Executive Master's Degree

Corporate Technical Data Science Management

MCTDSM

tech technological university

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Executive Master's Degree
Corporate Technical Data Science Management

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**
- Target Group: **Professionals wishing to update knowledge of advanced and cutting-edge IT, with the aim of broadening their skills**

Website: **www.techtitute.com/us/executive-master-degree/master-corporate-technical-data-science-management**

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01

Welcome

Many of today's cutting-edge tools, platforms or technologies are becoming obsolete with reduced applicability in the business environment. Without any doubt, this is an unstoppable and constantly evolving process, the maximum exponent of the current technological revolution, which forces IT professionals to specialize on a permanent basis.

Its teaching program is unique for its careful selection of technologies, including the most recently incorporated and in demand in the business world. In addition, the incorporation of specific modules for the improvement of business vision and the management of multidisciplinary teams, makes this program different and capable of covering a large part of the educational needs of any professional who wishes to position themselves as a reference in the theoretical and practical knowledge of the latest technologies.

Executive Master's Degree in Corporate Technical Data Science Management.
TECH Technological University

Succeed with the best and acquire the knowledge and skills you need to embark on a career in the advanced IT sector"

02

Why Study at TECH?

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

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

At TECH Technological University

Innovation

The university offers an online learning model that 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+
executives trained each year

200+
different nationalities

Empowerment

Students will grow hand in hand with the best companies and highly regarded and influential professionals. TECH has developed strategic partnerships and a valuable network of contacts with major economic players in 7 continents

500+ | **collaborative agreements with leading companies**

Talent

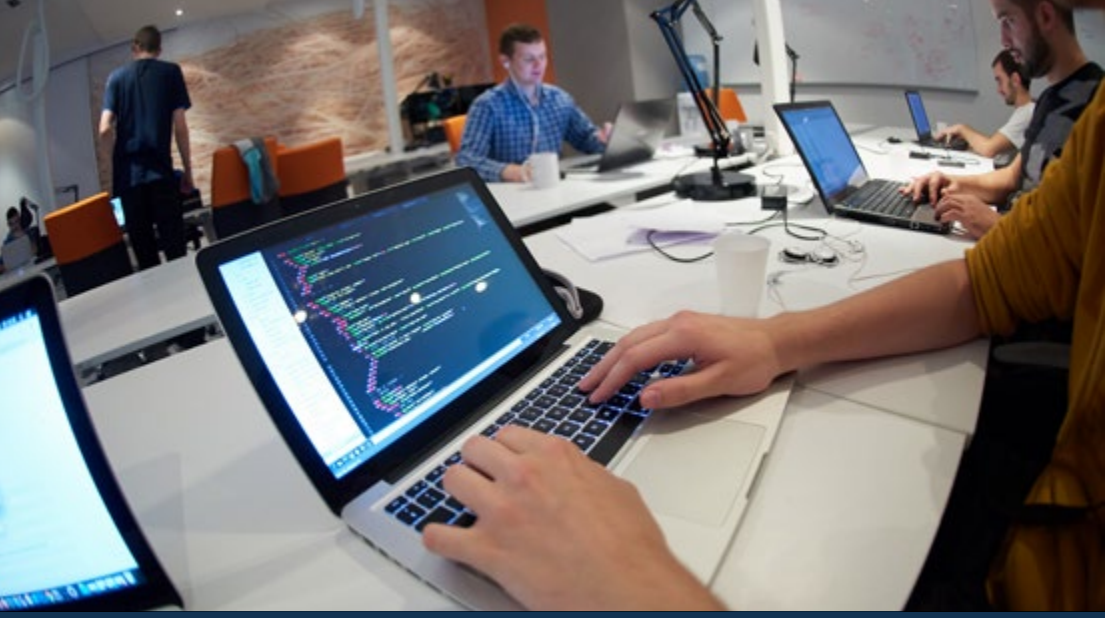
This program is a unique initiative to allow students to showcase their talent in the business world. An opportunity that will allow them to voice their concerns and share their business vision

After completing this program, TECH helps students show the world their talent

Multicultural Context

While studying at TECH, students will enjoy a unique experience. Study in a multicultural context. In a program with a global vision, through which students can learn about the operating methods in different parts of the world, and gather the latest information that best adapts to their business idea

TECH students represent more than 200 different nationalities



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"

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

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

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

01

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

02

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

03

Consolidate the student's senior management skills

Studying at TECH means opening the doors to a wide range of professional opportunities for students to position themselves as senior executives, with a broad vision of the international environment

You will work on more than 100 real senior management cases

04

Take on new responsibilities

The program will cover the latest trends, advances and strategies, so that students can carry out their professional work in a changing environment

45% of graduates are promoted internally

05

Access to a powerful network of contacts

TECH connects its students to maximize opportunities. Students with the same concerns and desire to grow. Therefore, partnerships, customers or suppliers can be shared

You will find a network of contacts that will be instrumental for professional development

06

Thoroughly develop business projects

Students will acquire a deep strategic vision that will help them develop their own project, taking into account the different areas in companies

20% of our students develop their own business idea

07

Improve soft skills and management skills

TECH helps students apply and develop the knowledge they have acquired, while improving their interpersonal skills in order to become leaders who make a difference

Improve your communication and leadership skills and enhance your career

08

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 Technological University community

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

04

Objectives

This programme is designed to strengthen students' skills in the Corporate Technical Data Science Management, as well as to develop new competencies and skills that will be essential in their professional development. After the program, you will be equipped to make global decisions with an innovative perspective and an international vision.

One of our fundamental objectives is to help you develop the essential skills to strategically manage a business"

Your goals are our goals.
We work together to help you achieve them.

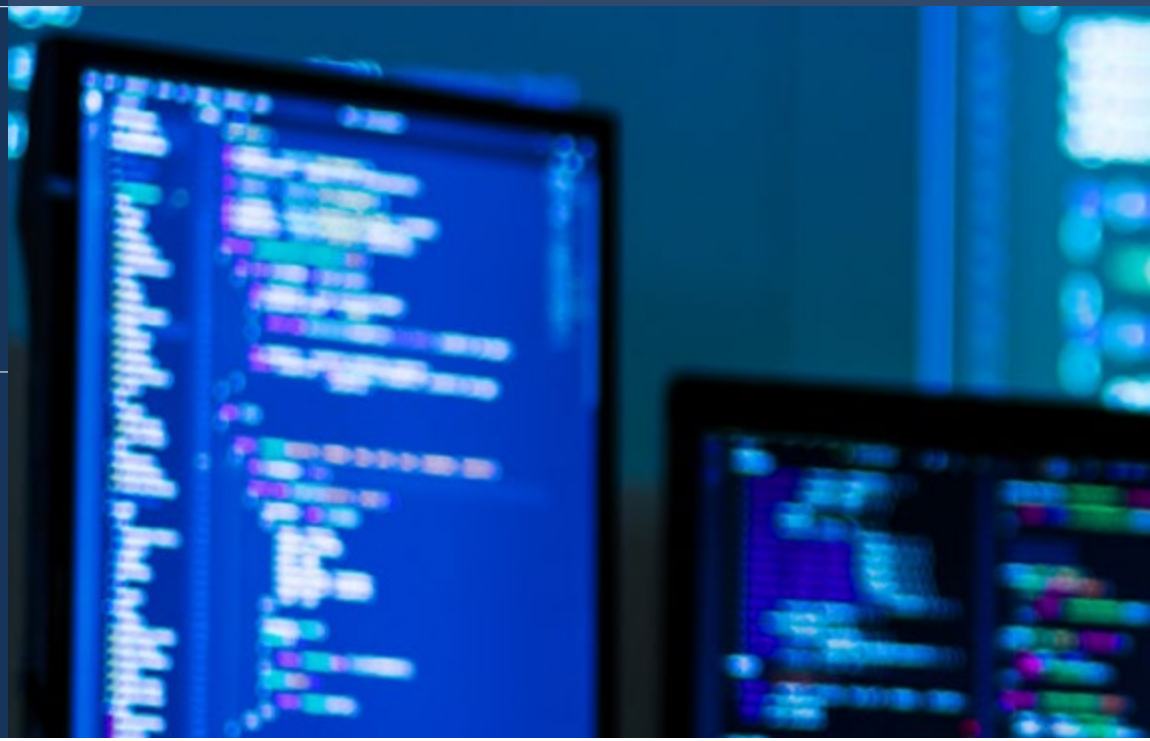
This **Executive Master's Degree in Corportate Technical Data Science Management** will enable students to:

01 Analyze ERP and CRM systems, their contribution and benefits

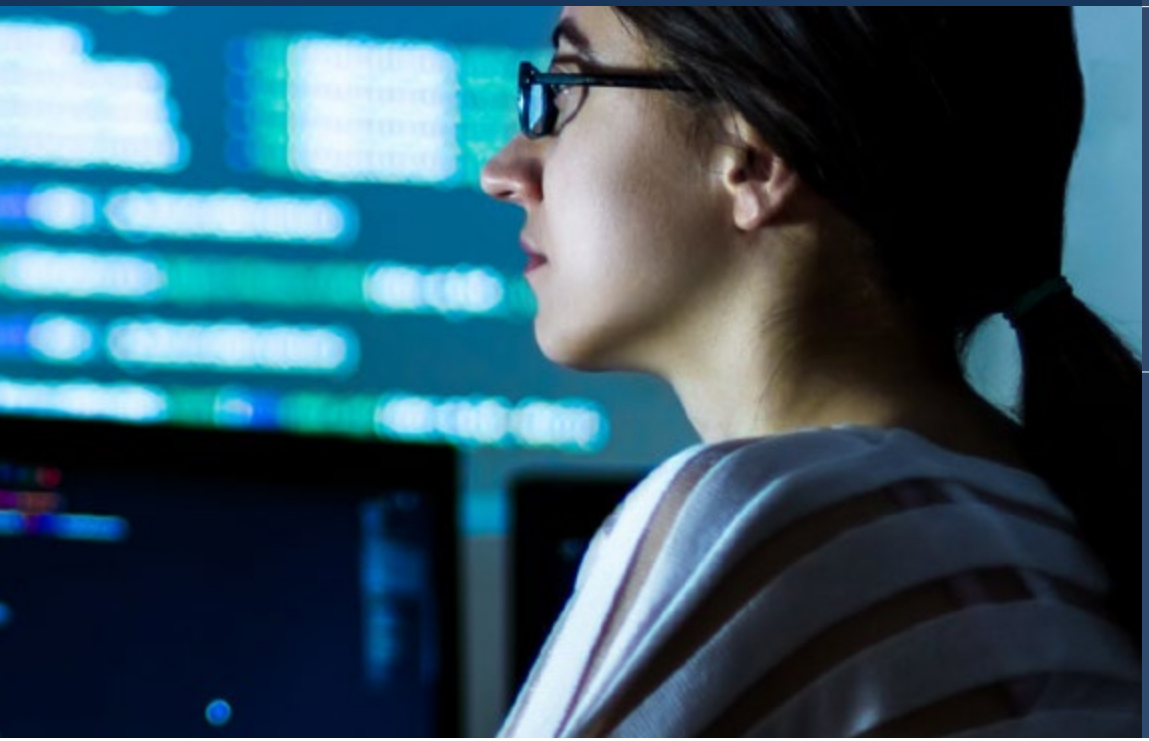
02 Design and select the right ERP or CRM tool for each company

03 Develop each stage of the data lifecycle

04 Examine the data mining process



05 Analyze a web platform and optimising its operation



06 Evaluate sessions and traffic to better understand the audience

07 Develop specialised knowledge on maintainable, scalable and reliable systems

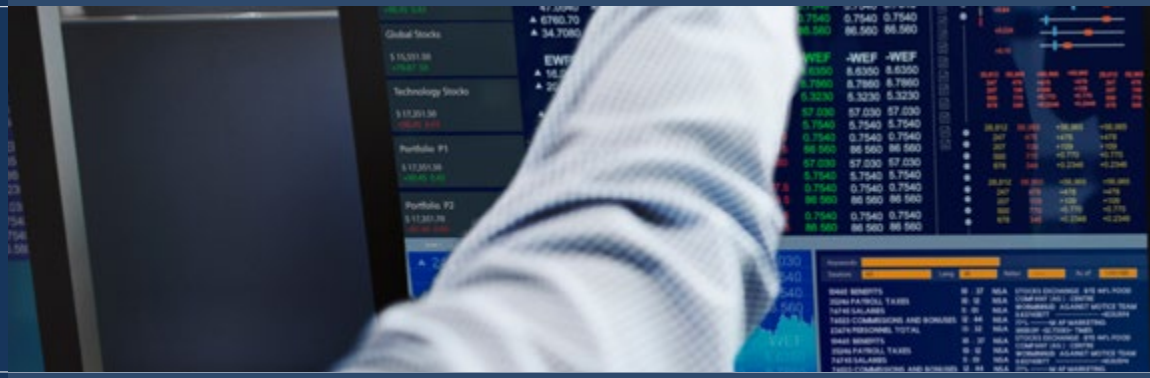
08 Analyze different data models and their impact on applications

09 Analyze classical system models and identify shortcomings for use in distributed applications

10 Examine the distributed computing paradigm and establish the microservice model

11 Generating IoT expertise

12 Develop the IoT Reference Architecture and technology framework



13 Analyze the concept of Agile Methodology for Project Management and develop the elements and processes of the SCRUM framework

14 Examine and develop the elements of the KANBAN method for Project Management

15 Base our company's differentiation on intangible resources

16 Identify opportunities for improvement through mindfulness

17 Present a business model based on flowing with change and uncertainty rather than "breaking" through resistance

18 Dynamize the company by using emotion management as a way to success

05

Skills

After passing the assessments of this Executive Master's Degree in Corporate Technical Data Science Management, students will have acquired the skills required for a quality and up-to-date practice based on the most innovative educational methodology.

This program will enable you to acquire the skills you need to succeed in tourism planning and management"

01 Specialize in the most common information systems

02 Use algorithms, tools and platforms to apply machine learning techniques

03 Manage specific architectures for high-volume information processing for business exploitation

04 Make use of the main IoT technologies and their applicability in real environments

05 Carry out web analytics processes to better understand the potential client, as a key tool for the management of strategic actions

06 Manage projects and people more effectively

07 Respond to current needs in the area of Advanced Information Technologies

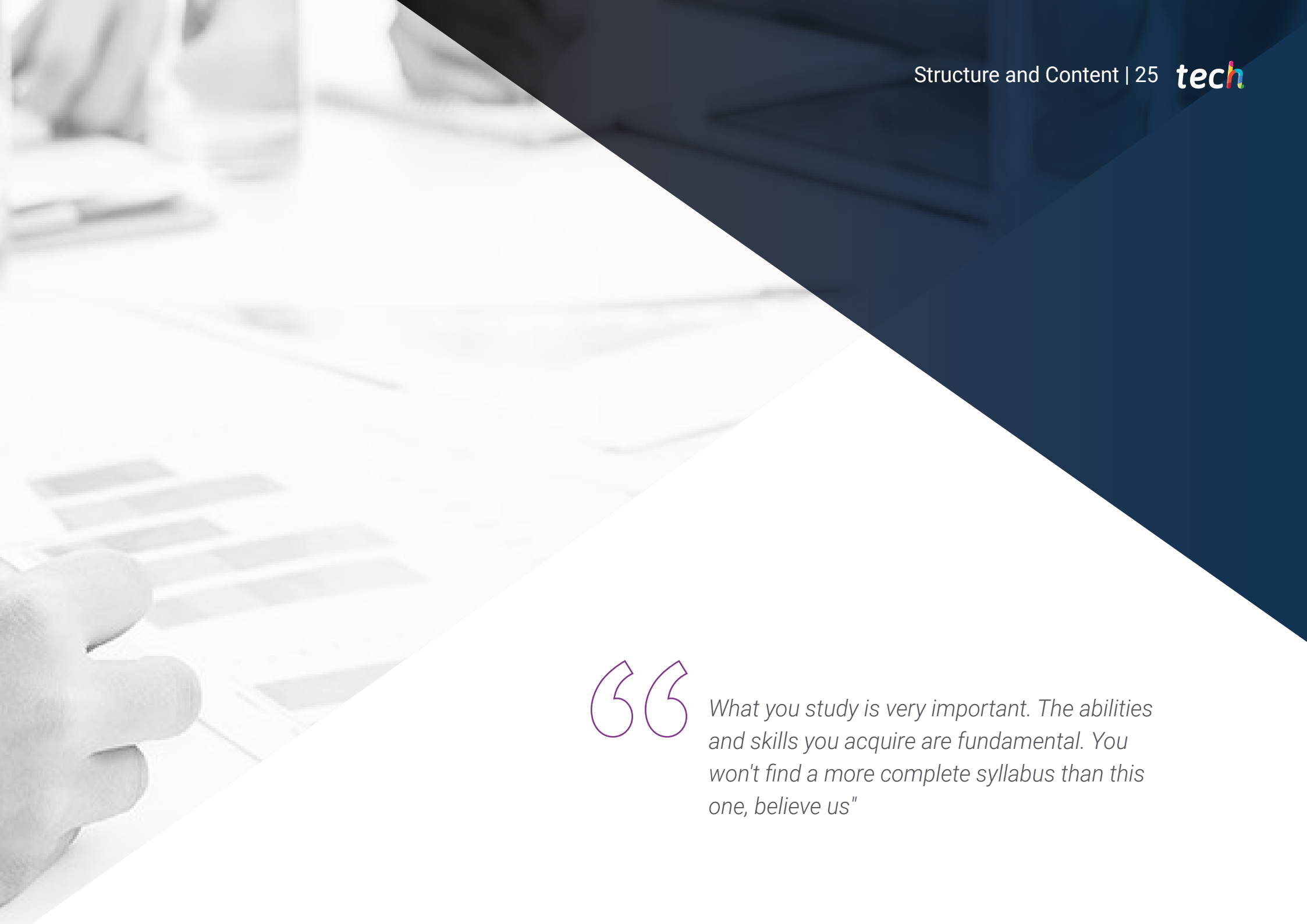
08 Develop a commercial strategy

09 Generate specialised knowledge for commercial decision making

06

Structure and Content

This Executive Master's Degree in Corporate Technical Data Science Management is a tailor-made program that is taught in a 100% online format so students can choose the time and place that best suits their availability, schedules and interests. A program that takes place over 12 months and is intended to be a unique and stimulating experience that lays the foundation for your success as a professional.



What you study is very important. The abilities and skills you acquire are fundamental. You won't find a more complete syllabus than this one, believe us"

Syllabus

This Executive Master's Degree in Corporate Technical Data Science Management from TECH Technological University is an intensive programme that prepares students to face challenges and business decisions in the field of Corporate Technical Data Science Management.

The content of this Executive Master's Degree in Corporate Technical Data Science Management is designed to promote the development of skills that enable more rigorous decision-making in uncertain environments.

Over the course of 1,500 hours, the student analyzes a plethora of practical cases through individual and teamwork. It is, therefore, an authentic immersion in real business situations.

This Executive Master's Degree deals in depth with the world of computer science in the business world, and is designed to prepare professionals who understand Corporate Technical Data Science Management from a strategic, international and innovative perspective.

A plan designed for students, focused on their professional improvement and that prepares them to achieve excellence in the field of business management and administration. A program that understands your needs and those of your company through innovative content based on the latest trends, and supported by the best educational methodology and an exceptional faculty, which will provide you with the skills to solve critical situations in a creative and efficient way.

This Executive Master's Degree takes place over 12 months and is divided into 10 modules:

Module 1	Main Information Management Systems
Module 2	Data Types and Data Life Cycle
Module 3	Number Machine Learning
Module 4	Web Analytics
Module 5	Scalable and Reliable Mass Data Usage Systems
Module 6	System Administration for Distributed Deployments
Module 7	Internet of Things
Module 8	Project Management and Agile Methodologies
Module 9	Communication, Leadership and Team Management

Where, when and how is it taught?

TECH offers the possibility of taking this program completely online. Over the course of the 12 months, the student will be able to access all the contents of this program at any time, allowing them to self-manage their study time.

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

Module 1. Main Information Management Systems

1.1. ERP and CRM
1.1.1. ERP
1.1.2. CRM
1.1.3. Differences between ERP and CRM Point of Sale
1.1.4. Business Success

1.2. ERP
1.2.1. ERP
1.2.2. Types of ERP
1.2.3. Development of an ERP Implementation Project
1.2.4. ERP Resource Optimizer
1.2.5. Architecture of an ERP System

1.3. Information Provided by the ERP
1.3.1. Information Provided by the ERP
1.3.2. Advantages and Disadvantages
1.3.3. The Information

1.4. ERP Systems
1.4.1. Current ERP Systems and Tools
1.4.2. Decision-Making
1.4.3. Day-to-Day with ERP

1.5. CRM: The Implementation Project
1.5.1. The CRM: The Implementation Project
1.5.2. The CRM as a Commercial Tool
1.5.3. Strategies for the Information System

1.6. CRM: Customer Loyalty
1.6.1. Starting Point
1.6.2. Sales or Loyalty
1.6.3. Factors for Success in our Loyalty System
1.6.4. Multi-Channel Strategies
1.6.5. Design of Loyalty Actions
1.6.6. E-Loyalty

1.7. CRM: Communication Campaigns
1.7.1. Communication Actions and Plans
1.7.2. Importance of the Informed Customer
1.7.3. Listening to the Client

1.8. CRM: Dissatisfaction Prevention
1.8.1. Customer Cancellations
1.8.2. Detecting Errors in Time
1.8.3. Improvement Processes
1.8.4. Recovery of the Dissatisfied Customer

1.9. CRM: Special Communication Actions
1.9.1. Objectives and Planning of a Company Event
1.9.2. Design and Realization of the Event
1.9.3. Actions from the Department
1.9.4. Analysis of Results

1.10. Relational Marketing
1.10.1. Implantation: Errors
1.10.2. Methodology, Segmentation and Processes
1.10.3. Performance, According to the Department
1.10.4. CRM Tools

Module 2. Data Types and Data Life Cycle

2.1. Statistics
2.1.1. Statistics: Descriptive Statistics, Statistical Inferences
2.1.2. Population, Sample, Individual
2.1.3. Variables: Definition, Measurement Scales

2.2. Types of Data Statistics
2.2.1. According to Type
2.2.1.1. Quantitative: Continuous Data and Discrete Data
2.2.1.2. Qualitative: Binomial Data, Nominal Data and Ordinal Data
2.2.2. According to their Shape
2.2.2.1. Numeric
2.2.2.2. Text
2.2.2.3. Logical
2.2.3. According to its Source
2.2.3.1. Primary
2.2.3.2. Secondary

2.3. Life Cycle of Data
2.3.1. Stages of the Cycle
2.3.2. Milestones of the Cycle
2.3.3. FAIR Principles

2.4. Initial Stages of the Cycle
2.4.1. Definition of Goals
2.4.2. Determination of Resource Requirements
2.4.3. Gantt Chart
2.4.4. Data Structure

2.5. Data Collection
2.5.1. Methodology of Data Collection
2.5.2. Data Collection Tools
2.5.3. Data Collection Channels

2.6. Data Cleaning
2.6.1. Phases of Data Cleansing
2.6.2. Data Quality
2.6.3. Data Manipulation (with R)

2.7. Data Analysis, Interpretation and Evaluation of Results
2.7.1. Statistical Measures
2.7.2. Relationship Indices
2.7.3. Data Mining

2.8. Data Warehouse
2.8.1. Elements of a Data Warehouse
2.8.2. Design
2.8.3. Aspects to Consider

2.9. Data Availability
2.9.1. Access
2.9.2. Uses
2.9.3. Security

Module 3. Number Machine Learning

3.1. Knowledge in Databases
3.1.1. Data Pre-Processing
3.1.2. Analysis
3.1.3. Interpretation and Evaluation of the Results

3.2. Machine Learning
3.2.1. Supervised and Unsupervised Learning
3.2.2. Reinforcement Learning
3.2.3. Semi-Supervised Learning: Other Learning Models

3.3. Classification
3.3.1. Decision Trees and Rule-Based Learning.
3.3.2. Support Vector Machines (SVM) and K-Nearest Neighbour (KNN) Algorithms.
3.3.3. Metrics for Sorting Algorithms

3.4. Regression
3.4.1. Linear and Logistic Regression
3.4.2. Non-Linear Regression Models
3.4.3. Time Series Analysis
3.4.4. Metrics for Regression Algorithms

3.5. Clustering
3.5.1. Hierarchical Grouping
3.5.2. Partitional Grouping
3.5.3. Metrics for Clustering Algorithms

3.6. Association Rules
3.6.1. Measures of Interest
3.6.2. Rule Extraction Methods
3.6.3. Metrics for Association Rule Algorithms

3.7. Multiclassifiers
3.7.1. "Bootstrap Aggregation" or "Bagging"
3.7.2. "Random Forests" Algorithm.
3.7.3. "Boosting" Algorithm

3.8. Probabilistic Reasoning Models
3.8.1. Probabilistic Reasoning
3.8.2. Bayesian Networks or Belief Networks
3.8.3. "Hidden Markov Models"

3.9. Multilayer Perceptron
3.9.1. Neural Networks
3.9.2. Machine Learning with Neural Networks
3.9.3. Gradient Descent, Backpropagation and Activation Functions
3.9.4. Implementation of an Artificial Neural Network

3.10. Deep Learning
3.10.1. Deep Neural Networks: Introduction
3.10.2. Convolutional Networks
3.10.3. Sequence Modelling
3.10.4. Tensorflow and Pytorch

Module 4. Web Analytics

4.1. Web Analytics
4.1.1. Introduction
4.1.2. Evolution of Web Analytics
4.1.3. Process of Analysis

4.2. Google Analytics
4.2.1. Google Analytics
4.2.2. Use
4.2.3. Objectives

4.3. Hits: Interactions with the Website
4.3.1. Basic Metrics
4.3.2. KPI (Key Performance Indicators)
4.3.3. Adequate Conversion Rates

4.4. Frequent Dimensions
4.4.1. Source
4.4.2. Medium
4.4.3. Keyword
4.4.4. Campaign
4.4.5. Personalized Labelling

4.5. Google Analytics Configuration
4.5.1. Installation: Creating an Account
4.5.2. Versions of the Tool: UA/GA4
4.5.3. Tracking Label
4.5.4. Conversion Objectives

4.6. Google Analytics Organization
4.6.1. Account
4.6.2. Property
4.6.3. View

4.7. Google Analytics Reports
4.7.1. In Real Time
4.7.2. Audience
4.7.3. Acquisition
4.7.4. Behaviour
4.7.5. Conversions
4.7.6. E-Commerce

4.8. Google Analytics Advanced Reports
4.8.1. Personalized Reports
4.8.2. Panels
4.8.3. APIs

4.9. Filters and Segments
4.9.1. Filter
4.9.2. Segment
4.9.3. Types of Segments: Predefined/Customized
4.9.4. Remarketing Lists

4.10. Digital Analytics Plan
4.10.1. Measurement
4.10.2. Implementation in the Technological Environment
4.10.3. Conclusions

Module 5. Scalable and Reliable Mass Data Usage Systems

5.1. Scalability, Reliability and Maintainability
5.1.1. Scales
5.1.2. Reliability
5.1.3. Maintainability

5.2. Data Models
5.2.1. Evolution of Data Models
5.2.2. Comparison of Relational Model with Document-Based NoSQL Model
5.2.3. Network Model

5.3. Data Storage and Retrieval Engines
5.3.1. Structured Log Storage
5.3.2. Storage in Segment Tables
5.3.3. Trees B

6.4. Services, Message Passing and Data Encoding Formats
6.4.1. Data Flow in REST Services
6.4.2. Data Flow in Message Passing
6.4.3. Message Sending Formats

5.5. Replication
5.5.1. CAP Theorem
5.5.2. Consistency Models
5.5.3. Models of Replication Based on Leader and Follower Concepts

5.6. Distributed Transactions
5.6.1. Atomic Operations
5.6.2. Distributed Transactions from Different Approaches Calvin, Spanner
5.6.3. Serializability

5.7. Partitions
5.7.1. Types of Partitions
5.7.2. Indexes in Partitions
5.7.3. Partition Rebalancing

6.8. Batch Processing
6.8.1. Batch Processing
6.8.2. MapReduce
6.8.3. Post-MapReduce Approaches

5.9. Data Stream Processing
5.9.1. Messaging Systems
5.9.2. Persistence of Data Flows
5.9.3. Uses and Operations with Data Flows

5.10. Use Cases: Twitter, Facebook, Uber
5.10.1. Twitter: The Use of Caches
5.10.2. Facebook: Non-Relational Models
5.10.3. Uber: Different Models for Different Purposes

Module 6. System Administration for Distributed Deployments

6.1. Classic Administration: The Monolithic Model
6.1.1. Classical Applications: The Monolithic Model
6.1.2. System Requirements for Monolithic Applications
6.1.3. The Administration of Monolithic Systems
6.1.4. Automation

6.2. Distributed Applications: The Microservice
6.2.1. Distributed Computing Paradigm
6.2.2. Microservices-Based Models
6.2.3. System Requirements for Distributed Models
6.2.4. Monolithic vs. Distributed Applications

6.3. Tools for Resource Exploitation
6.3.1. "Iron" Management
6.3.2. Virtualization
6.3.3. Emulation
6.3.4. Paravirtualization

6.4. IaaS, PaaS and SaaS Models
6.4.1. LaaS Model
6.4.2. PaaS Model
6.4.3. SaaS Model
6.4.4. Design Patterns

6.5. Containerization
6.5.1. Virtualization with Cgroups
6.5.2. Containers
6.5.3. From Application to Container
6.5.4. Container Orchestration

6.6. Clustering
6.6.1. High Performance and High Availability
6.6.2. High Availability Models
6.6.3. Cluster as SaaS Platform
6.6.4. Cluster Securitization

6.7. Cloud Computing
6.7.1. Clusters vs. Clouds
6.7.2. Types of Clouds
6.7.3. Cloud Service Models
6.7.4. Oversubscription

6.8. Monitoring and Testing
6.8.1. Types of Monitoring
6.8.2. Visualization
6.8.3. Infrastructure Tests
6.8.4. Chaos Engineering

6.9. Case Study: Kubernetes
6.9.1. Structure
6.9.2. Administration.
6.9.3. Deployment of Services
6.9.4. Development of Services for K8S

6.10. Case Study: OpenStack
6.10.1. Structure
6.10.2. Administration.
6.10.3. Deployment
6.10.4. Development of Services for OpenStack

Module 7. Internet of Things

7.1. Internet of Things (IoT)
7.1.1. The Internet of the Future
7.1.2. Internet of Things and Industrial Internet of Things
7.1.3. The Industrial Internet Consortium

7.2. Architecture of Reference
7.2.1. The Architecture of Reference
7.2.2. Layers and Components

7.3. IoT Devices
7.3.1. Classification
7.3.2. Components.
7.3.3. Sensors and Actuators

7.4. Communication Protocols
7.4.1. Classification
7.4.2. OSI Model
7.4.3. Technologies

7.5. IoT and IIoT platforms
7.5.1. The IoT Platform
7.5.2. General Purpose Cloud Platforms
7.5.3. Industrial Platforms
7.5.4. Open Code Platforms

7.6. Data Management on IoT Platforms
7.6.1. Management Mechanisms
7.6.2. Open Data
7.6.3. Exchange of Data
7.6.4. Data Visualization

7.7. IoT Security
7.7.1. Security Requirements
7.7.2. Security Areas
7.7.3. Security Strategies
7.7.4. IIoT Security

7.8. IoT Systems Application Areas
7.8.1. Intelligent Cities
7.8.2. Health and Fitness
7.8.3. Smart Home
7.8.4. Other Applications

7.9. Application of IIoT to Different Industrial Sectors
7.9.1. Fabrication
7.9.2. Transport
7.9.3. Energy
7.9.4. Agriculture and Livestock
7.9.5. Other Sectors

7.10. Integration of IIoT in the Industry 4.0 Model
7.10.1. IoRT (Internet of Robotics Things)
7.10.2. 3D Additive Manufacturing
7.10.3. Big Data Analytics

Module 8. Project Management and Agile Methodologies

8.1. Project Management
8.1.1. Projects
8.1.2. Phases to a Project
8.1.3. Project Management

8.2. PMI Methodology for Project Management
8.2.1. PMI (Project Management Institute)
8.2.2. PMBOK
8.2.3. Difference between Project, Program and Project Portfolio
8.2.4. Evolution of Organizations Working with Projects
8.2.5. Process Assets in Organizations

8.3. PMI Methodology for Project Management: Process
8.3.1. Groups of Processes
8.3.2. Knowledge Areas
8.3.3. Process Matrix

8.4. Agile Methodologies for Project Management
8.4.1. VUCA Context (Volatility, Uncertainty, Complexity and Ambiguity)
8.4.2. Agile Values
8.4.3. Principles of the Agile Manifesto

8.5. Agile Methodologies for Project Management
8.5.1. SCRUM
8.5.2. The Pillars of the Scrum Methodology
8.5.3. The Values in Scrum

8.6. Agile SCRUM Framework for Project Management. Process
8.6.1. The SCRUM Process
8.6.2. Typified Roles in a Scrum Process
8.6.3. The Ceremonies of Scrum

8.7. Agile SCRUM Framework for Project Management. Artefacts
8.7.1. Artefacts in the Scrum Process
8.7.2. The Scrum Team
8.7.3. Metrics for Evaluating the Performance of a Scrum Team

8.8. Agile KANBAN Framework for Project Management. Kanban Method
8.8.1. Kanban
8.8.2. Benefits of Kanban
8.8.3. Kanban Method Components

8.9. Agile KANBAN Framework for Project Management. Kanban Method Practices
8.9.1. The Values of Kanban
8.9.2. Principles of the Kanban Method
8.9.3. General Practices of the Kanban Method
8.9.4. Metrics for Kanban Performance Evaluation

8.10. Comparison: PMI, SCRUM and KANBAN
8.10.1. PMI – SCRUM
8.10.2. PMI – KANBAN
8.10.3. SCRUM – KANBAN

Module 9. Communication, Leadership and Team Management

9.1. Organisational Development in Business
9.1.1. Climate, Culture and Organisational Development in the Company
9.1.2. Human Capital Management

9.2. Management Models: Decision-Making
9.2.1. Paradigm Shift in Management Models
9.2.2. Management Process of a Technology Company
9.2.3. Decision-Making: Planning Instruments

9.3. Leadership: Delegation and Empowerment
9.3.1. Leadership
9.3.2. Delegation and Empowerment
9.3.3. Performance Evaluation

9.4. Leadership: Knowledge and Talent Management
9.4.1. Corporate Talent Management
9.4.2. Corporate Engagement Management
9.4.3. Improving Corporate Communication

9.5. Coaching Applied to Business
9.5.1. Executive Coaching
9.5.2. Team Coaching

9.6. Mentoring Applied to Business
9.6.1. Mentor Profile
9.6.2. The 4 Processes of a Mentoring Program
9.6.3. Tools and Techniques in a Mentoring Process
9.6.4. Benefits of Mentoring in the Business Environment

9.7. Team Management I: Interpersonal Relations
9.7.1. Interpersonal Relationships
9.7.2. Relational Styles: Approach
9.7.3. Effective Meetings and Agreements in Difficult Situations

9.8. Team Management II: Conflicts
9.8.1. Conflicts
9.8.2. Preventing, Addressing and Resolving Conflict
9.8.2.1. Conflict Prevention Strategies
9.8.2.2. Conflict Management: Basic Principles
9.8.3. Conflict Resolution Strategies
9.8.4. Stress and Work Motivation

9.9. Team Management III: Negotiation
9.9.1. Negotiation at the Managerial Level in Technology Companies
9.9.2. Styles of Negotiation
9.9.3. Negotiation Phases
9.9.3.1. Barriers to Overcome in Negotiations

9.10. Team Management IV: Negotiation Techniques
9.10.1. Negotiation Techniques and Strategies
9.10.1.1. Strategies and Main Types of Negotiation
9.10.1.2. Negotiation Tactics and Practical Issues
9.10.2. The Figure of the Negotiator

07

Methodology

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

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

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

TECH Business School uses the Case Study to contextualize all content

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

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

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

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

A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch to present executives with challenges and business decisions at the highest level, whether at the national or international level. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and business reality is taken into account

> *You will learn, through collaborative activities and real cases, how to solve complex situations in real business environments"*

The case method has been the most widely used learning system among the world's leading business schools for as long as they have existed. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method

What should a professional do in a given situation? This is the question we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They must integrate all their knowledge, research, argue and defend their ideas and decisions

Relearning Methodology

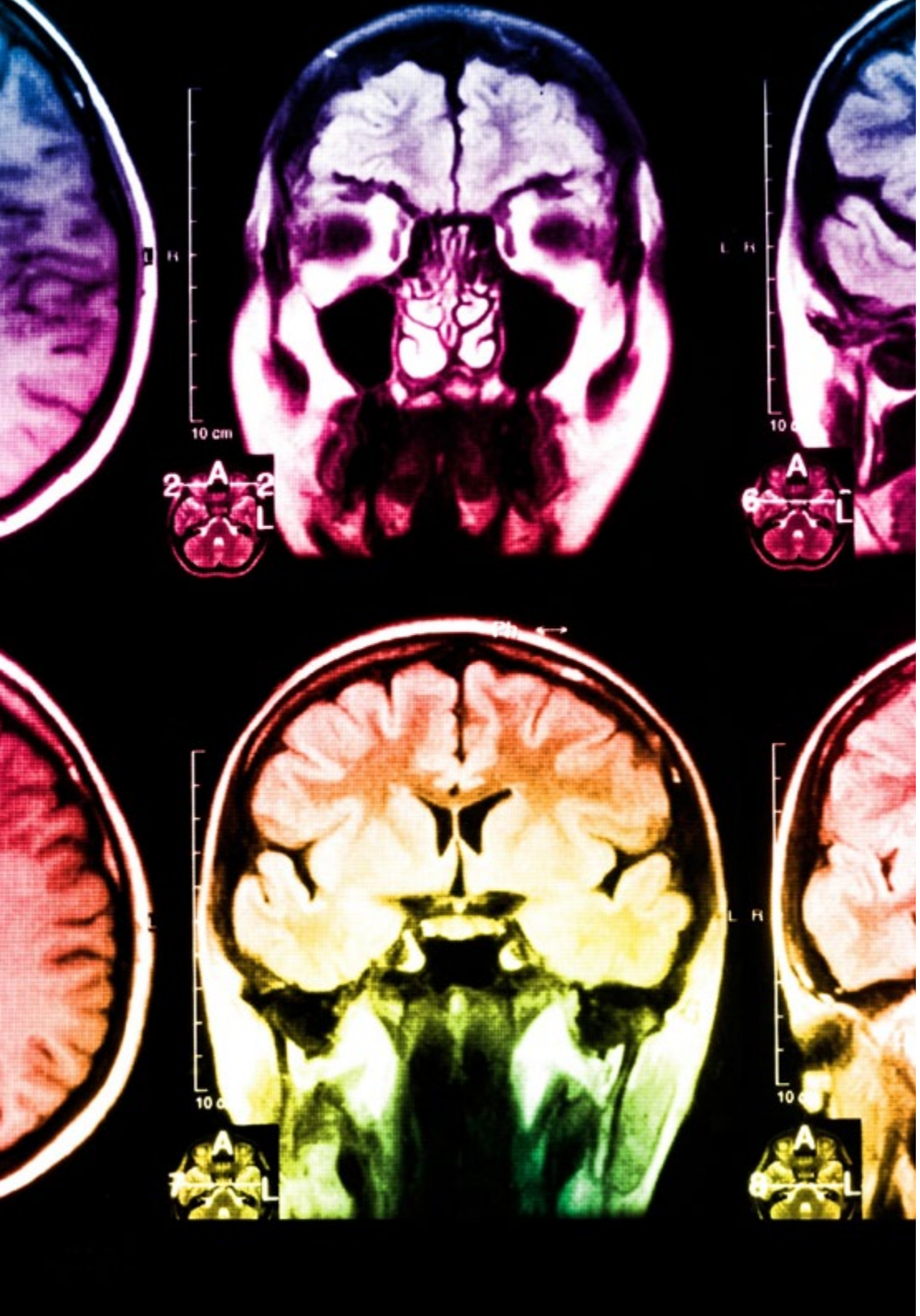
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson

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

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

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

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



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

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

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

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

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

Study Material

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

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

Classes

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

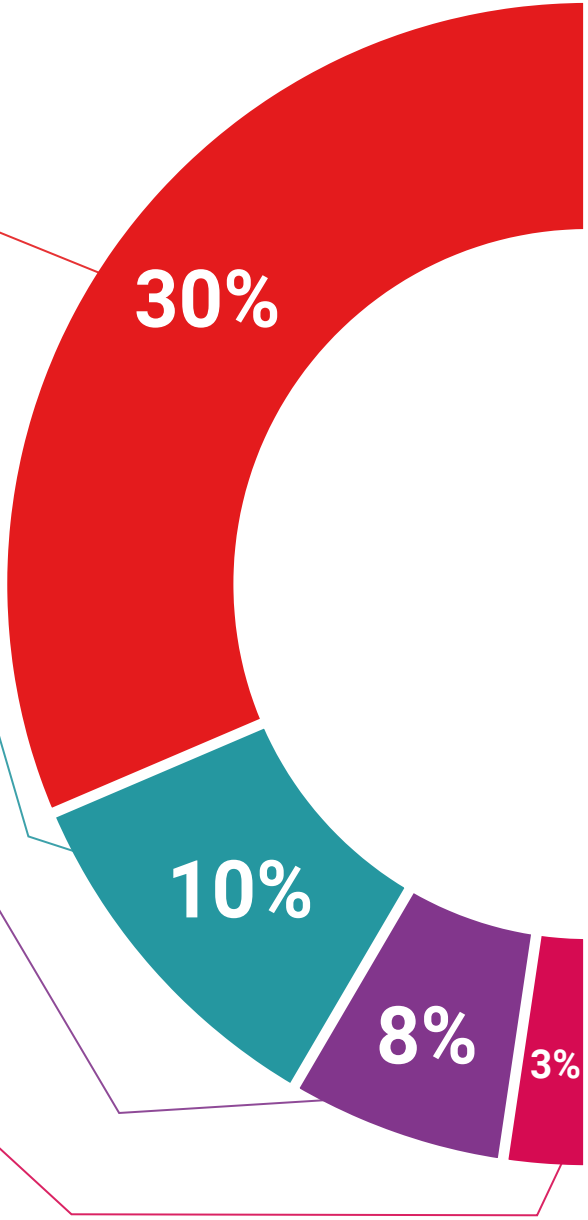
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions

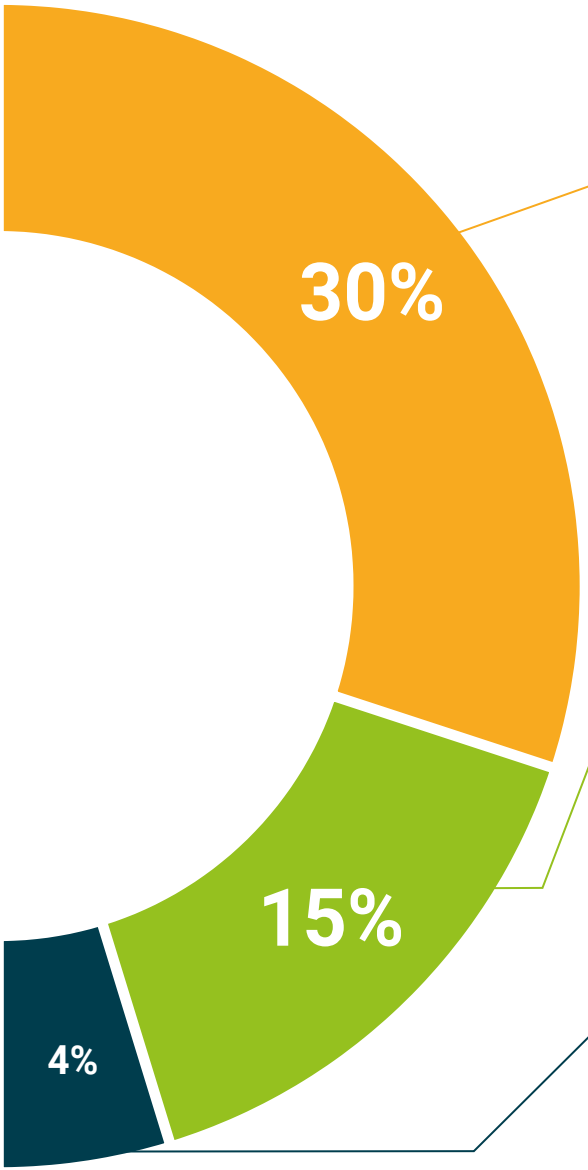
Management Skills Exercises

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

Additional Reading

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





Case Studies

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

Interactive Summaries

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

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

Testing & Retesting

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

08

Our Students' Profiles

The Executive Master's Degree is aimed at professionals who wish to update their knowledge of advanced and cutting-edge computer technologies, with the aim of broadening their skills.

This program uses a multidisciplinary approach as the students have a diverse set of academic profiles and represent multiple nationalities.

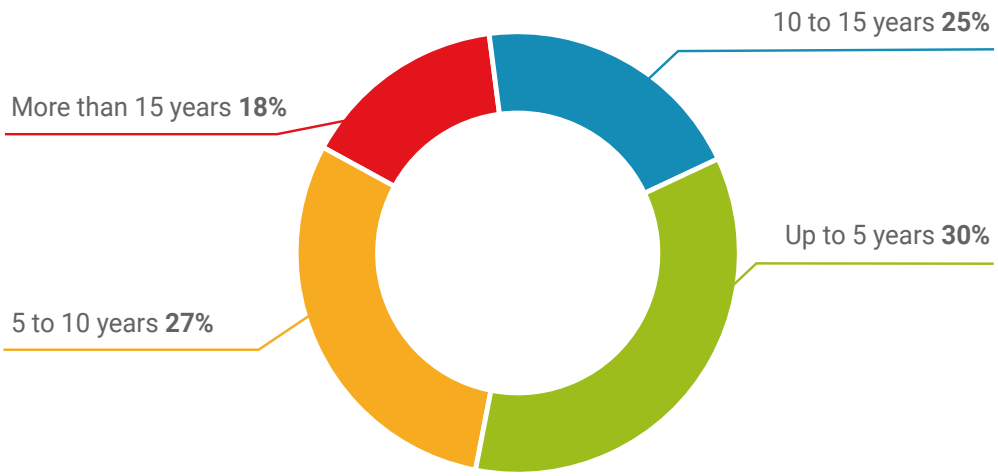
This Executive Master's Degree is also open to professionals who, being university graduates in any field, have two years of work experience in the field of Corporate Technical Data Science Management.

Our students choose us in search of professional improvement, and most of them get it"

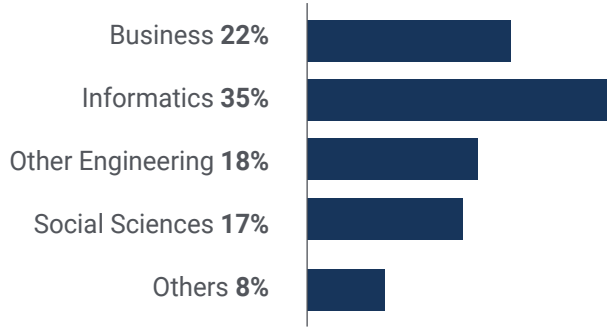
Average Age

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

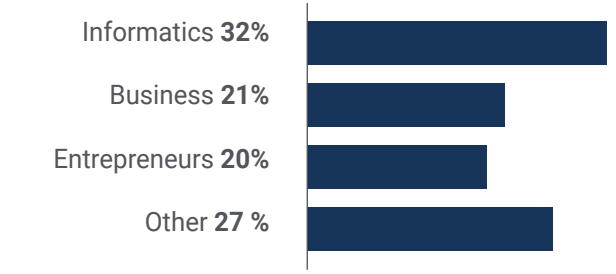
Years of Experience



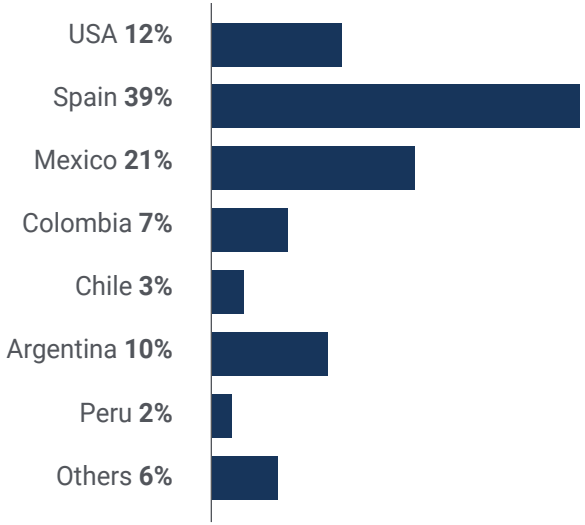
Training



Academic Profile



Geographical Distribution



Marta Rodríguez Hernández

Data Entry Technician

"I have always been interested in the world of IT and corporate data management. With this high-level program, I have incorporated the latest developments in the sector into my daily professional practice. I would like to thank the teachers for their ability to convey and share knowledge in a simple, precise and orderly manner. It's definitely an investment with great short-term returns"

09

Course Management

In keeping with its commitment to offering an elite education for all, TECH counts on renowned professionals so that the student acquires a solid knowledge in Corporate Technical Data Science Management. This Executive Master's Degree has a highly qualified and experienced team in the field, which will offer the best possible resources for students in developing their skills during the program. Accordingly, students have the guarantees they need to specialize at an international level in a booming sector that will catapult them to professional success.

Succeed with the best and gain the knowledge and skills you need to embark on a career in the advanced IT sector"

Management

Dr. Peralta Martín-Palomino, Arturo

- CEO and CTO at Prometeus Global Solutions
- CTO at Korporate Technologies
- CTO in AI 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.

Professors

Mr. Díaz Díaz-Chirón, Tobías

- Researcher at the ArCO laboratory of the University of Castilla-La Mancha, a group dedicated to projects related to computer architectures and networks.
- Consultant at Blue Telecom, a company dedicated to the telecommunications sector.
- Freelance mainly dedicated to the telecommunications sector, specialising in 4G/5G networks.
- OpenStack: deploy and administration
- Degree in Computer Engineering from the University of Castilla-La Mancha, specialising in computer architecture and networks.
- Associate Professor at the University of Castilla-La Mancha in the subjects of distributed systems, computer networks and concurrent programming.
- Speaker at Sepecam course on network administration

Ms. Fernández Meléndez, Galina

- Data Analyst. Aresi | Gestión de Fincas - Madrid-Spain
- Data Analyst. ADN Mobile Solution-Gijón-Spain
- ETL processes, data mining, data analysis and visualisation, establishment of KPI's, Dashboard design and implementation, management control. R development, SQL management, among others. Pattern determination, predictive modelling, machine learning
- Bachelor's degree in Business Administration. Bicentennial University of Aragua-Caracas
- Diploma in Planning and Public Finance Venezuelan School School of Planning-School of Finance
- Executive Master's Degree in Data Analysis and Business Intelligence. University of Oviedo
- MBA in Business Administration and Management (Escuela De Negocios Europea De Barcelona)
- Master's Degree in Big Data and Business Intelligence (Escuela de Negocios Europea de Barcelona)

Mr. García Niño, Pedro

- Specialist in Web Positioning and SEO/Google Ads
- SEO On-Page / Off-Page Specialist
- Google Ads Specialist (SEM / PPC), Official Certification
- Specialist in Google Analytics/Digital Marketing Analytics and Performance Measurement
- Specialist in Digital Marketing and RRSS
- IT Services Sales Manager
- Computer Equipment Technician Specializing in Hardware/Software

Ms. García La O, Marta

- Specialist in Digital Marketing and RRSS
- Management, administration and account management at Think Planning and Development
- Organization, supervision and mentoring of senior management training courses in Think Planning and Development
- Accountant-administrative in Tabacos Santiago y Zaraiche-Stan Roller
- Marketing Specialist at Versas Consultores
- Diploma in Business Studies from the University of Murcia.
- Master's Degree in Sales and Marketing Management from Fundesem Business School

Ms. Martínez Cerrato, Yésica

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

Mr. Montoro Montarroso, Andrés

- Researcher in the SMILe Group at the University of Castilla-La Mancha.
- Data Scientist at Prometeus Global Solutions
- Graduate in Computer Engineering from the University of Castilla-La Mancha.
- Master's Degree in Data Science and Computer Engineering from the University of Granada. (2021)
- Guest lecturer in the subject of Knowledge-Based Systems at the Escuela Superior de Informática de Ciudad Real, Giving the Lecture "Advanced Artificial Intelligence Techniques: Search and Analysis of Potential Social Media Radicals". (2021)
- Guest lecturer in the subject of Data Mining at the Escuela Superior de Informática de Ciudad Real giving the lecture: "Applications of Natural Language Processing: Fuzzy Logic to the analysis of messages in social networks".
- Speaker at the Seminar on Corruption Prevention in Public Administrations and Artificial Intelligence. Faculty of Law and Social Sciences of Toledo. Conference entitled "Artificial Intelligence Techniques". Speaker at the first International Seminar on Administrative Law and Artificial Intelligence (DAIA). Organized by Centro de Estudios Europeos Luis Ortega Álvarez and Institut de Recerca TransJus. Conference entitled "Sentiment Analysis for the prevention of hate speech on social media".

Ms. Palomino Dávila, Cristina

- Consultant and Senior GRC Auditor at Oesía Networks
- Audit Sub-Directorate - General Secretary at Compañía Logística de Hidrocarburos CLH
- Senior consultant and auditor in the field of Personal Data Protection and information society services at Helas Consultores.
- Graduate in Law from the University of Castilla La Mancha.
- Master's Degree in Legal Consultancy for Businesses from the Instituto de Empresa
- Advanced Course in Digital Security and Crisis Management, University of Alcalá and the Spanish Security and Crisis Alliance (AESYC)

Mr. Peris Morillo, Luis Javier

- Technical Lead in Capitole Consulting. He leads a team at Inditex in the logistics unit of its open platform
- Senior Technical Lead and Delivery Lead Support at HCL
- Agile Coach and Director of Operations at Mirai Advisory
- Member of the Steering Committee as Chief Operating Officer
- Developer, Team Leader, Scrum Master, Agile Coach, Product Manager in DocPath
- Higher Engineering in Computer Science by the ESI of Ciudad Real (UCLM).
- Postgraduate Degree in Project Management by CEOE - Confederación Española de Organizaciones Empresariales (Spanish Confederation of Business Organisations)
- 50+ MOOCs taken, taught by renowned universities such as Stanford University, Michigan University, Yonsei University, Polytechnic University of Madrid, etc.
- Several certifications, some of the most notable or recent ones are Azure Fundamentals

Mr. Tato Sánchez, Rafael

- Project Management INDRA SISTEMAS S.A.
- Technical Director INDRA SISTEMAS S.A.
- Systems Engineer ENA TRÁFICO S.A.U.
- IFCD048PO. Software Project Management and Development Methodology with SCRUM
- Coursera: Machine Learning
- Udemy: Deep Learning A-Z. Hands-on Artificial Neural Networks
- Coursera: IBM: Fundamentals of Scalable Data Science
- Coursera: IBM: Applied AI with Deep Learning
- Coursera: IBM: Advance Machine Learning and Signal Processing
- Degree in Industrial Electronics and Automation Engineering from the European University of Madrid.
- Master's Degree in Industrial Engineering from the European University of Madrid.
- Master's Degree in Industry 4.0 by the International University of La Rioja (UNIR)
- Professional certification. SSCE0110. Teaching for vocational training for employment

10

Impact on Your Career

TECH is aware that studying a program like this entails great economic, professional and, of course, personal investment. The ultimate goal of this great effort should be to achieve professional growth. Here students will find great possibilities to get it. For this, we have the perfect equation for a quality specialization: a highly up-to-date syllabus and internationally renowned teachers. Undoubtedly, a unique opportunity that will help you give a boost to your career in a short time.

Our challenge is to generate a positive change in your professional career. We are fully committed to helping you achieve it"

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

With this program you will be able to drastically advance in your profession, although there is no doubt that, in order to do so, you will have to make an investment in different areas, such as economic, professional and personal.

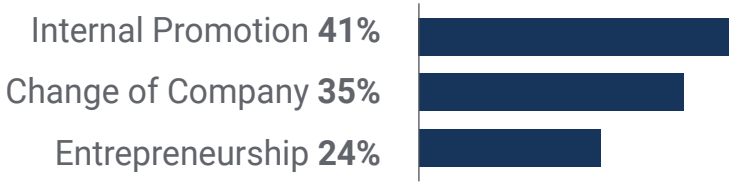
However, the goal is to improve in your professional life and, to do so, it is necessary to fight.

The best way to achieve professional change is to increase your skills. So don't stop studying at TECH.

Thanks to this programme you will receive a large number of job offers with which you will be able to start your professional growth.

When the change occurs

Type of change



Salary increase

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

11

Benefits for Your Company

This Executive Master's Degree in Corporate Technical Data Science Management contributes to raising the organization's talent to its maximum potential by Instructions high-level leaders.

Participating in this Executive Master's Degree is a unique opportunity to access a powerful network of contacts in which to find future professional partners, customers or suppliers.

All the subjects and areas of knowledge have been compiled in a complete and up-to-date syllabus, in order to bring the student to the highest theoretical and practical level"

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

01

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.

02

Retaining high-potential executives to avoid talent drain

This program strengthens the link between the company and the professional and opens new avenues for professional growth within the company.

03

Building agents of change

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

04

Increased international expansion possibilities

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

05

Project Development

The professional can work on a current project or develop new projects in the field of R&D or Business Development within their company.

06

Increased competitiveness

This Executive Master's Degree will equip students with the skills to take on new challenges and drive the organization forward.

12

Certificate

This Executive Master's Degree in Corporate Technical Data Science Management guarantees you, in addition to the most rigorous and updated training, access to a Professional Master's Degree issued by TECH Technological University.

Successfully complete this program and receive your university degree without travel or laborious paperwork”

This **Executive Master's Degree in Corporate Technical Data Science Management** contains the most complete and up-to-dated program on the market.

After the student has passed the assessments, they will receive their corresponding **Executive Master's Degree** issued by **TECH Technological University** via tracked delivery*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Executive Master's Degree, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Executive Master's Degree in Corporate Technical Data Science Management**

Official Nº of hours: **1,500 h.**


tech technological university

Awards the following

DIPLOMA

to

Mr./Ms. _____, with identification number _____.

For having successfully passed and accredited the following program

EXECUTIVE MASTER'S DEGREE

in

Corporate Technical Data Science Management

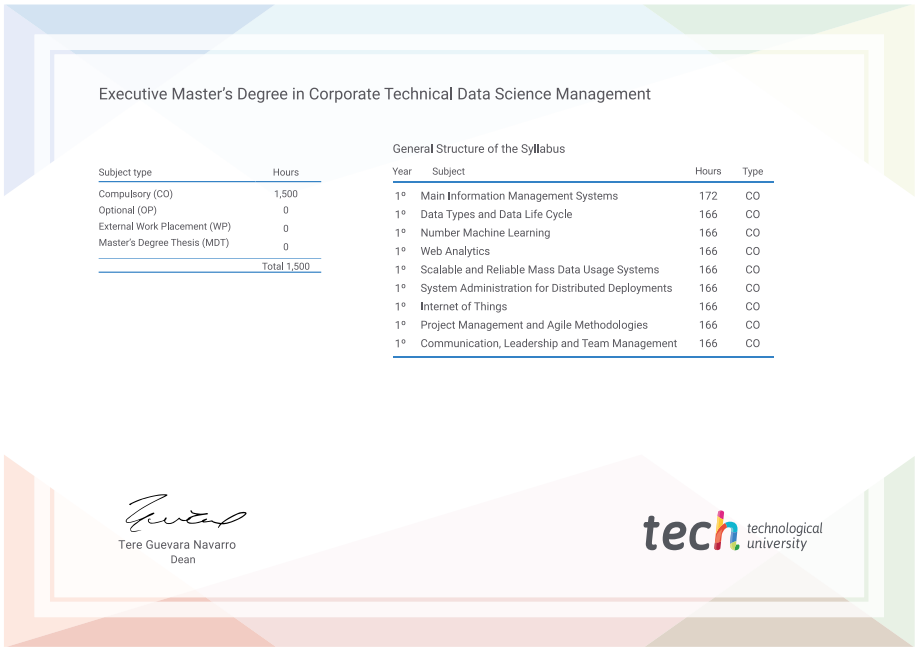
This is a qualification awarded by this University, equivalent to 1,500 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

Unique TECH Code: AFWORD23S techtitute.com/certificates


Executive Master's Degree in Corporate Technical Data Science Management

Subject type	Hours
Compulsory (CO)	1,500
Optional (OP)	0
External Work Placement (WP)	0
Master's Degree Thesis (MDT)	0
	Total 1,500

General Structure of the Syllabus

Year	Subject	Hours	Type
1º	Main Information Management Systems	172	CO
1º	Data Types and Data Life Cycle	166	CO
1º	Number Machine Learning	166	CO
1º	Web Analytics	166	CO
1º	Scalable and Reliable Mass Data Usage Systems	166	CO
1º	System Administration for Distributed Deployments	166	CO
1º	Internet of Things	166	CO
1º	Project Management and Agile Methodologies	166	CO
1º	Communication, Leadership and Team Management	166	CO

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Dean

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

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Executive Master's Degree

Corporate Technical Data Science Management

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Executive Master's Degree

Corporate Technical Data Science Management

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