2.6. 1.2.7. 1.2.8. 1.2.9.	Purchasing Department Economic-Financial Department HR Department Production Department	1.3.2. 1.3.3.	
1.4.1 1.4.2 1.4.3 1.4.4 1.4.5	Background Study Prediction for the Marketing Plan Marketing Strategies	<b>1.5.</b> 1.5.1. 1.5.2. 1.5.3.	Sales Department Sales Department Needs Market Research Relationship with the Customer	<b>1.6.</b> 1.6.1. 1.6.2. 1.6.3.	Customer Service Management Customer Service Department Needs Personal Coaching and Emotional Intelligence Customer Satisfaction	<b>1.7.</b> 1.7.1. 1.7.2.	Loyalty Purchasing Department Purchasing Department Needs Analysis of the Market and Competition Applications
1.8. 1.8.1 1.8.2 1.8.3 1.8.4 1.9.	Data Warehouse and Credit Risk Analysis	1.10.1	Advantages of Using BI Tools Applying Business Intelligence to HR  IT Department IT Department Needs Data Analysis and Digital Transformation		3. Productivity 4. Innovation		

<b>Module 2.</b> Business Intelligence Solutions			
2.1. Data Life Cycle 2.1.1. Business Intelligence 2.1.2. Business Intelligence Concept Evolution 2.1.3. Data Life Cycle	<ul><li>2.2.1. Descriptive Analytics</li><li>2.2.2. Prescriptive Analytics</li><li>2.2.3. Predictive Analytics</li></ul>	<ul><li>2.3.1. Structured Data</li><li>2.3.2. Semi-Structured Data</li><li>2.3.3. Unstructured Data</li></ul>	2.4.1. Data Lake 2.4.2. Data Warehouse 2.4.3. Data Mart
2.2. Types of Analytics 2.5.1. Stages: Extraction, Processing and Loading 2.5.2. ETL Paradigm 2.5.3. ELT Paradigm	<ul><li>2.3. Types of Data Power BI</li><li>2.6.1. Ecosystem</li><li>2.6.2. Potential Strengths and Weaknesses</li></ul>	<ul> <li>2.4. Data Storage Tableau</li> <li>2.7.1. Ecosystem</li> <li>2.7.2. Potential Strengths and Weaknesses</li> </ul>	2.5. Data Management Qlik 2.8.1. Ecosystem 2.8.2. Potential Strengths and Weaknesses
2.6. Businesselntelligence Solutions: 2.9.1. Ecosystem 2.9.2. Potential Strengths and Weaknesses	2.77.1. Business Intelligence Solutions: 2.10.2. Self-Service Business Intelligence 2.10.3. Integration with Data Science: Value Generation	2.8. Business Intelligence Solutions:	2.9. Business Intelligence Solutions:
2.10. The Future of Business Intelligence	. Data Analytica		
Module 3. Strategic Management through	•		
3.1. Business and Big Data 3.1.1. Business and Big Data 3.1.2. Value 3.1.3. Value Projects	<ul><li>3.2. Advantages of Digital Marketing</li><li>3.2.1. Digital Marketing</li><li>3.2.2. Advantages of the Application of Digital Marketing</li></ul>	<ul> <li>3.3. Digital Marketing Planning</li> <li>3.3.1. Campaigns</li> <li>3.3.2. Drive and Redemption</li> <li>3.3.3. Options in the Digital Marketing Strategy</li> <li>3.3.4. Planning</li> <li>3.4. Implementation of Digital</li> </ul>	Marketing 3.4.1. Relation of the Customer Life Cycle to Digital Marketing 3.4.2. Websites 3.4.3. Tools 3.5. Life Cycle
3.5.1. Customer Journey 3.5.2. Campaigns and Life Cycle 3.5.3. Campaign KPIs	<ul><li>3.6.1. Datawarehouse and Datalabe</li><li>3.6.2. Tools for Creating Campaigns</li><li>3.6.3. Drive Techniques</li></ul>	<ul><li>3.7.1. Personal Data Management and Anonymization</li><li>3.7.2. Robinson</li><li>3.7.3. Types of Exclusions</li></ul>	3.8.1. Indicators 3.8.2. Receptors 3.8.3. Dashboard Creation Software 3.8.4. Conclusions
3.6. Campaigns and Data 3.9.1. 360° Customer 3.9.2. Analysis and Strategy 3.9.3. Tools	3.7. Personal Data in Digital Marketing 3.10.1. Cross-Selling and Selling of New Services 3.10.2. Propensity-Based Models 3.10.3. Models Based on Risk Scoring 3.10.4. Predictive Models 3.10.5. Examples of Image Processing	3.8. Dashboard	3.9. Analysis and Insights



This 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 method of skills and knowledge development. 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

#### Relearning Methodology

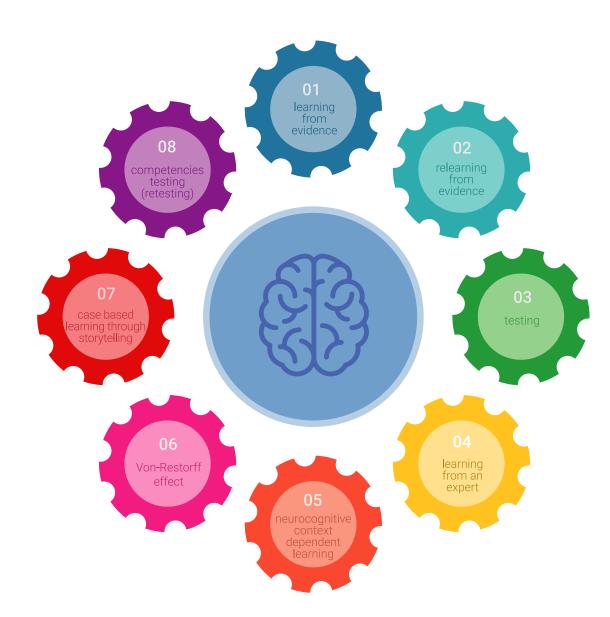
TECH effectively balances the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

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 prepare the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our online business school is the only one in the world licensed to incorporate this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



### Methodology | 31 **tech**

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we balance each of these elements concentrically. With this methodology we have prepared 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 adapted in 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.



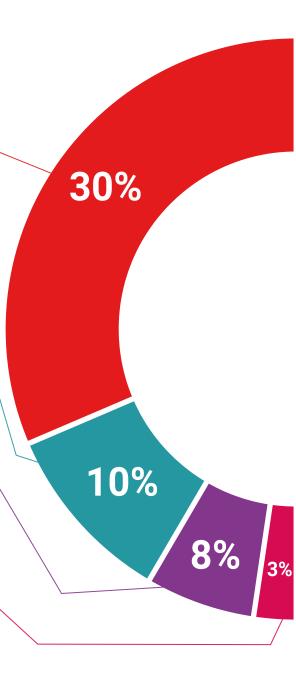
#### **Management Skills Exercises**

They will carry out activities to develop specific executive skills in each thematic field. Practices and dynamics to acquire and develop the skills and abilities that a high-level manager needs to develop in the context of the globalization we live in.



#### **Additional Reading**

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best senior management specialists in the world.



#### **Interactive Summaries**

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

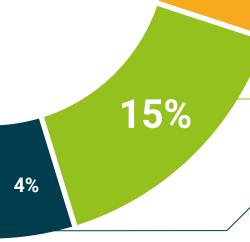


This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

#### **Testing & Retesting**

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We periodically assess and re-assess 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%



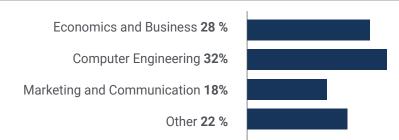


## tech 36 | Our Students' Profiles

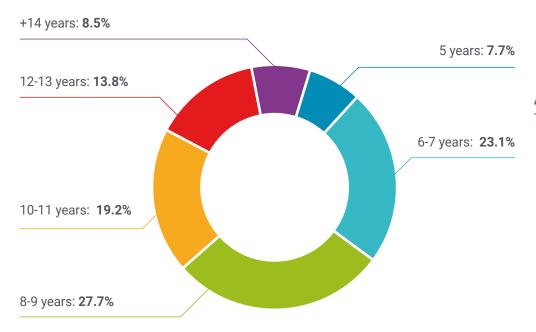


Between 35 and 45 years old

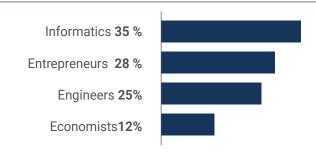
#### **Training**



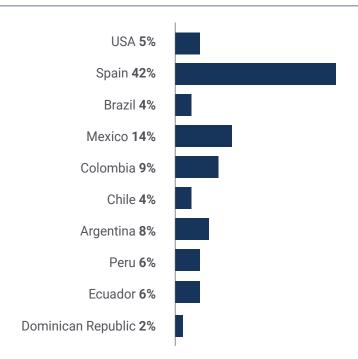
### **Years of Experience**



#### **Academic Profile**



## **Geographical Distribution**





# **Jorge Ramos Fuente**

**Computer Engineer and Data Researcher** 

"At TECH I have found the best way to continue my studies and improve at a professional level, without the need to pause my work and all areas of my personal life. I was able to take each class perfectly from my office or at home and apply the knowledge acquired almost instantly"





#### 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 Castilla la Mancha
- 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 professor, 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.
- Professor 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**

#### Mr. Fondón Alcalde, Rubén

- Customer Value Management Business Analyst at Vodafone Spain
- Head of Service Integration at Entelgy for Telefónica Global Solutions
- Online account manager for clone servers at EDM Electronics
- Business Analyst for Southern Europe at Vodafone Global Enterprise
- Telecommunications Engineer from the European University of Madrid
- Master's Degree in Big Data and Data Science from the International University of Valencia.

#### 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 specializing new recruits on commercial management software (CRM, ERP, INTRANET), product and procedures in Ricopia Technologies (Alcalá de Henares)
- Responsible for specializing 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)





If you want to make a positive change in your profession, the Postgraduate Diploma in Operations Management through Business Analytics will help you achieve it.

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

TECH's Postgraduate Diploma in Operations Management through Business Analytics is an intensive program that prepares you to develop specialized knowledge in the techniques and algorithms for data analysis in the business world. The main objective is to promote your personal and professional growth. Helping you achieve success.

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

Do not miss the opportunity to train with us and you will find the improvement you were looking for.

### When the change occurs

During the program

11%

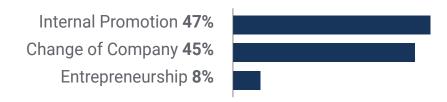
During the first year

63%

After 2 years

26%

## Type of change



## Salary increase

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

\$ 57,900

A salary increase of

25.22%

\$ 72,500





## tech 48 | Benefits for Your Company

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



## Intellectual Capital and Talent Growth

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 current project or develop new projects in the field of R&D or Business Development within their 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 Diploma in Operations Management through Business Analytics** 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 Diploma in Operations Management through Business Analytics

Modality: online

Duration: 6 months

Accreditation: 18 ECTS



#### Postgraduate Diploma in Operations Management through Business Analytics

This is a program of 450 hours of duration equivalent to 18 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



<sup>\*</sup>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.



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