Hybrid Executive Master's Degree
Visual Analytics and Big Data

tech global university

Hybrid Executive Master's Degree
Visual Analytics and Big Data

Modality: **Hybrid (Online + Internship)**

Duration: **12 months**

Certificate: **TECH Global University**

Accreditation: **60 + 4 ECTS**

Website: **www.techtitute.com/us/school-of-business/hybrid-executive-master-degree/hybrid-executive-master-degree-visual-analytics-big-data**

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01
Introduction

As data generation continues to grow at a rapid pace, organizations face the challenge of extracting valuable information from this data. In this regard, a report by a prestigious consulting firm reflects that 85% of companies are looking to incorporate professionals capable of effectively managing and analyzing their data. In this context, Big Data and Visual Analytics emerge as powerful tools to address these challenges. Faced with this, experts need to acquire advanced skills to handle the most innovative techniques to process and interpret large volumes of data to facilitate informed decision making. For this reason, TECH is launching a revolutionary university degree focused on the most cutting-edge methods in this field.

> " *Through this Hybrid Executive Master's Degree, you will master the most innovative Machine Learning techniques to analyze large datasets"*

In the information age, the ability to transform complex data into useful information is crucial for informed decision making. In this sense, data visualization has evolved beyond simple graphics, incorporating advanced techniques that allow users to explore and interact with large data sets. Against this backdrop, both Visual Analytics and Big Data facilitate the identification of patterns, trends and anomalies that might otherwise go unnoticed. It is therefore essential for experts to have a solid understanding of these fields in order to efficiently manage and analyze large volumes of data efficiently.

With this in mind, TECH presents a pioneering and comprehensive Hybrid Executive Master's Degree in Visual Analytics and Big Data. Designed by experts in this field, the academic itinerary will delve into the most recent advances in areas such as Predictive Analytics, Deep Learning, Machine Learning, and Neural Networks. In line with this, the syllabus will provide students with the most sophisticated data analysis techniques, including Natural Language Processing or Montercarlo Simulations. In this way, graduates will develop advanced skills to identify complex problems related to Big Data and develop highly innovative analytical solutions.

Once the theoretical stage has been completed, this program provides for graduates to carry out a practical internship at a prestigious institution in this field. Thanks to this, students will have the opportunity to apply everything they have learned on a practical level, in first-class facilities equipped with top-notch technological tools. In this way, professionals will develop advanced competencies that will enable them to improve their job prospects considerably. In addition, the itinerary includes 10 comprehensive Masterclasses given by a prestigious International Guest Director.

This **Hybrid Executive Master's Degree in Visual Analytics and Big Data** contains the most complete and up-to-date program on the market. The most important features include:

- Development of more than 100 case studies presented by professionals in Data Analysis and Interpretation

- Its graphic, schematic and practical contents provide essential information on those disciplines that are indispensable for professional practice

- Preparation of a strategic, operational and management report

- Identify complex data patterns through Machine Learning

- Practice of data organization through CRM

- Data processing, cleansing, and preparation in different data formats

- Use of Many Eyes, Matlab, Tableau, SAS Visual Analytics or Microsoft Power Bi as visualization tools

- All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments

- Content that is accessible from any fixed or portable device with an Internet connection

- Furthermore, you will be able to carry out a internship in one of the best companies

A renowned International Guest Director will offer 10 intensive Masterclasses that will allow you to handle the most advanced encryption technologies to improve data security and privacy"
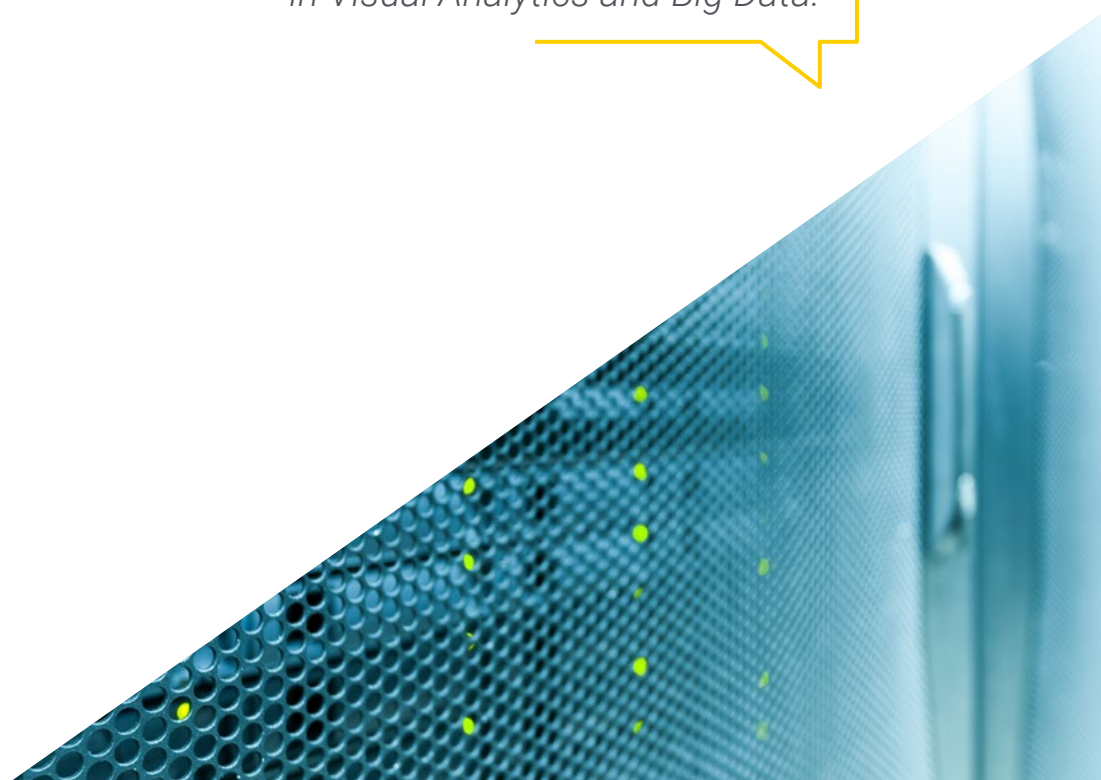
"You will have unrestricted access to all the contents of the Virtual Campus and you will be able to download them to consult them whenever you want"

This program allows training in simulated environments, which provide immersive learning programmed to train in real situations.

You will spend a practical stay in a renowned institution, alongside experts in Visual Analytics and Big Data.

In this Hybrid Executive Master's Degree, of a professionalizing nature and blended learning modality, the program is aimed at updating IT and Marketing professionals. The contents are based on the latest scientific evidence, and oriented in a didactic way to integrate theoretical knowledge in professional practice. professional practice.

Thanks to its multimedia content developed with the latest educational technology, they will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to prepare for real situations. This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Why Study this Hybrid Executive Master's Degree?

In a competitive business environment, organizations seek to identify new market opportunities and emerging trends ahead of their competitors. For this reason, organizations are demanding the incorporation of Visual Analytics and Big Data experts in order to better understand customer preferences and behaviors. For this reason, TECH has created this pioneering degree, where the most recent update in areas such as Cloud Computing, interactive data visualization or Deep Learning is combined with a practical stay in a prestigious entity. In this way, graduates will acquire advanced skills that will optimize their daily practice.

"TECH gives you the opportunity to go inside a real institution to delve into the latest trends in Visual Analytics and Big Data"

1. Updating from the latest technology available

New technologies are playing had a significant impact on the field of Visual Analytics and Big Data, transforming the way data is collected, analyzed and visualized. For example, Machine Learning algorithms allow automating data analysis, identifying patterns and trends efficiently. To bring specialists closer to these technologies, TECH presents this practical stay, which will allow professionals to access a cutting-edge work environment, where they will have access to the most innovative technological tools in this field.

2. Gaining in-depth knowledge from the experience of top specialists

Throughout the entire practical period, graduates will be guided by a team of professionals highly specialized in Visual Analytics and Big Data. These experts will help students handle sophisticated tools to develop highly innovative solutions. In turn, a specifically appointed tutor will help students get the most out of the academic path.

3. Entering first-class environments

TECH carefully carefully all the centers available for its Internship Programs. Thanks to this, students have the guarantees they demand to enjoy an academic experience in leading institutions. In this way, they will be able to experience the day-to-day of a profession that is highly demanded by companies.

4. Combining the best theory with state-of-the-art practice

In order to facilitate the assimilation of professional skills of its students, TECH has configured a disruptive learning model that combines practice with theoretical study. In this way, graduates are faced with a unique opportunity, unparalleled in the academic scenario, which will help them to immediately opt for the best positions in the labor market.

5. Expanding the boundaries of knowledge

The practical stay of this Hybrid Executive Master's Degree from TECH can be carried out in accordance out in different entities of international scope. In this way, students will expand their professional horizons and will be highly qualified to perform their work in any part of the world. All this thanks to the wide network of contacts and agreements available to the largest digital university in the world.

You will have full practical immersion at the center of your choice"

Objectives

After completing this university program, professionals will stand out for their solid understanding of the key technologies used in Visual Analytics and Big Data. In tune with this, graduates will incorporate into their daily practice the most sophisticated statistical and Machine Learning techniques to analyze large data sets. In this way, experts will carry out critical analyses that will enable companies to make informed and strategic decisions.

You will improve the operational efficiency and increase the competitiveness of companies through Data Analytics"

General Objective

• This Hybrid Executive Master's Degree in Visual Analytics and Big Data will provide graduates with skills to apply Machine Learning algorithms to automate large volumes of data and improve predictive analytics. Along the same lines, students will create interactive and effective visualizations using tools such as Tableau. In this way, experts will be equipped with the necessary tools to identify and address complex problems in data interpretation

You will improve the operational efficiency and increase the competitiveness of companies through Data Analytics"

Specific Objectives

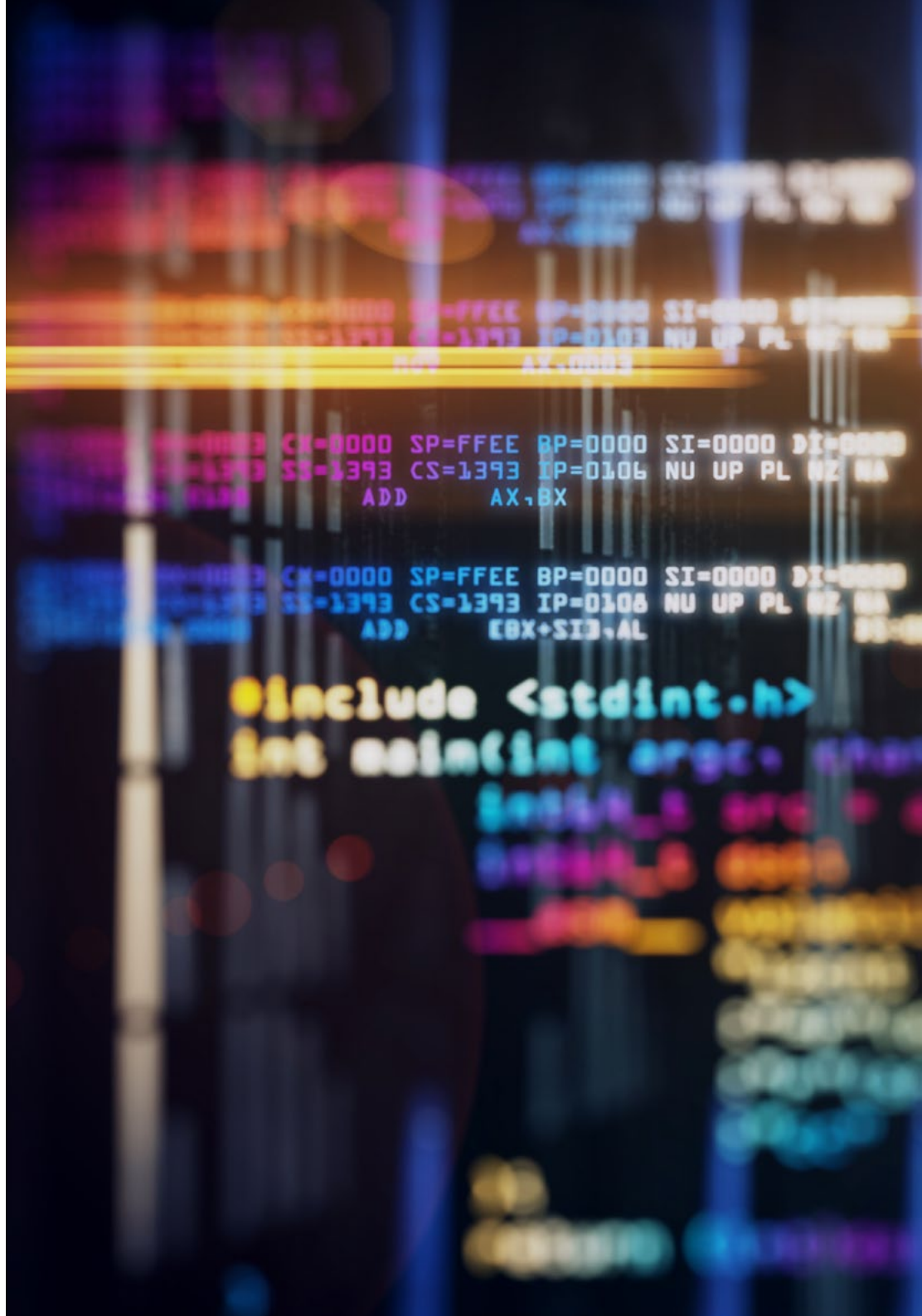- Develop analytical and critical thinking for strategic decision making

- Generate differential value in our ability to make decisions

- Know the different theories for data analysis and interpretation

- Identify the most common descriptors for a dataset

- Learn how to interpret the different existing regression techniques

- Understand the different techniques for data analysis

- Design the joint strategy of statistical and artificial intelligence techniques for the development of descriptive and predictive systems applied to the reality of a data set

- Identify the techniques oriented to statistical analysis, Artificial Intelligence and massive data processing

- Know the environments most used by Data Scientists

- Know how to process data in different formats from different sources

- Know the latest trends in the creation of intelligent entities based on Deep Learning and neural networks

- Know the artificial intelligence techniques applicable for mass parallelized data processing on a given data set and according to previously defined requirements

- Know how to manage large volumes of data in a distributed manner

- Understand the operation and characteristics of common mass data processing techniques

- Identify commercial and open software tools oriented to statistical analysis, artificial intelligence and mass data processing

- Know and develop the Drive profile applied to mass data environments
- Develop strategic communication and presentation techniques
- Understand the role of emotional intelligence in the context of visual analytics
- Develop emotional management skills as a key to performance-focused organizations
- Know the best practices in PMI applied to the world of Big Data
- Know the SQuID methodology and its applicability in the development of projects with large volumes of data
- Be able to design a central intelligence system (CRM) for decision support based on data analysis and visualization, and focused on the company's own context.
- Analyze the technologies underlying the various web systems
- Develop open source intelligence solutions, exploiting available data sources
- Understand how patterns found in a data set can be made visible in order to generate a common interpretation of the underlying reality
- Understand the scalability of individual representations
- Understand the difference between Visual Analytics and information visualization
- Understand the process of Keim's visual analysis
- Assess the different data visualization methods applicable depending on the information to be conveyed
- Design a system that combines data capture and storage techniques, as well as data analysis and visualization, to represent existing patterns in that data set

" *Boost your career path with holistic teaching, allowing you to advance both theoretically and practically"*

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Skills

Thanks to this university degree, professionals will be able to use programming languages such as Python for data analysis and visualization. At the same time, graduates will develop skills to design dashboards and visual reports that facilitate both interpretation and data-driven decision making. In this way, students will be highly qualified to plan, execute and supervise large-scale data analysis projects.

You will be able to overcome the challenges of big data analysis and visualization"

General Skills

- Possess a strategic vision of the application of new Data Analysis technologies to the business world and apply them to the development of innovative services based on the information analyzed
- Master Big Data technologies and tools

You will use Data Analytics to support strategic and operational business decisions"

Specific Skills

♦ Acquire the necessary skills for professional practice in the field of Visual Analytics in the social and technological context

♦ Know how to analyze and interpret statistical data

♦ Use data evaluation and analysis techniques

♦ Know the tools to be used in data analysis

♦ Perform management and parallelization of databases of different types

♦ Put into practice advanced management skills in data organization

♦ Lead Visual Analytics and Big Data projects

♦ Applying data engineering to marketing

♦ Make data visible

♦ Use data visualization tools

05
Course Management

TECH's philosophy is to provide the most complete and renewed university degrees in the academic panorama. For this reason, it carries out a exhaustive process to form their respective teaching staff. Thanks to this, this Hybrid Executive Master's Degree has the participation of the best specialists in Visual Analytics and Big Data. These professionals have developed a variety of didactic materials that stand out both for their high quality and their full application to the demands of today's labor market. In this way, students will be immersed in a high-intensity experience that will raise their employment horizons significantly.

You will be supported by authentic references in Visual Analytics and Big Data"

International Guest Director

Recognized as one of the best experts in Data Science by Forbes magazine, Robert Morgan is a distinguished mathematician highly specialized in the field of Computational Statistics. His extensive knowledge in this field has allowed him to be part of international reference institutions, such as the multinational Unilever.

In this way, he has led the Data Science strategy at a global level. In this sense, he has supervised multiple projects that use advanced analysis to optimize the strategic operations of companies. Among his major achievements, he has improved the shopping experience of multiple customers by offering them personalized product recommendations based on their preferences. As a result, it has enabled users to establish loyal relationships with brands. He has also employed Digital Twins in the manufacturing network, managing to monitor soap production in real time and significantly improving its quality.

Moreover, his philosophy focuses on the use of data systems to solve complex problems in the business environment and drive innovation. In the same vein, in his spare time he develops software and participates in open source projects. As such, he stays at the forefront of the latest trends in subjects such as Bayesian Statistics, Big Data and Artificial Intelligence, among others.

In addition, his work has been rewarded on multiple occasions in the form of awards. For example, he recently received the "Business Achievement" award from Unilever for his contribution to the digital transformation of the company. In this regard, it is worth noting that the integration of technologies has enabled companies to improve their operational efficiency by automating repetitive tasks. This has considerably reduced human errors in the logistics chain, resulting in both time and cost savings.

Mr. Morgan, Robert

- Global Director of Data Science at Unilever in New York, United States
- Head of Analytics and Data Science at Dunnhumby, New York
- Statistician at Unilever, New York
- M.Sc. in Computational Statistics from the University of Bath
- M.Sc. in Statistical Research from the University of Bristol
- B.Sc. in Mathematics, Cardiff University
- Certificate in Statistical Learning from Stanford University
- Certificate in Programming from Johns Hopkins University

❝

Thanks to TECH you will be able to learn with the best professionals in the world"

Management

Dr. Galindo, Luis Ángel

- Executive Director of Innovation at Telefónica
- Feasibility Analysis Manager at Telefónica Móviles
- Development Supervisor at Motorola
- PhD in Managerial Economics and Generation of New Business Models from Universidad Politécnica de Madrid
- Master's Degree in Business Administration from the University of Navarra
- Master's Degree in IP Network Services and Security from Universidad Politécnica de Madrid
- Postgraduate Diploma in Network and Advanced Internet Services from Universidad Carlos III de Madrid
- Telecommunications Engineer, Polytechnic University of Madrid

Professors

Ms. Cordero García, Marta

- Specialist in Applied Mathematics and Aerospace Engineering
- Researcher of the Group Methods and Numerical Applications to Aerospace Technology
- Full Professor at the Polytechnic University of Madrid
- Senior Technician in Aerospace Engineering

Mr. García Montesinos, Felipe

- Founding Partner and CEO of Knowdle AI Technologies Group
- CEO at HOMONOVUS incubator
- CEO at Intuitio Group
- Executive Master's Degree in Innovation
- Degree in Computer Science from the Polytechnic University of Madrid

Professors

Dr. Lominchar Jiménez, José
- Doctor in Law, International Consultant and Lecturer
- Director of the International Consultancy of High Performance (CIAR), Intelligence & Consulting
- University Professor
- International Speaker and TED Speaker
- Researcher
- Managing Director at Next International Business School
- International Advisor at ICONO sud Network
- Vice President of the Spanish Association of Executive and Business Coaching (AECEE)
- Doctor in Law from the Labor Law Program at UCJC, Spain
- Honorary Doctorate from the University Center for Legal Studies (Centro Universitario de Estudios Jurídicos), Mexico
- Law Degree from the Complutense University of Madrid, Spain
- MBA: Master's Degree of Business Administration

Mr. Almansa, Antonio
- Data management and visual analytics specialist
- Design, implementation and integration of contingency center in DC Julián Camarillo
- Senior Technician: operation, engineering and architecture of the Data Center (DC) networks located in Independencia and Orduña, as well as the transport network at national level for tariffs and upgrades
- Level 2 Expert: design and implementation of the networks (with technological change) of the DC of Fco. Sancha and later Manuel Tovar

Ms. Olmedo Soler, Asunta
- Creative Director, Copywriter and Blogger
- Creative Director, Copywriter and Graphic Designer at Managing and Innovation Business Partners
- Graphic Designer at Defensor del Pueblo
- Founder and Creative at Kidecó
- Director of the Graphic Design and Social Media Management Department at OK-Systems
- Master's Degree in Graphic Design at Tracor Training Center
- Communication, Public and PR Technician by the International Institute of Specialized Techniques
- Certificate in Community Manager at the Instituto Marketing Online

Ms. Álvarez de las Cuevas, Mónica
- Computer Engineer
- Project Management and Direction at COO MiBizPartners
- Project Team Management at Factor Ideas
- Training Coordinator at the School of Technical Excellence at Accenture
- IT Department Manager at Geditec
- Training Manager at Telefónica Educación Digital
- B.S. in Computer Engineering from the University of Southern Mississippi

Educational Plan

This Hybrid Executive Master's Degree in Visual Analytics and Big Data has been designed by experts in this field. Thanks to this, students will have access to high quality teaching materials and adjusted to the requirements of the current labor market. Consisting of 10 specialized modules, the curriculum will delve into the most cutting-edge Data Analysis techniques. In this sense, the syllabus will delve into the latest innovations in areas such as Deep Learning, Cloud Computing and Data Driven Soft Skills, among others.

In this way, the graduates will develop skills to effectively implement predictive models and advanced data analysis.

"

You will handle Storytelling techniques to facilitate both understanding and action based on data"

Module 1. *Visual Analytics* in the Social and Technological Context

1.1.   Technological Waves in Different Societies. Towards a 'Data Society'
1.2.   Globalization. Geopolitical and Social World Context
1.3.   VUCA Environment. Always Living in the Past
1.4.   Knowing New Technologies: 5G and IoT
1.5.   Knowing New Technologies: Cloud and Edge Computing
1.6.   Critical Thinking in Visual Analytics
1.7.   Knowmads. Nomads Among Data
1.8.   Learning to Be an Entrepreneur in Visual Analytics
1.9.   Anticipation Theories Applied to Visual Analytics
1.10. The New Business Environment. Digital Transformation

Module 2. Data Analysis and Interpretation

2.1.   Introduction to Statistics
2.2.   Measures Applicable to the Processing of Information
2.3.   Statistical Correlation
2.4.   Theory of Conditional Probability
2.5.   Random Variable and Probability Distribution
2.6.   Bayesian Inference
2.7.   Sample Theory
2.8.   Confidence Intervals
2.9.   Hypothesis Testing
2.10. Regression Analysis

Module 3. Data and AI Analysis Techniques

3.1.   Predictive Analytics
3.2.   Evaluation Techniques and Model Selection
3.3.   Lineal Optimization Techniques
3.4.   Montecarlo Simulations
3.5.   Scenario Analysis
3.6.   Machine Learning Techniques
3.7.   Web Analytics
3.8.   Text Mining Techniques
3.9.   Methods of Natural Language Processing (NLP)
3.10. Social Network Analytics

Module 4. Data Analysis Tools

4.1.   Data Science R Environment
4.2.   Data Science Python Environment
4.3.   Static and Statistical Graphs
4.4.   Data Processing in Different Formats and Different Sources
4.5.   Data Cleaning and Preparation
4.6.   Exploratory Studies
4.7.   Decision Trees
4.8.   Classification and Association Rules
4.9.   Neural Networks
4.10. Deep Learning

Module 5. Database Management and Data Parallelization Systems

5.1.   Conventional Databases
5.2.   Non-Conventional Databases
5.3.   Cloud Computing: Distributed Data Management
5.4.   Tools for the Ingestion of Large Volumes of Data
5.5.   Types of Parallels
5.6.   Data Processing in Streaming and Real Time
5.7.   Parallel Processing: Hadoop
5.8.   Parallel Processing: Spark
5.9.   Apache Kafka
   5.9.1.   Introduction to Apache Kafka
   5.9.2.   Architecture
   5.9.3.   Data Structure
   5.9.4.   Kafka APIs
   5.9.5.   Case Uses
5.10.   Cloudera Impala

Module 6. Data-Driven Soft Skills in Strategic Management in Visual Analytics

6.1.   Drive Profile for Data-Driven Organizations
6.2.   Advanced Management Skills in Data-Driven Organizations
6.3.   Using Data to Improve Strategic Communication Performance
6.4.   Emotional Intelligence Applied to Management in Visual Analytics
6.5.   Effective Presentations
6.6.   Improving Performance Through Motivational Management
6.7.   Leadership in Data-Driven Organizations
6.8.   Digital Talent in Data-Driven Organizations
6.9.   Data-Driven Agile Organization I
6.10.   Data-Driven Agile Organization II

Module 7. Strategic Management of Visual Analytics and Big Data Projects

7.1.   Introduction to Strategic Project Management
7.2.   Best Practices in the Description of Big Data Processes (PMI)
7.3.   Kimball Methodology
7.4.   SQuID Methodology
7.5.   Introduction to SQuID Methodology to Approach Big Data Projects
   7.5.1.   Phase I. Sources
   7.5.2.   Phase II. Data Quality
   7.5.3.   Phase III. Impossible Questions
   7.5.4.   Phase IV. Discovering
   7.5.5.   Best Practices in the Application of SQuID in Big Data Projects
7.6.   Legal Aspects in the World of Data
7.7.   Big DataPrivacy
7.8.   Cyber Security in Big Data
7.9.   Identification and De-Identification with Large Volumes of Data
7.10.   Data Ethics I
7.11.   Data Ethics II

Module 8. Client Analysis. Applying Data Intelligence to Marketing

8.1.   Concepts of Marketing. Strategic Marketing
8.2.   Relationship Marketing
8.3.   CRM as an Organizational Hub for Customer Analysis
8.4.   Web Technologies
8.5.   Web Data Sources
8.6.   Acquisition of Web Data
8.7.   Tools for the Extraction of Data from the Web
8.8.   Semantic Web
8.9.   OSINT: Open-Source Intelligence
8.10.   Master Lead or How to Improve Sales Conversion Using Big Data

Module 9. Interactive Visualization of Data

9.1.   Introduction to the Art of Making Data Visible
9.2.   How to do Storytelling with Data
9.3.   Data Representation
9.4.   Scalability of Visual Representations
9.5.   Visual Analytics vs. Information Visualization. Understanding That Its Not The Same
9.6.   Visual Analysis Process (Keim)
9.7.   Strategic, Operative and Managerial Reports
9.8.   Types of Graphs and Their Application.
9.9.   Interpretation of Reports and Graphs. Playing the Role of the Receiver
9.10.   Evaluation of Visual Analytics Systems

Module 10. Visualization Tools

10.1.   Introduction to Data Visualization Tools
10.2.   *Many Eyes*
10.3.   Google Charts
10.4.   jQuery
10.5.   Data-Driven Documents I
10.6.   Data-Driven Documents II
10.7.   Matlab
10.8.   Tableau
10.9.   SAS Visual Analytics
10.10. Microsoft Power BI

You will master the most innovative Machine Learning techniques to analyze large volumes of data"

Clinical Internship

After passing the online theoretical period, this university degree provides for an Internship Program in a renowned institution in Visual Analytics and Big Data. During this stage, graduates will be supervised by a tutor, who will help them throughout the process and ensure that students enjoy highly effective learning.

Do your internship with Visual Analytics and Big Data professionals, who will teach you the most innovative techniques in Data Analytics"

The Internship Program in Visual Analytics and Big Data consists of a 3-week internship in a distinguished institution, from Monday to Friday, with 8 consecutive hours of practical training with an associate specialist. During this itinerary, the graduates will develop advanced management skills in Data-Driven, which will allow them to optimize the performance of strategic communication. During their intervention, students will be supported by a team of experts in the sector who will guide them to act under the ethics and organization of data through multiple processes, such as CRM.

In this completely practical training proposal, the activities are aimed at adapting the specialists to the digital paradigm and the new trends in Data Analysis. Through this practical stay, the graduates will put into practice all their knowledge to design database management systems and perform data parallelization.

This is an exclusive opportunity for students to learn with the support of experienced professionals, who will accompany them in their practices and will be responsible for developing various tools around visualization, data analysis and its benefits in results.

The practical part will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of professors and other fellow students who facilitate teamwork and multidisciplinary integration as transversal competencies for computer science and marketing (learning to be and learning to relate).

The procedures described below will be the basis of the practical part of the training, and its realization will be subject to the center's own availability and workload, being the proposed activities the following:

| Module	Practical Activity
Social and Technological Context of Visual Analytics	Understand the new 5G, IoT, Cloud and Edge Computing technologies
	Apply critical Thinking techniques in Visual Analytics
	Manage the different types of information processing
	Learn about random variables and probability distributions
	Implement the different applications of Bayesian inference
	Manage information by applying sampling theory
	Practice working with the range of values through the application of confidence intervals
Data Analytics and AI	Manage information through the use of method evaluation and method selection
	Integrate information through web analytics
	Evaluate the use of social networks
	Implement linear optimization techniques: graphical method and simple method
	Identify complex data patterns through Machine Learning
	Perform statistics through the Monte Carlo method
	Work on understanding, classifying and analyzing texts through Text Mining
	Manage methods in Natural Language Processing (NLP)

Module	Practical Activity
Data Analysis Tools and Database Management and Parallelization	Work on statistical analysis through the Data Science R environment
	Practice data analysis through Python
	Delve into the processing, cleaning, and preparation of data in different formats
	Elaborate a decision tree
	Apply classification and association rules
	Know the tools for ingesting large volumes of data
	Delve into the management of the Hadoop and Spark data processing system
	Work on the management of the Apache Kafka platform
	Manage the Cloudera Impala search engine
Strategic Management of Visual Analytics and Big Data Projects and Use of Data-Driven Softskills	Manage data for the optimization of strategic communication performance
	Practice advanced data-driven management skills
	Manage Kimball methodology
	Monitor and evaluate quality through the SQUID method
	Put into practice privacy issues in Big Data
	Apply the best cybersecurity techniques in Big Data

Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the Internship Program period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.
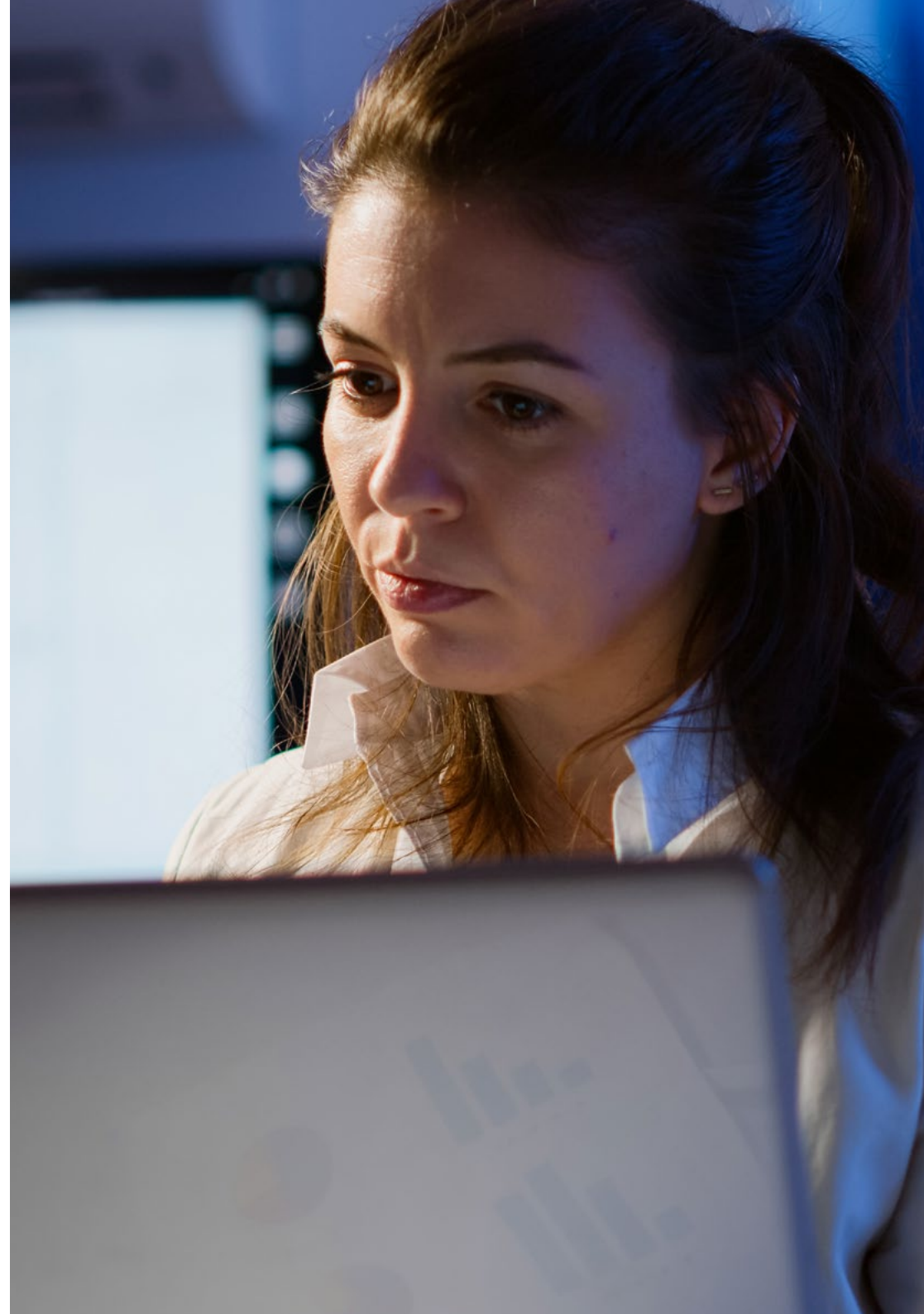
General Conditions of the Internship Program

The general terms and conditions of the internship agreement for the program are as follows:

1. TUTOR: During the Hybrid Executive Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

3. ABSENCE: If the students does not show up on the start date of the Hybrid Executive Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

4. CERTIFICATION: Professionals who pass the Hybrid Executive Master's Degree will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: the Hybrid Executive Master's Degree shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Hybrid Executive Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOES NOT INCLUDE: The Hybrid Executive Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed.

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

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Where Can I Do the Internship?

In line with its philosophy of providing university degrees of excellence, TECH has made an effort so that the practical stay that makes up this Hybrid Executive Master's Degree in Visual Analytics and Big Data can be carried out in different institutions of reference around the national geography. In this way, this institution strengthens its commitment to quality and affordable education for all.

You will spend a practical stay in a renowned institution, alongside experts in Visual Analytics and Big Data"

The student will be able to complete the practical part of this Hybrid Executive Master's Degree at the following centers:

School of Business

Captia Ingeniería

Country
Spain

City
Madrid

Address: Av. de las Nieves, 37, Bloque A Planta 1 Oficina E, 28935, Móstoles, Madrid

IT company dedicated to providing advanced technological solutions to industries.

Related internship programs:
- Visual Analytics and Big Data
- Software Development
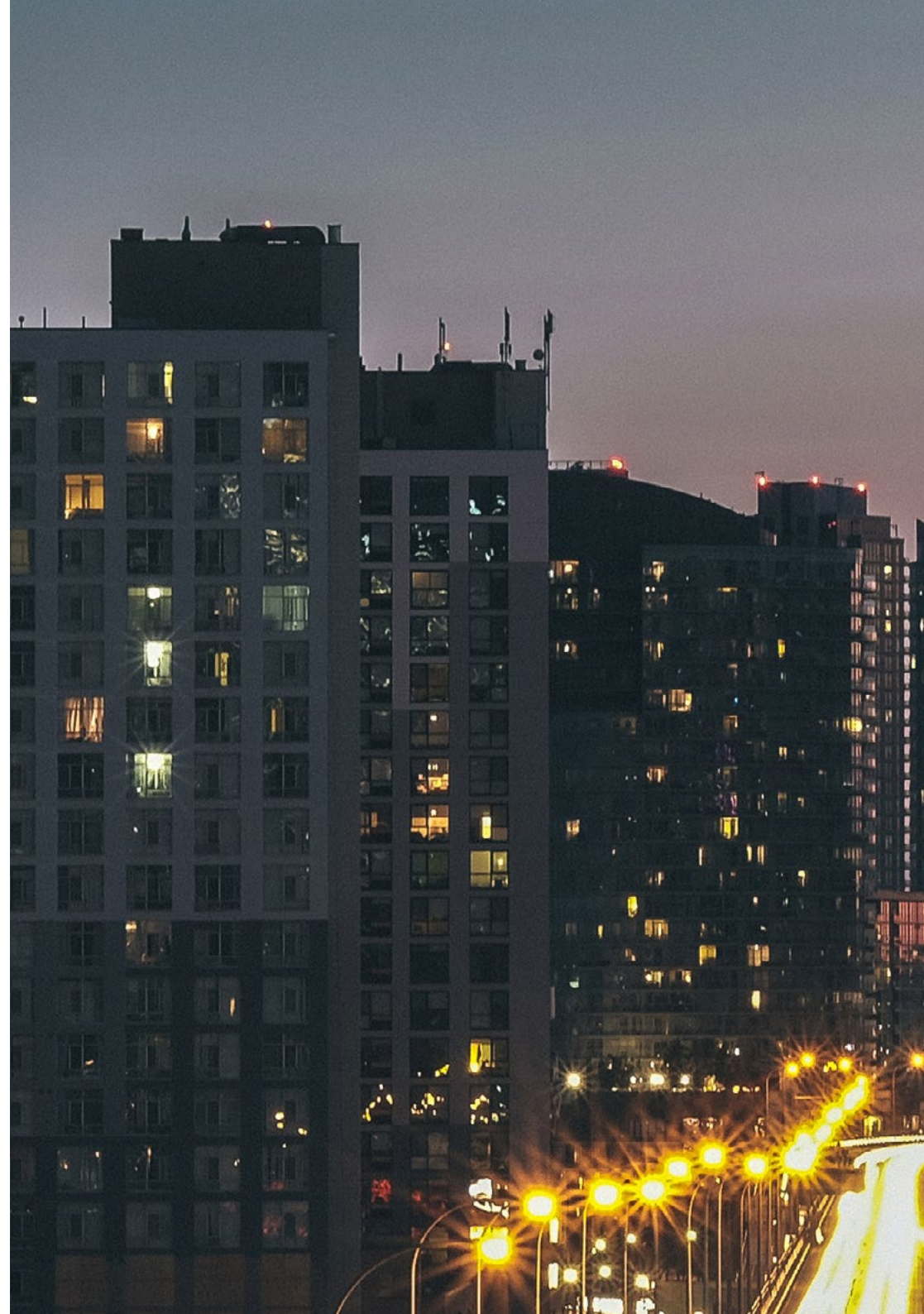
Delve into the most relevant theory in this field, subsequently applying it in a real work environment"

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

TECH Business School uses the Case Study to contextualize all content

Our program offers a revolutionary approach to developing skills and knowledge. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

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

This program prepares you to face business challenges in uncertain environments and achieve business success.

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.

Our program prepares you to face new challenges in uncertain environments and achieve success in your career.

Relearning Methodology

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

We enhance the Case Study with the best 100% online teaching method: Relearning.

Our online system will allow you to organize your time and learning pace, adapting it to your schedule. You will be able to access the contents from any device with an internet connection.

At TECH you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

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

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically. With this methodology we have trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, markets, and financial instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.

This program offers the best educational material, prepared with professionals in mind:

Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Classes

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

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

Management Skills Exercises

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

Additional Reading

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

30%

10%

8%

3%

30%

15%

4%
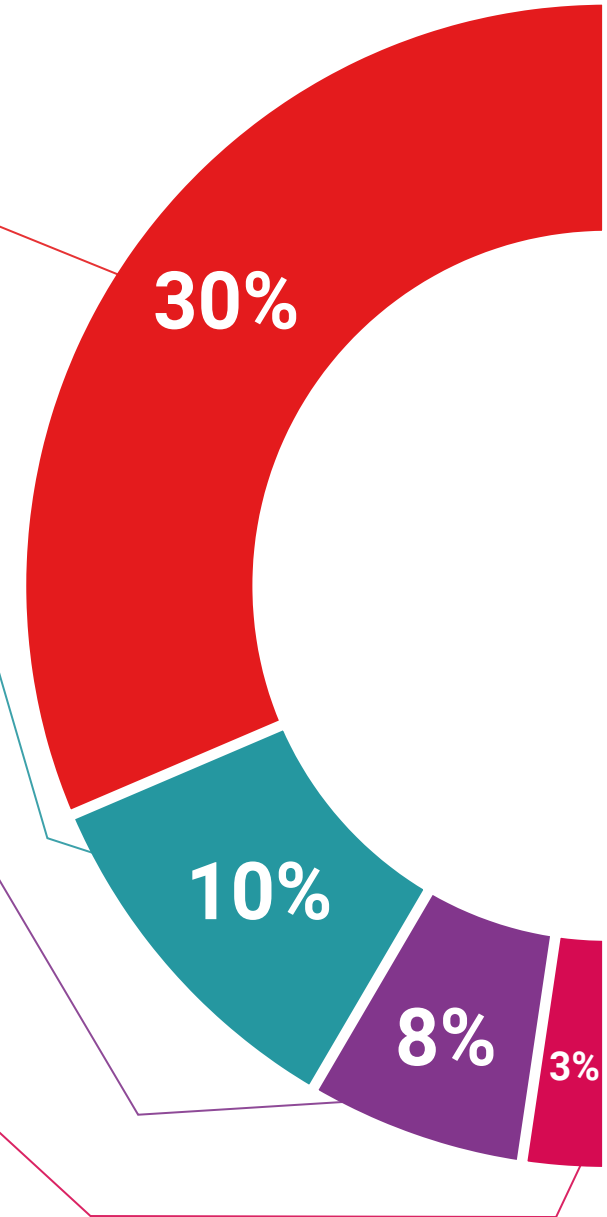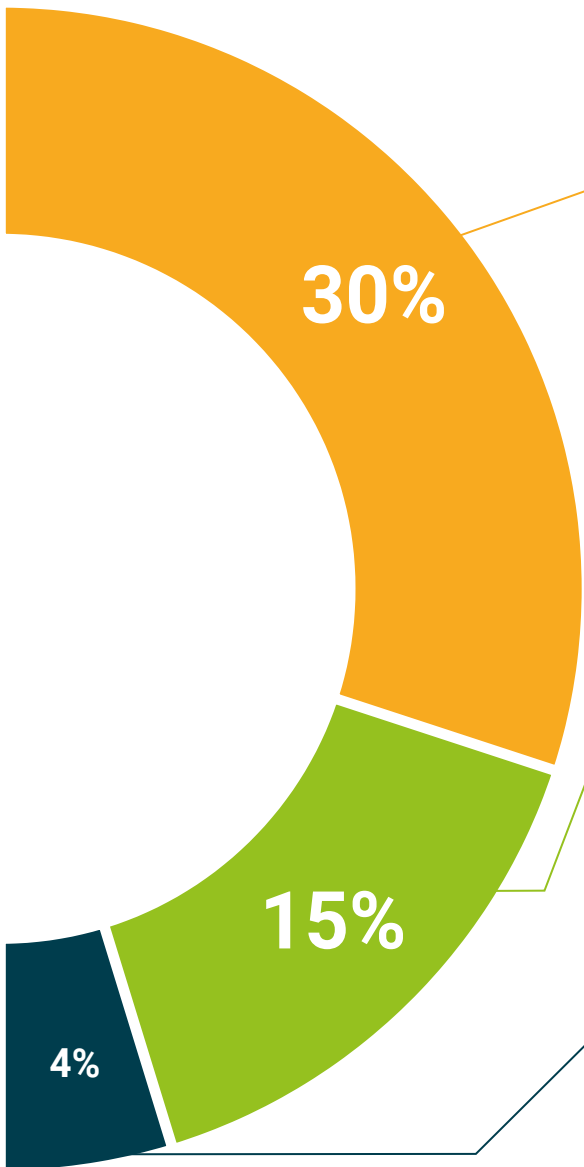
Case Studies

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

Interactive Summaries

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

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

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

10

Certificate

The Hybrid Executive Master's Degree in Visual Analytics and Big Data guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Executive Master's Degree issued by TECH Global University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This private qualification will allow you to obtain an **Hybrid Executive Master's Degree in Multimedia Communication** 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.
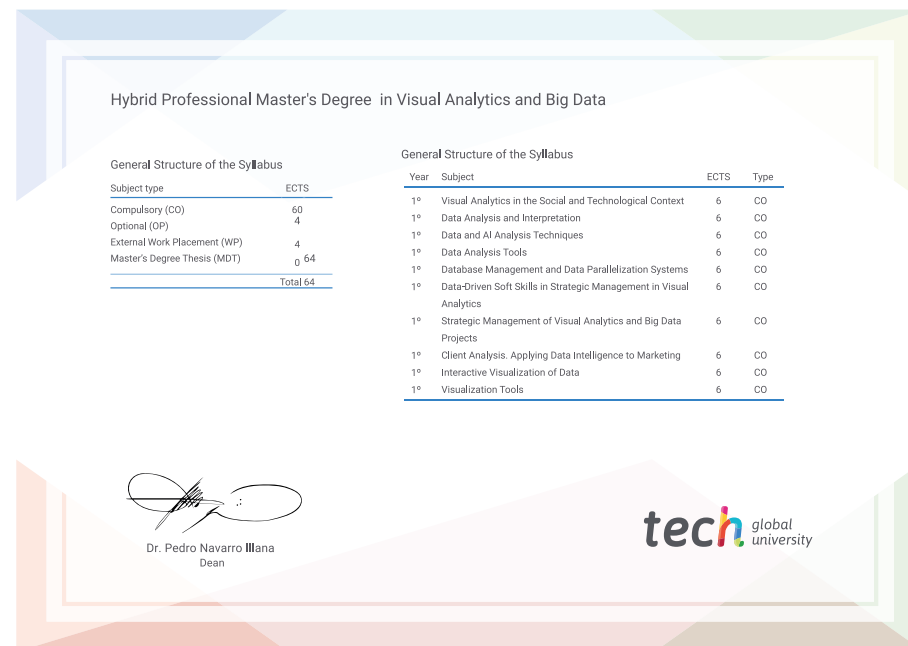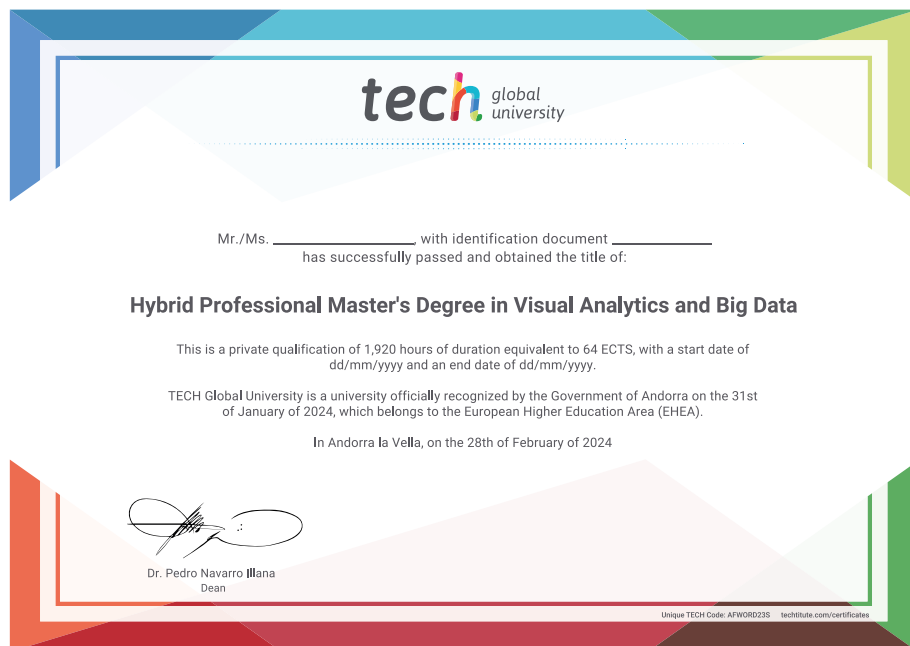
This **TECH Global University** private qualification, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Hybrid Executive Master's Degree in Visual Analytics and Big Data**

Modality: **Hybrid (Online + Internship)**

Duration: **12 months**

Accreditation: **60 + 4 ECTS**

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Mr./Ms. _____, with identification document _____ has successfully passed and obtained the title of:

Hybrid Professional Master's Degree in Visual Analytics and Big Data

This is a private qualification of 1,920 hours of duration equivalent to 64 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

Dr. Pedro Navarro Illana
Dean

Unique TECH Code: AFWORD23S   techtitute.com/certificates

Hybrid Professional Master's Degree in Visual Analytics and Big Data

General Structure of the Syllabus

Subject type	ECTS
Compulsory (CO)	60
Optional (OP)	4
External Work Placement (WP)	4
Master's Degree Thesis (MDT)	0
	Total 64

General Structure of the Syllabus

Year	Subject	ECTS	Type
1°	Visual Analytics in the Social and Technological Context	6	CO
1°	Data Analysis and Interpretation	6	CO
1°	Data and AI Analysis Techniques	6	CO
1°	Data Analysis Tools	6	CO
1°	Database Management and Data Parallelization Systems	6	CO
1°	Data-Driven Soft Skills in Strategic Management in Visual Analytics	6	CO
1°	Strategic Management of Visual Analytics and Big Data Projects	6	CO
1°	Client Analysis. Applying Data Intelligence to Marketing	6	CO
1°	Interactive Visualization of Data	6	CO
1°	Visualization Tools	6	CO

Dr. Pedro Navarro Illana
Dean

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*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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Hybrid Executive Master's Degree
Visual Analytics and Big Data

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Hybrid Executive Master's Degree
Visual Analytics and Big Data

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