



Data Visualization

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Acreditation: 6 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

 $We b site: {\color{blue}www.techtitute.com/us/school-of-business/postgraduate-certificate/data-visualization} \\$

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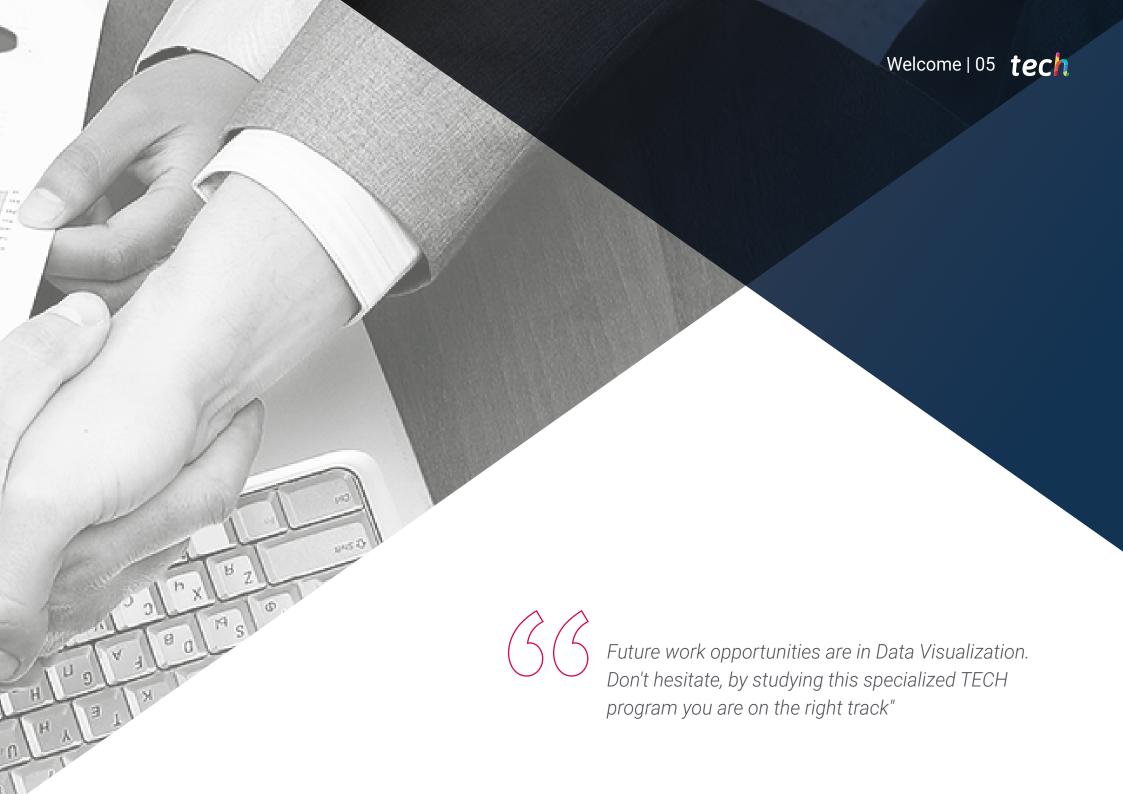
Certificate

01 **Welcome**

We live in a world of complex data that we need to be able to comprehend, and the best way to do that is through graphical representations. This makes it essential for companies to have analytical profiles capable of optimizing the time and resources available to them. This is where Data Visualization comes into play, that presentation of data in graphical format that reveals unseen information behind large data sets (*Big Data*), gives quick answers and helps to more easily understand cause-effect relationships. Which will be your future work opportunity.

Data Visualization involves understanding and analyzing the various sources from which the data comes, as well as controlling the three processes involved in any *Big Data* project, which are: knowing the characteristics of the data we have, analyzing the results of the transformations of this data and efficiently communicating these results. For this reason, through this program the student will learn the most relevant concepts of Data Visualization, as well as the applicable design principles and the choice of the most appropriate tools to obtain a correct visualization and succeed in this field.









tech 08 | Why Study at TECH?

At TECH Global University



Innovation

The university offers an online learning model that combines 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.

100,000+

200+

executives trained 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 studies in the academic community"

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 (a postgraduate learning methodology with the highest international rating) with the Case Study. A complex balance between tradition and state-of-the-art, within the context of the most demanding academic 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.

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.



tech 12 | Why Our Program?

This program will provide students with a multitude of professional and personal advantages, particularly the following:



A significant career boost

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 participants achieve positive career development in less than 2 years.



Develop a strategic and global vision of companies

TECH offers an in-depth overview of general management to understand how each decision affects each of the company's different functional areas.

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.



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 areas 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.



Be part of an exclusive community

Students will be part of a community of elite executives, large companies, renowned institutions, and qualified professors from the most prestigious universities in the world: the TECH Global University community.

We give you the opportunity to train with a team of world renowned teachers.





tech 16 | Objectives

TECH makes the objectives of its students its own. Working together to achieve them.

The **Postgraduate Certificate in Data Visualization** enables students to:



Analyze data visualization, its types and sets



Determine the elements that make up a data visualization







Identify the different types of representation most commonly used in data analysis and the tools that exist to apply them



Address the future of data analysis





tech 20 | Structure and Content

Syllabus

The Postgraduate Certificate in Data Visualization at TECH Global University is an intensive program that prepares students to face challenges and strategic decisions in the corporate environment with business intelligence tools, that is, data management. Therefore, the content of the program is designed to make use of the possible applications of Business Intelligence (BI) in the enterprise.

Throughout 150 hours of preparation, the student analyzes a multitude of practical cases through individual work and teamwork. It is, therefore, an authentic immersion in real business situations.

In this way, this Postgraduate Certificate deals in depth with the concept of Data Visualization to implement it in business management so that it brings positive results to the company, from a disruptive, complete and up to date perspective, focused on solving the real needs of the business world. It is designed to specialize professionals who understand the data world with a strategic, international and innovative approach.

A syllabus that has been fully designed for the student, focused on their professional improvement, preparing them to achieve excellence. A program that understands both the needs of the student and the company, through innovative content based on the latest trends, supported by the best educational methodology and an exceptional faculty.

This Postgraduate Certificate is developed over 6 week and is divided into 1 module:

Module 1

Data Visualization



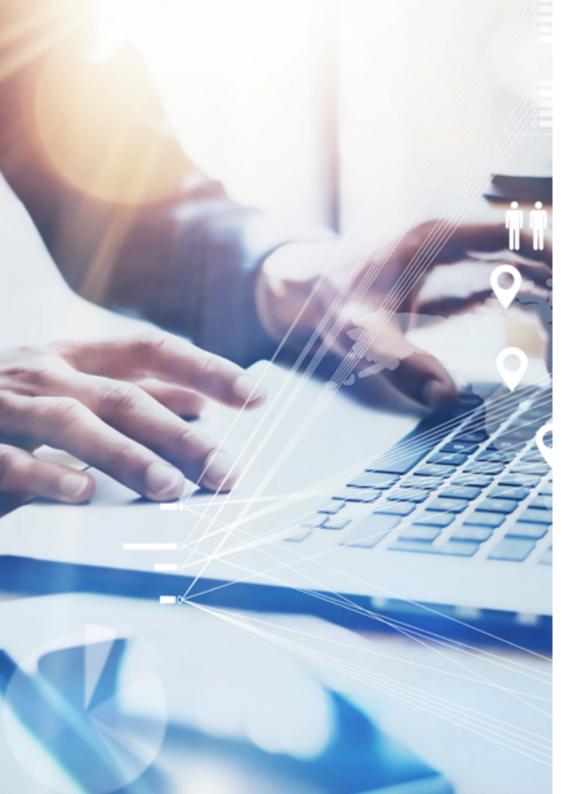
Where, when and how is it taught?

TECH offers its students the possibility of taking this program completely online. Throughout the six week of training, they will be able to access all the program contents at any time, allowing them to self manage their own study time.

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

tech 22 | Structure and Content

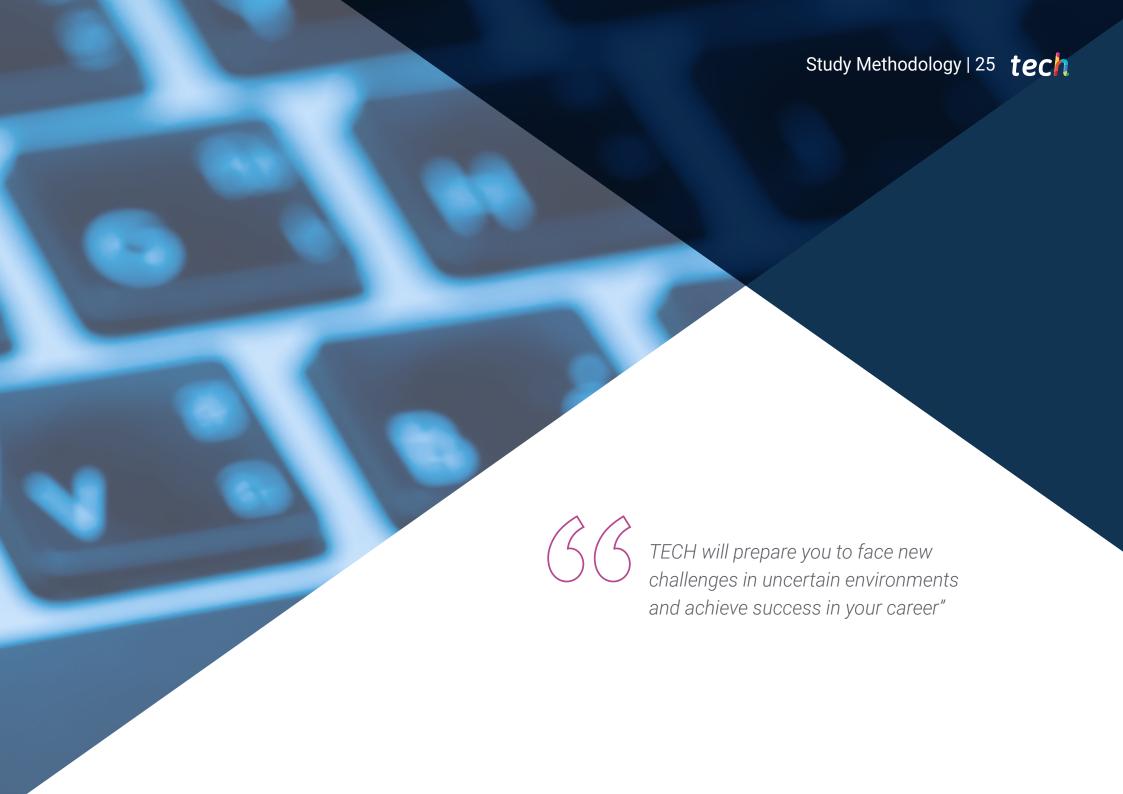
Module 1. Data Visualization						
	Data Visualization Data Visualization Importance of Data Analysis and Visualization Evolution	1.2. The Design1.2.1. Use of Color1.2.2. Composition and Typography1.2.3. Recommendations	1.3.1. 1.3.2.	Types of Data Qualitative Quantitative Temporary Data	1.4.2. 1.4.3.	Data Sets Files Databases Open Data Streaming Data
1.5.3. 1.5.4.	Common Types of Representation Columns Bars Lines Areas Dispersion	1.6. Advanced Types of Representation1.6.1. Circular1.6.2. Rings1.6.3. Bubbles1.6.4. Maps	1.7.5.	Political Science and Sociology Science Marketing Health and Well being	1.8.2.	Importance of Storytelling
1.9.2. 1.9.3.	Visualization Software Paid Free Online Free Software	1.10. The Future of Data Visualization 1.10.1. Virtual Reality 1.10.2. Augmented Reality 1.10.3. Artificial Intelligence				





Identifying the application areas of data analytics and presenting the principles of Data Visualization design will be two of your star functions that will make you stand out in your profession"



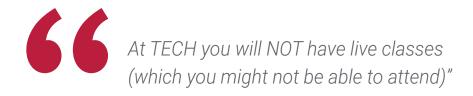


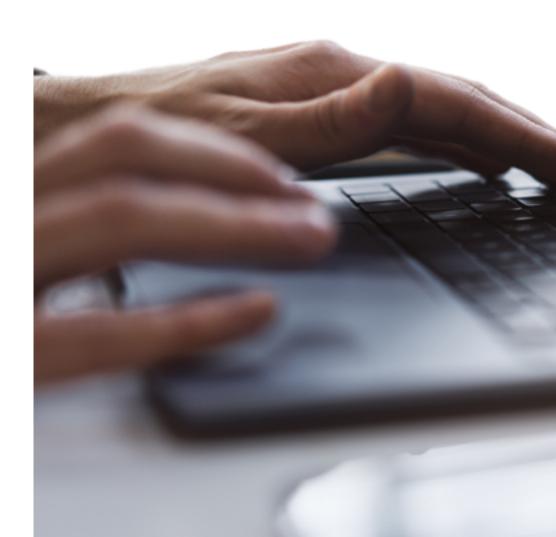
The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.









The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.



TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want"

tech 28 | Study Methodology

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



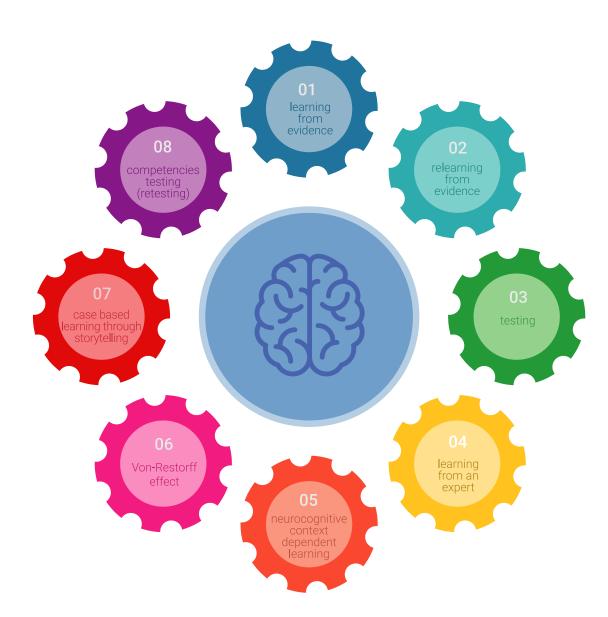
Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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.



tech 30 | Study Methodology

A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

The effectiveness of the method is justified by four fundamental achievements:

- 1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
- **2.** Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- 4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

Study Methodology | 31 tech

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.

tech 32 | Study Methodology

As such, the best educational materials, thoroughly prepared, will be available in this program:



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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Practicing Skills and Abilities

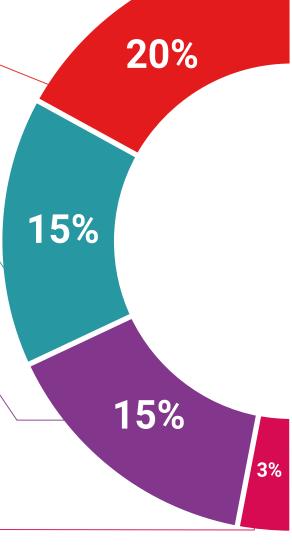
You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



Interactive Summaries

We present 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".





Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.

Case Studies

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.



Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.



Classes

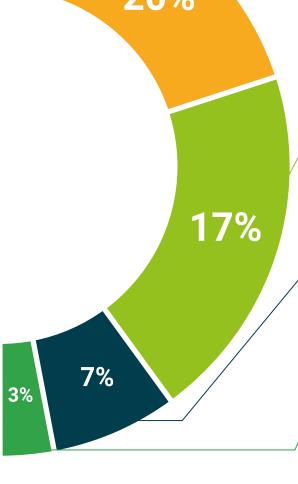
There is scientific evidence suggesting that observing third-party experts can be useful.



Learning from an expert strengthens knowledge and memory, and generates confidence for future difficult decisions.

Quick Action Guides

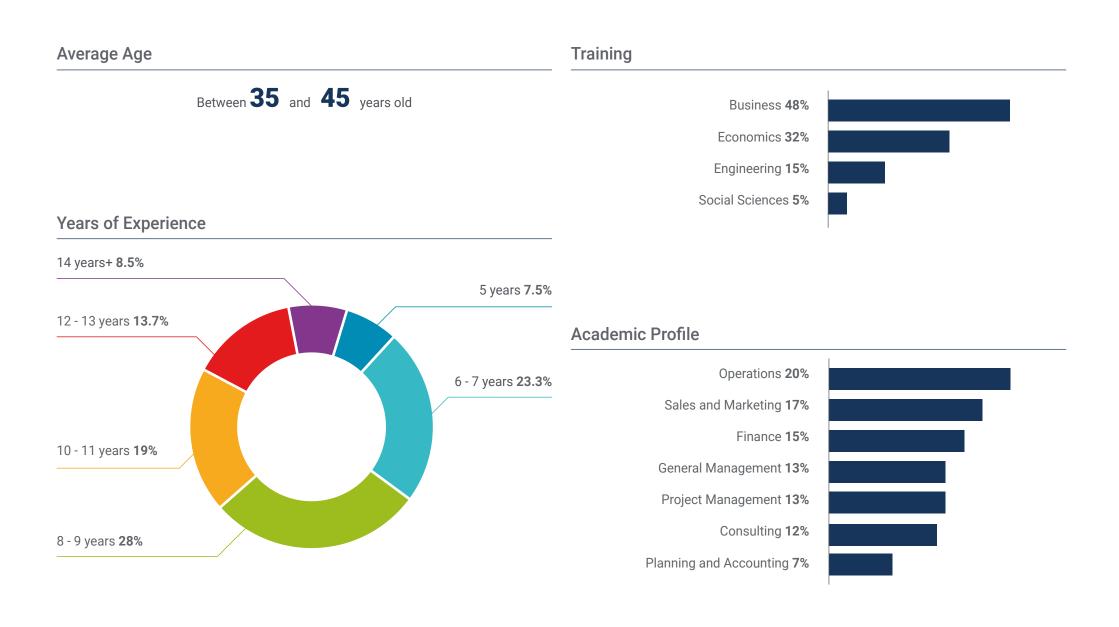
TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.



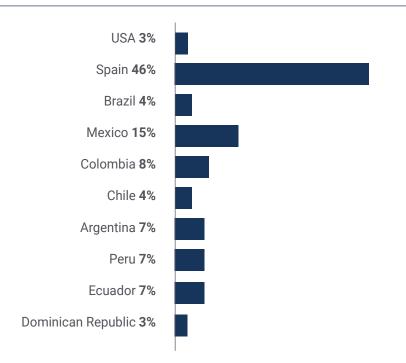




tech 36 | Our Students' Profiles



Geographical Distribution





Iris Benjumea

Data Analyst

"Thanks to this TECH Postgraduate Certificate, I have updated my knowledge in Data Visualization, a field towards which I recently oriented myself in order to achieve professional growth. It is a program with practical examples that makes it easy to understand, and it is online, which fits very well with my lifestyle. I am delighted and will repeat with another program for sure"





International Guest Director

Mick Gram is synonymous with innovation and excellence in the field of **Business Intelligence** internationally. His successful career is linked to leadership positions in multinationals such as **Walmart** and Red Bull. Likewise, this expert stands out for his vision to identify emerging technologies that, in the long term, achieve an everlasting impact in the corporate environment.

On the other hand, the executive is considered a pioneer in the use of data visualization techniques that simplified complex sets, making them accessible and facilitating decision making. This ability became the pillar of his professional profile, transforming him into a desired asset for many organizations that bet on gathering information and generating concrete actions from them.

One of his most outstanding projects in recent years has been the Walmart Data Cafe platform, the largest of its kind in the world that is anchored in the cloud aimed at Big Data analysis. In addition, he has held the position of Director of Business Intelligence at Red Bull, covering areas such as Sales, Distribution, Marketing and Supply Chain Operations. His team was recently recognized for its constant innovation regarding the use of Walmart Luminate's new API for Shopper and Channel insights.

In terms of education, the executive has several Master's degrees and postgraduate studies at prestigious centers such as the **University of Berkeley**, in the United States, and the **University of Copenhagen**, in Denmark. Through this continuous updating, the Postgraduate Diploma has achieved cutting-edge competencies. Thus, he has come to be considered a **born leader of the new global economy**, centered on the impulse of data and its infinite possibilities.



Mr. Gram, Mick

- Business Intelligence Solutions Architect for Walmart Data Café
- Independent Business Intelligence and Data Science Consultant
- Business Intelligence Director at Capgemini
- Chief Analyst at Nordea
- Chief Business Intelligence Consultant for SAS
- Executive Education in Al and Machine Learning at UC Berkeley College of Engineering
- Executive MBA in e-commerce at the University of Copenhagen
- Bachelor's Degree and Professional Master's Degree in Mathematics and Statistics at the University of Copenhagen



tech 42 | Course Management

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
- PhD in Psychology, University of Castilla La Mancha
- 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



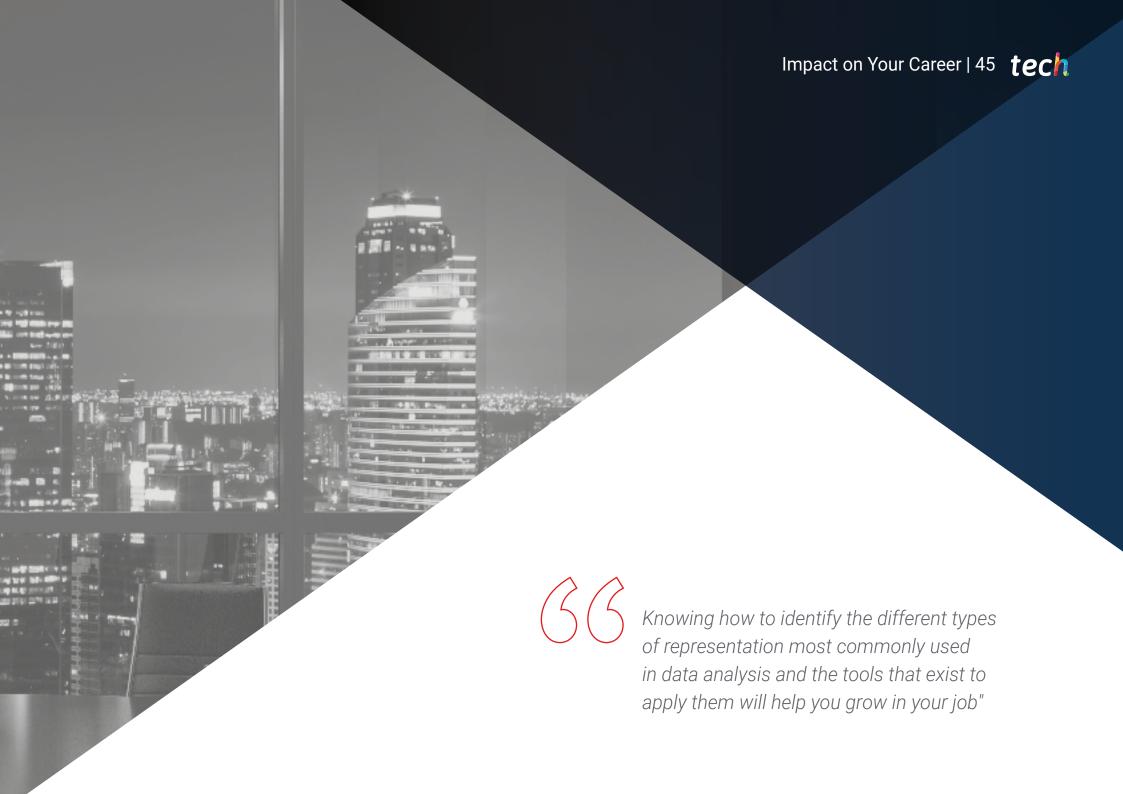
Course Management | 43 tech

Professors

Mr. Catalán Ramírez, Raúl Luis

- Interface Designer and Analyst/Programmer at Prometeus Global Solutions
- Freelance designer and programmer
- Designer at Mille Cunti Association
- Graduated in Graphic Design at the EA. Pedro Almodóvar Teaching Experience
- CMS web implementation and management Professional Experience





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

TECH's Postgraduate Certificate in Data Visualization is an intensive program that prepares students to face challenges and business decisions in a competitive environment full of strategies, metadata and the latest advances in technology to boost the management of a company through Business Intelligence and Artificial Intelligence.

Therefore, its purpose is to promote the personal and professional growth of the student so that they may prosper in this field of work.

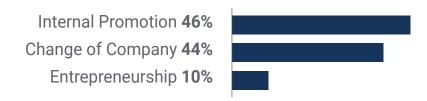
Examining storytelling as a Data Visualization tool is a safe bet that will yield positive reviews.

Reach your career goal by specializing in Data Visualization with this complete program offered by TECH.

When the change occurs



Type of change



Salary increase

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

\$59,800

A salary increase of

25.26%

\$74,905





tech 50 | 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 real project or develop new projects in the field of BI, *Big Data* or data analysis.



Increased competitiveness

This Postgraduate Certificate will equip your professionals with the skills to take on new challenges and thus drive the organization forward.







tech 54 | Certificate

This private qualification will allow you to obtain a **Postgraduate Certificate in Data Visualization** 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** private qualification 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 Data Visualization

Modality: online

Duration: 6 Weeks

Accreditation: 6 ECTS



^{*}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.

health confidence people information tutors guarantee accreditation teaching technology learning community community



Postgraduate Certificate Data Visualization

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Acreditation: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

