Executive Master's Degree

MBA in Digital Transformation and Industry 4.0

MBADTI

tech *technological university*

Executive Master's Degree
MBA in Digital Transformation and Industry 4.0

- » Modality: **online**
- » Duration: **12 months**
- » Certificate: **TECH Technological University**
- » Schedule: **at your own pace**
- » Exams: **online**
- » Target Group: **graduates and university graduates who have previously completed any degree in the field of Computer Science or previously any of the degrees in the field of Computer Science or Engineering.**

Website: **www.techtitute.com/us/school-of-business/executive-master-degree/master-mba-digital-transformation-industry-4-0**

Index

01
Welcome

New technologies have driven the transformation of different economic sectors. Therefore, the digital drive that has taken place in recent years has greatly optimized both the production processes and the internal organization of companies. In this scenario, professionals are facing an excellent opportunity to develop Startups supported by the technological component that has given rise to the so-called Industry 4.0. Given the existing demand in this sector for highly qualified personnel with leadership vision, this 100% online program is born in which the professional will obtain through a theoretical-practical approach the most advanced and current knowledge in Blockchain and Quantum Computing, Big Data, Artificial Intelligence or automation systems. All this will be possible thanks to the team of specialized teaching professionals who teach this program and the multimedia content developed with the latest technology applied to academic teaching.

MBA in Digital Transformation and Industry 4.0
TECH Technological University

" *This program will successfully introduce you to the latest developments in digital transformation and the streamlining of industrial processes. Enroll and take a step forward in your professional career"*

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 center for intensive managerial skills education.

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 balances the latest educational technology with the most rigorous teaching methods. A unique method with the highest international recognition that will provide students with the keys to develop in a rapidly-evolving world, where innovation must be every entrepreneur's focus.

"Microsoft Europe Success Story", for integrating the innovative, interactive multi-video system.

The Highest Standards

Admissions criteria at TECH are not economic. Students don't need to make a large investment to study at this university. However, in order to obtain a qualification from TECH, the student's intelligence and ability will be tested to their limits. The institution's academic standards are exceptionally high...

95% of TECH students successfully complete their studies

Networking

Professionals from countries all over the world attend TECH, allowing students to establish a large network of contacts that may prove useful to them in the future.

+100000 executives prepared 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.
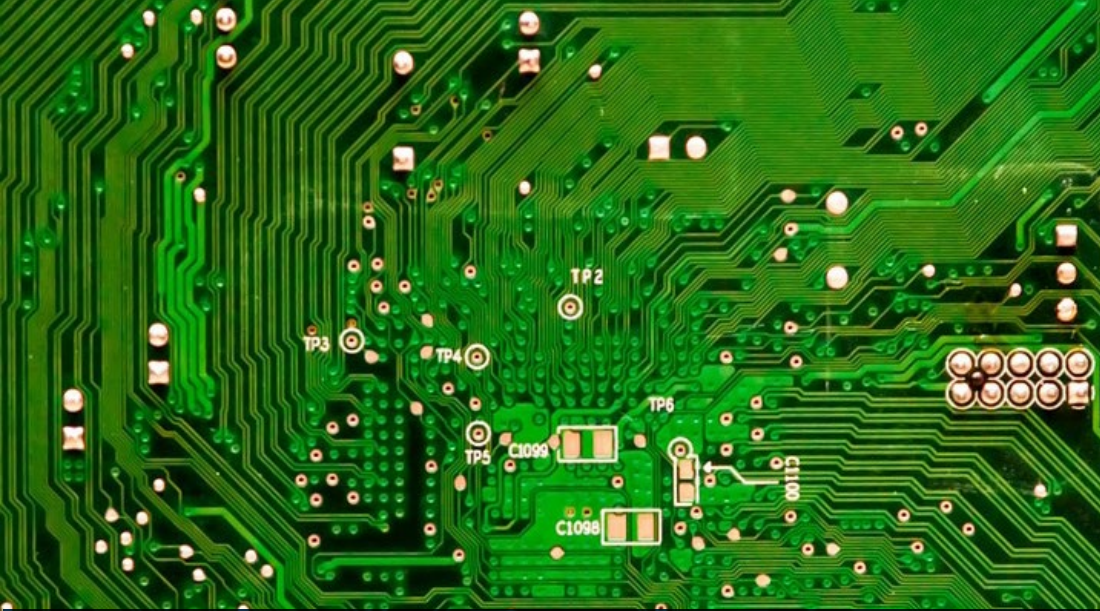
TECH strives for excellence and, to this end, boasts a series of characteristics that make this university unique:

Learn with the best

In the classroom, TECH's teaching staff discuss how they have achieved success in their companies, working in a real, lively, and dynamic context. Teachers who are fully committed to offering a quality specialization that will allow students to advance in their career and stand out in the business world.

Teachers representing 20 different nationalities.

At TECH, you will have access to the most rigorous and up-to-date case analyses in academia"

Analysis

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

Academic Excellence

TECH offers students the best online learning methodology. The university combines the Relearning method (postgraduate learning methodology with the best international valuation) with the Case Study. Tradition and vanguard in a difficult balance, and in the context of the most demanding educational itinerary.

Economy of Scale

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

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 education of the highest academic level"

This program will provide you with a multitude of professional and personal advantages, among which we highlight the following:

01

A Strong Boost to Your Career

By studying at TECH, students will be able to take control of their future and develop their full potential. By completing this program, students will acquire the skills required to make a positive change in their career in a short period of time.

70% of students achieve positive career development in less than 2 years.

02

Develop a strategic and global vision of the company

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

Our global vision of companies will improve your strategic vision.

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

You will take on new responsibilities

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

45% of graduates are promoted internally.

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 fields 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

You will be part of an exclusive community

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

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

04
Objectives

This program has been designed to offer the professional the most advanced and intensive learning on Digital Transformation Management and Industry 4.0. To do this, TECH provides students with the most innovative teaching tools, so that, at the end of this program, they have acquired a successful learning that will lead them to implement leadership in the digital sector, to be able to convert the facilities of the production process in a real Smart Factory or to identify the main business areas related to IoT platforms.

Transform your knowledge into a tool for the updating of your company, with the mastery of the most updated and innovative contents of Industry 4.0"

TECH makes the goals of their students their own goals too Working together to achieve them

The **MBA in Digital Transformation and Industry 4.0** will enable students to:

01 Acquire in-depth knowledge of the fundamentals of Blockchain technology and its value propositions

02 Master the techniques and tools of this technology (Machine Learning/Deep Learning)

03 Acquire expert knowledge on the characteristics and fundamentals of virtual reality, augmented reality and mixed reality, as well as their differences

04 Analyze the origins of the so-called Fourth Industrial Revolution and the Industry 4.0 concept

05 Understand the current virtual era we live in and its leadership capacity, on which will depend the success and survival of the digital transformation processes in which any type of industry is involved

06 Convert the production process facilities into a true Smart Factory

07 Conduct an exhaustive analysis of the practical application that emerging technologies are having in the different economic sectors and in the value chain of their main industries

08 Entering the world of robotics and automation

09 Choose a robotic platform, prototype and know in detail simulators and robot operating system (ROS)

10 Have a thorough understanding of the technological impact and how technologies are revolutionizing the tertiary economic sector in the fields of transportation and logistics, health and healthcare (E-Health and Smart Hospitals), smart cities, the financial sector (Fintech) and mobility solutions

11 Know in detail the functioning of IoT and Industry 4.0 and its combinations with other technologies, its current situation, its main devices and uses and how hyperconnectivity gives rise to new business models where all products and systems are connected and in permanent communication

12 Deepen the knowledge of an IoT platform and the elements that compose it, the challenges and opportunities to implement IoT platforms in factories and companies, the main business areas related to IoT platforms and the relationship between IoT platforms, robotics and other emerging technologies

Skills

The professional who takes this Executive Master's Degree will acquire knowledge that will lead them to enhance their skills in the field of Digital Transformation and Industry 4.0. They will also expand their skills to use the main techniques of artificial intelligence such as Machine Learning and Deep Learning, to face the major challenges related to artificial intelligence or to create virtual worlds applied, for example, to the tertiary sector. All this will be possible thanks to the multimedia resources of this program, its pedagogical methodology and the case studies provided by the specialists who teach this program.

This 100% online program will allow you to enhance your skills to successfully integrate the IoT ecosystem in the industrial sector"

01 Securing an existing IoT ecosystem or creating a secure one by deploying intelligent security systems

02 Automate production systems with the integration of robots and industrial robotics systems

03 Maximize value creation for the customer by applying Lean Manufacturing to the digitalization of our production process

04 Know how the Blockchain works and the characteristics of the so-called networks

05 Use the main artificial intelligence techniques such as Machine Learning and Deep Learning, Neural Networks, and the applicability and use of Natural Language Recognition (NLR)

06 Facing the great challenges related to artificial intelligence, such as providing it with emotions, creativity and personality, even considering how ethical and moral connotations may be affected in its use

07 Create truly useful chatbots and virtual assistants

08 Create virtual worlds and elevate User Experience (UX) enhancement

09 Integrating the benefits and main advantages of Industry 4.0

10 Learn more about the key factors of the digital transformation of industry and the industrial internet

11 Leading the new business models derived from Industry 4.0

14 Master the core technologies of Industry 4.0

12 Develop future production models

13 Address the challenges of Industry 4.0 and understand its effects

15 Lead manufacturing digitization processes and identify and define digital capabilities in an organization

16 Define the architecture behind a Smart Factory

18 Delve into the current situation in the digital transformation
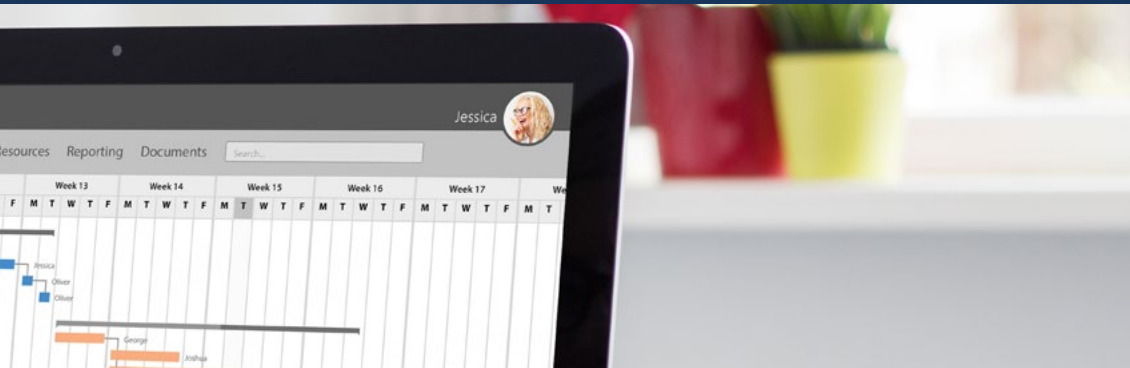
19 Use RPA (Robotic Process Automation) to automate processes in companies, gain efficiency and reduce costs

17 Reflect on the technological markers in the post-covid era and in the era of absolute virtualization.

20 Address the major challenges facing robotics and automation such as transparency and ethics

06
Structure and Content

Professional who immerse themselves in this university education will go through, during 12 months, the 15 modules that make up the syllabus of this program. They will do so in a fluid way thanks to the Relearning system, used by TECH in all its degrees, and in a much more dynamic way with multimedia resources. Therefore, they have video summaries, videos in detail or schemes that will lead them to delve into the latest developments in Big Data, technological applications in Industry 4.0 or the Internet of Things.

"

Give a boost to your professional career thanks to the up-to-date multimedia content on Big Data and Artificial Intelligence provided by this university program"

Syllabus

The MBA in Digital Transformation and Industry 4.0 of TECH Technological University is an intensive program that prepares professionals to face challenges and business decisions in the technological field.

The content of the program is designed to promote the development of managerial competencies that allow for decision making with greater rigor in uncertain environments.

Throughout the 2,700 hours of specialization, students analyze case studies developed by professionals who teach this program, which will bring them closer to situations that they can apply in their sectors. It is, therefore, an authentic immersion in real business situations.

This program deals in depth with the services and solutions that technology can offer to the Primary, Secondary or Tertiary sector, as well as the progress in the creation of drones, robots or the application of the Internet of Things. All this, from a strategic, international and innovative perspective.

A syllabus focused on professional improvement that prepares students to achieve excellence in the field of business management and administration. A program that understands both the students' and their companies' needs. To achieve these objectives, TECH provides innovative content based on the latest trends, supported by an improved educational methodology and an exceptional faculty, which will provide students with the competencies to solve critical situations in a creative and efficient way.

This program takes place over 12 months and is divided into 15 modules:

Module 1	Blockchain and Quantum Computing
Module 2	Big Data and Artificial Intelligence
Module 3	Virtual, Augmented and Mixed Reality
Module 4	Industry 4.0
Module 5	Leading Industry 4.0
Module 6	Robotics, Drones and Augmented Workers
Module 7	Industry 4.0 Automation Systems
Module 8	Industry 4.0- Services and Industry Solutions I
Module 9	Industry 4.0 Services and Industry Solutions II
Module 10	Internet of Things (IoT)
Module 11	Leadership, Ethics and Social Responsibility in Companies
Module 12	People and Talent Management
Module 13	Economic and Financial Management
Module 14	Commercial and Strategic Marketing Management
Module 15	Executive Management

Where, When and How is it Taught?

TECH offers its students the possibility of developing this MBA in Digital Transformation and Industry 4.0 completely online. During the 12 months that the specialization lasts, the student will be able to access all the contents of this program at any time, which will allow them to self-manage their study time.

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

Module 1. Blockchain and Quantum Computing

1.1. Aspects of Decentralization
1.1.1. Market Size, Growth, Companies and Ecosystem
1.1.2. Fundamentals of Blockchain

1.2. Background: Bitcoin, Ethereum, etc.
1.2.1. Popularity of Decentralized Systems
1.2.2. Evolution of Decentralized Systems

1.3. Blockchain Operation and Examples
1.3.1. Types of Blockchain and Protocols
1.3.2. Wallets, Mining and More

1.4. Characteristics of Blockchain Networks
1.4.1. Functions and Properties of Blockchain Networks
1.4.2. Applications: Cryptocurrencies, Reliability, Chain of Custody, etc

1.5. Types of Blockchain
1.5.1. Public and Private Blockchains
1.5.2. *Hard And Soft Forks*

1.6. Smart Contracts
1.6.1. Intelligent Contracts and Their Potential
1.6.2. Smart Contract Applications

1.7. Industry Use Models
1.7.1. Blockchain Applications by Industry
1.7.2. Blockchain Success Stories by Industry

1.8. Security and Cryptography
1.8.1. Objectives of Cryptography
1.8.2. Digital Signatures and Hash Functions

1.9. Cryptocurrencies and Uses
1.9.1. Types of Cryptocurrencies Bitcoin, HyperLedger, Ethereum, Litecoin, etc.
1.9.2. Current and Future Impact of Cryptocurrencies
1.9.3. Risks and Regulations

1.10. Quantum Computing
1.10.1. Definition and Keys
1.10.2. Uses of Quantum Computing

Module 2. Big Data and Artificial Intelligence

2.1. Fundamental Principles of Big Data
2.1.1. Big Data
2.1.2. Tools to Work With Big Data

2.2. Data Mining and Warehousing
2.2.1. Data Mining Cleaning and Standardization
2.2.2. Information Extraction, Machine Translation, Sentiment Analysis, etc
2.2.3. Types of Data Storage

2.3. Data Intake Applications
2.3.1. Principles of Data intake
2.3.2. Data Ingestion Technologies to Serve Business Needs

2.4. Data Visualization
2.4.1. The Importance of Data Visualization
2.4.2. Tools to Carry It Out *Tableau, D3, matplotlib (Python), Shiny®*

2.5. Machine Learning
2.5.1. Understanding Machine Learning
2.5.2. Supervised and Unsupervised Learning
2.5.3. Types of Algorithms

2.6. Neural Networks (Deep Learning)
2.6.1. Neural Network: Parts and Operation
2.6.2. Types of Networks CNN, RNN
2.6.3. Applications of Neural Networks; Image Recognition and Natural Language Interpretation
2.6.4. Generative Text Networks: LSTM

2.7. Natural Language Recognition
2.7.1. NLP (Natural Language Processing)
2.7.2. Advanced PLN Techniques: Word2vec, Doc2vec

2.8. Chatbots and Virtual Assistants
2.8.1. Types of Assistants: Voice and Text Assistants
2.8.2. Fundamental Parts for the Development of an Assistant: Intents, Entities and Dialogue Flow
2.8.3. Integrations: web, Slack, Whatsapp, Facebook
2.8.4. Assistant Development Tools: Dialog Flow, Watson Assistant expressions and content

2.9. Emotions, Creativity and Personality in IA
2.9.1. Understand How to Detect Emotions Using Algorithms
2.9.2. Creating a Personality: Language, Expressions and Content

2.10. Future of Artificial Intelligence

2.11. Reflections

Module 3. Virtual, Augmented and Mixed Reality

3.1. Market and Tendencies
3.1.1. Current Market Situation
3.1.2. Reports and Growth by Different Industries

3.2. Differences Between Virtual, Augmented and Mixed Reality
3.2.1. Differences Between Immersive Realities
3.2.2. Immersive Reality Typology

3.3. Virtual Reality Cases and Uses
3.3.1. Origin and Fundamentals of Virtual Reality
3.3.2. Cases Applied to Different Sectors and Industries

3.4. Augmented Reality Cases and Uses
3.4.1. Origin and Fundamentals of Augmented Reality
3.4.2. Cases Applied to Different Sectors and Industries

3.5. Mixed and Holographic Reality
3.5.1. Origin, History and Fundamentals of Mixed and Holographic Reality
3.5.2. Cases Applied to Different Sectors and Industries

3.6. 360º Photography and Video
3.6.1. Camera Typology
3.6.2. Uses of 360 Images
3.6.3. Creating a Virtual Space in 360 Degrees

3.7. Virtual World Creation
3.7.1. Platforms for the Creation of Virtual Environments
3.7.2. Strategies for the Creation of Virtual Environments

3.8. User Experience (UX)
3.8.1. Components in the User Experience
3.8.2. Tools for the Creation of User Experiences

3.9. Devices and Glasses for Immersive Technologies
3.9.1. Device Typology on the Market
3.9.2. Glasses and Wearables: Operation, Models and Uses
3.9.3. Smart Glasses Applications and Evolution

3.10. Future Immersive Technologies
3.10.1. Tendencies and Evolution
3.10.2. Challenges and Opportunities

Module 4. Industry 4.0

4.1. Definition of 4.0 Industry
4.1.1. Features

4.2. Benefits of the 4.0 Industry
4.2.1. Key Factors
4.2.2. Main Advantages

4.3. Industrial Revolutions and Vision of the Future
4.3.1. Industrial Revolutions
4.3.2. Keys Factors in Each Revolution
4.3.3. Technological Principles as a Basis for Possible New Revolutions

4.4. The Digital Transformation of the Industry
4.4.1. Characteristics of the Digitization of the Industry
4.4.2. Disruptive Technologies
4.4.3. Applications in the Industry

4.5. Forth Industrial Revolution Key Principles of Industry 4.0
4.5.1. Definitions
4.5.2. Key Principles and Applications

4.6. 4.0 Industry and Industrial Internet
4.6.1. Origin of IIoT
4.6.2. Operation
4.6.3. Steps to Follow for its Implementation
4.6.4. Benefits

4.7. Smart Factory Principles
4.7.1. Smart Factory
4.7.2. Elements That Define a Smart Factory
4.7.3. Steps to Deploy a Smart Factory

4.8. Status of the 4.0 Industry
4.8.1. Status of the 4.0 Industry in Different Sectors
4.8.2. Barriers to the Implementation of 4.0 Industry

4.9. Challenges and Risks
4.9.1. DAFO Analysis
4.9.2. Challenges

4.10. Role of Technological Capabilities and the Human Factor
4.10.1. Disruptive Technologies in Industry 4.0
4.10.2. The Importance of the Human Factor Key Factor

Module 5. Leading Industry 4.0

5.1. Leadership Abilities
5.1.1. Leadership Factors in the Human Factor
5.1.2. Leadership and Technology

5.2. Industry 4.0 and the Future of Production
5.2.1. Definitions
5.2.2. Production Systems
5.2.3. Future of Digital Production Systems

5.3. Effects of Industry 4.0
5.3.1. Effects and Challenges

5.4. Essential Technologies in Industry 4.0
5.4.1. Definition of Technologies
5.4.2. Characteristics of Technologies
5.4.3. Applications and Impacts

5.5. Digitization of Manufacturing
5.5.1. Definitions
5.5.2. Benefits of the Digitization of Manufacturing
5.5.3. Digital Twins

5.6. Digital Capabilities in an Organization
5.6.1. Development Digital Capabilities
5.6.2. Understanding the Digital Ecosystem
5.6.3. Digital Vision of the Business

5.7. Architecture Behind a Smart Factory
5.7.1. Areas and Operations
5.7.2. Connectivity and Security
5.7.3. Case Uses

5.8. Technology Markers in the Post-Covid Era
5.8.1. Technological Challenges in the Post-Covid Era
5.8.2. New Case Uses

5.9. The Era of Absolute Virtualization
5.9.1. Virtualization
5.9.2. The New Era of Virtualization
5.9.3. Advantages

5.10. Current Situation in Digital Transformation Gartner Hype
5.10.1. *Gartner Hype*
5.10.2. Analysis of Technologies and Their Status

5.10.3. Data Exploitation

Module 6. Robotics, Drones and Augmented Workers

6.1. Robotics
6.1.1. Robotics, Societies and Cinema
6.1.2. Components and Parts of Robot

6.2. Robotics and Advanced Automation: Simulators, Cobots
6.2.1. Transfer of Learning
6.2.1. Cobots and Case Uses

6.3. RPA (Robotic Process Automatization)
6.3.1. Understanding RPA and its Functioning
6.3.2. RPA Platforms, Projects and Roles

6.4. Robot as a Service (RaaS)
6.4.1. Challenges and Opportunities for Implementing RaaS in Companies
6.4.2. Functioning of a RaaS System

6.5. Drones and Automated Vehicles
6.5.1. Components and Drones Operation
6.5.2. Uses, Types and Applications of Drones
6.5.3. Evolution of Drones and Autonomous Vehicles

6.6. The Impact of 5G
6.6.1. Evolution of Communications and Implications
6.6.2. Uses of 5G Technology

6.7. Augmented Workers
6.7.1. Human-Machine Integration in Industrial Environments
6.7.2. Challenges in Worker-Robot Collaboration

6.8. Transparency, Ethics and Traceability
6.8.1. Ethical Challenges in Robotics and Artificial Intelligence
6.8.2. Monitoring, Transparency and Traceability Methods

6.9. Prototyping, Components and Evolution
6.9.1. Prototyping Platforms
6.9.2. Phases to Make a Prototype

6.10. Future of Robotics
6.10.1. Trends in Robotization
6.10.2. New Types of Robots

Module 7. Industry 4.0 Automation Systems

7.1. Industrial Automation
7.1.1. Automization
7.1.2. Architecture and Components
7.7.3. *Safety*

7.2. Industrial Robotics
7.2.1. Fundamentals of Industrial Robotics
7.2.2. Models and Impact on Industrial Processes

7.3. PLC Systems and Industrial Control
7.3.1. PLC Evolution and Status
7.3.2. Evolution of Programming Languages
7.3.3. Computer Integrated Automation CIM

7.4. Sensors and Actuators
7.4.1. Classification of Transducers
7.4.2. Types of Sensors
7.4.3. Standardization of Signals

7.5. Monitor and Manage
7.5.1. Types of Actuators
7.5.2. Feedback Control Systems

7.6. Industrial Connectivity
7.6.1. Standardized Fieldbuses
7.6.2. Connectivity

7.7. Proactive/Predictive Maintenance
7.7.1. Predictive Maintenance
7.7.2. Fault Identification and Analysis
7.7.3. Proactive Actions Based on Predictive Maintenance

7.8. Continuous Monitoring and Prescriptive Maintenance
7.8.1. Prescriptive Maintenance Concept in Industrial Environments
7.8.2. Selection and Exploitation of Data for Self-Diagnostics

7.9. Lean Manufacturing
7.9.1. *Lean Manufacturing*
7.9.2. Benefits Lean Implementation in Industrial Processes

7.10. Industrialized Processes in Industry 4.0. Use Case
7.10.1. Project Definition
7.10.2. Technological Selection
7.10.3. Connectivity
7.10.4. Data Exploitation

Module 8. Industry 4.0. Services and Sectorial Solutions (I)

8.1. Industry 4.0 and Business Strategies
8.1.1. Factors of Business Digitalization
8.1.2. Roadmap for Business Digitalization

8.2. Digitalization of Processes and the Value Chain
8.2.1. Value Chain
8.2.2. Key Steps in the Digitization of Processes

8.3. Sector Solutions Primary Sector
8.3.1. The Primary Economic Sector
8.3.2. Characteristics of Each Subsector

8.4. Digitization of the Primary Sector: Smart Farms
8.4.1. Main Characteristics
8.4.2. Keys Factors of Digitization

8.5. Digitization of the Primary Sector: Digital Agriculture and Intelligence
8.5.1. Main Characteristics
8.5.2. Keys Factors of Digitization

8.6. Sector Solutions Secondary Sector
8.6.1. The Secondary Economic Sector
8.6.2. Characteristics of Each Subsector

8.7. Digitization of the Secondary Sector: *Smart Factory*
8.7.1. Main Characteristics
8.7.2. Keys Factors of Digitization

8.8. Digitization of the Secondary Sector: Energy
8.8.1. Main Characteristics
8.8.2. Keys Factors of Digitization

8.9. Digitization of the Secondary Sector: Construction
8.9.1. Main Characteristics
8.9.2. Keys Factors of Digitization

8.10. Digitization of the Secondary Sector: Mining
8.10.1. Main Characteristics
8.10.2. Keys Factors of Digitization

Module 9. Industry 4.0. Services and Sectorial Solutions (II)

9.1. Tertiary Sector Solutions
9.1.1. Tertiary Economic Sector
9.1.2. Characteristics of Each Subsector

9.2. Digitization of the Tertiary Sector: Transport
9.2.1. Main Characteristics
9.2.2. Keys Factors of Digitization

9.3. Digitization of the Tertiary Sector: eHealth
9.3.1. Main Characteristics
9.3.2. Keys Factors of Digitization

9.4. Digitization of the Tertiary Sector: Smart Hospitals
9.4.1. Main Characteristics
9.4.2. Keys Factors of Digitization

9.5. Digitization of the Tertiary Sector: Smart Cities
9.5.1. Main Characteristics
9.5.2. Keys Factors of Digitization

9.6. Digitization of the Tertiary Sector: Logistics
9.6.1. Main Characteristics
9.6.2. Keys Factors of Digitization

9.7. Digitization of the Tertiary Sector: Tourism
9.7.1. Main Characteristics
9.7.2. Keys Factors of Digitization

9.8. Digitization of the Tertiary Sector: Fintech
9.8.1. Main Characteristics
9.8.2. Keys Factors of Digitization

9.9. Digitization of the Tertiary Sector: Mobility
9.9.1. Main Characteristics
9.9.2. Keys Factors of Digitization

9.10. Future Technological Tendencies
9.10.1. New Technological Innovations
9.10.2. Application Trends

Module 10. Internet of Things (IoT)

10.1. Cyber-Physical Systems (CPS) in the Industry 4.0 Vision
10.1.1. Internet of Things (IoT)
10.1.2. Components Involved in IoT
10.1.3. Cases and Applications of IoT

10.2. Internet of Things and Cyber-Physical Systems
10.2.1. Computing and Communication Capabilities to Physical Objects
10.2.2. Sensors, Data and Elements in Cyber-Physical Systems

10.3. Device Ecosystem
10.3.1. Typologies, Examples and Uses
10.3.2. Applications of the Different Devices

10.4. IoT Platforms and their Architecture
10.4.1. IoT Market Typologies and Platforms
10.4.2. Operation of an IoT Platform

10.5. Digital Twins
10.5.1. Digital Twins
10.5.2. Uses and Applications the Digital Twin

10.6. Indoor & outdoor Geolocation (Real Time Geospatial)
10.6.1. Indoor and Outdoor Geolocation Platforms
10.6.2. Implications and Challenges of Geolocation in an IoT Project

10.7. Security Intelligence Systems
10.7.1. Typologies and Platforms for Security Systems Implementation
10.7.2. Components and Architectures in Intelligent Safety Systems

10.8. IoT and IIoT Platform Security
10.8.1. Security Components in an IoT System
10.8.2. IoT Security Implementation Strategies

10.9. Wearables at Work
10.9.1. Types of Wearables in Industrial Environments
10.9.2. Lessons Learned and Challenges in Implementing Wearables in the Workplace

10.10. Implementing an API to Interact with a Platform
10.10.1. Types of APIs Involved in an IoT Platform
10.10.2. API Market
10.10.3. Strategies and Systems to Implement API Integrations

Module 11. Leadership, Ethics and Social Responsibility in Companies

11.1. Globalization and Governance
11.1.1. Governance and Corporate Governance
11.1.2. The Fundamentals of Corporate Governance in Companies
11.1.3. The Role of the Board of Directors in the Corporate Governance Framework

11.2. Leadership
11.2.1. Leadership A Conceptual Approach
11.2.2. Leadership in Companies
11.2.3. The Importance of Leaders in Business Management

11.3. Cross Cultural Management
11.3.1. Cross Cultural Management Concept
11.3.2. Contributions to Knowledge of National Cultures
11.3.3. Diversity Management

11.4. Management and Leadership Development
11.4.1. Concept of Management Development
11.4.2. Concept of Leadership
11.4.3. Leadership Theories
11.4.4. Leadership Styles
11.4.5. Intelligence in Leadership
11.4.6. The Challenges of Today's Leader

11.5. Business Ethics
11.5.1. Ethics and Morality
11.5.2. Business Ethics
11.5.3. Leadership and Ethics in Companies

11.6. Sustainability
11.6.1. Sustainability and Sustainable Development
11.6.2. The 2030 Agenda
11.6.3. Sustainable Companies

11.7. Corporate Social Responsibility
11.7.1. International Dimensions of Corporate Social Responsibility
11.7.2. Implementing Corporate Social Responsibility
11.7.3. The Impact and Measurement of Corporate Social Responsibility

11.8. Responsible Management Systems and Tools
11.8.1. CSR: Corporate Social Responsibility
11.8.2. Essential Aspects for Implementing a Responsible Management Strategy
11.8.3. Steps for the Implementation of a Corporate Social Responsibility Management System
11.8.4. CSR Tools and Standards

11.9. Multinationals and Human Rights
11.9.1. Globalization, Multinational Companies and Human Rights
11.9.2. Multinational Corporations and International Law
11.9.3. Legal Instruments for Multinationals in the Area of Human Rights

11.10. Legal Environment and Corporate Governance
11.10.1. International Rules on Importation and Exportation
11.10.2. Intellectual and Industrial Property
11.10.3. International Labor Law

Module 12. People and Talent Management

12.1. Strategic People Management
12.1.1. Strategic Human Resources Management
12.1.2. Strategic People Management

12.2. Human Resources Management by Competencies
12.2.1. Analysis of the Potential
12.2.2. Remuneration Policy
12.2.3. Career/Succession Planning

12.3. Performance Evaluation and Performance Management
12.3.1. Performance Management
12.3.2. Performance Management: Objectives and Process

12.4. Innovation in Talent and People Management
12.4.1. Strategic Talent Management Models
12.4.2. Talent Identification, Training and Development
12.4.3. Loyalty and Retention
12.4.4. Proactivity and Innovation

12.5. Motivation
12.5.1. The Nature of Motivation
12.5.2. Expectations Theory
12.5.3. Needs Theory
12.5.4. Motivation and Financial Compensation

12.6. Developing High Performance Teams
12.6.1. High-Performance Teams: Self-Managed Teams
12.6.2. Methodologies for the Management of High Performance Self-Managed Teams

12.7. Change Management
12.7.1. Change Management
12.7.2. Type of Change Management Processes
12.7.3. Stages or Phases in the Change Management Process

12.8. Negotiation and Conflict Management
12.8.1. Negotiation
12.8.2 Conflicts Management
12.8.3 Crisis Management

12.9. Executive Communication
12.9.1. Internal and External Communication in the Corporate Environment
12.9.2. Communication Departments
12.9.3. The Person in Charge of Communication of the Company The Profile of the Dircom

12.10. Productivity, Attraction, Retention and Activation of Talent
12.10.1. Productivity
12.10.2. Talent Attraction and Retention Levers

Module 13. Economic and Financial Management

13.1. Economic Environment
13.1.1. Macroeconomic Environment and the National Financial System
13.1.2. Financial Institutions
13.1.3. Financial Markets
13.1.4. Financial Assets
13.1.5. Other Financial Sector Entities

13.2. Executive Accounting
13.2.1. Basic Concepts
13.2.2. The Company's Assets
13.2.3. The Company's Liabilities
13.2.4. The Company's Net Worth
13.2.5. The Income Statement

13.3. Information Systems and Business Intelligence
13.3.1. Fundamentals and Classification
13.3.2. Cost Allocation Phases and Methods
13.3.3. Choice of Cost Center and Impact

13.4. Budget and Management Control
13.4.1. The Budget Model
13.4.2. The Capital Budget
13.4.3. The Operating Budget
13.4.5. Treasury Budget
13.4.6. Budget Monitoring

13.5. Financial Management
13.5.1. The Company's Financial Decisions
13.5.2. Financial Department
13.5.3. Cash Surpluses
13.5.4. Risks Associated with Financial Management
13.5.5. Financial Administration Risk Management

13.6. Financial Planning
13.6.1. Definition of Financial Planning
13.6.2. Actions to be Taken in Financial Planning
13.6.3. Creation and Establishment of the Business Strategy
13.6.4. The Cash Flow Table
13.6.5. The Working Capital Table

13.7. Corporate Financial Strategy
13.7.1. Corporate Strategy and Sources of Financing
13.7.2. Financial Products for Corporate Financing

13.8. Strategic Financing
13.8.1. Self-Financing
13.8.2. Increase in Equity
13.8.3. Hybrid Resources
13.8.4. Financing Through Intermediaries

13.9. Financial Analysis and Planning
13.9.1. Analysis of the Balance Sheet
13.9.2. Analysis of the Income Statement
13.9.3. Profitability Analysis

13.10. Analyzing and Solving Cases/Problems
13.10.1. Financial Information on Industria de Diseño y Textil, S.A. (INDITEX)

Module 14. Commercial and Strategic Marketing Management

14.1. Commercial Management
14.1.1. Conceptual Framework of Commercial Management
14.1.2. Business Strategy and Planning
14.1.3. The Role of Sales Managers

14.2. Marketing
14.2.1. The Concept of Marketing
14.2.2. Basic Elements of Marketing
14.2.3. Marketing Activities of the Company

14.3. Strategic Marketing Management
14.3.1. The Concept of Strategic Marketing
14.3.2. Concept of Strategic Marketing Planning
14.3.3. Stages in the Process of Strategic Marketing Planning

14.4. Digital Marketing and e-Commerce
14.4.1. Digital Marketing and E-commerce Objectives
14.4.2. Digital Marketing and Media Used
14.4.3. E-Commerce General Context
14.4.4. Categories of E-commerce
14.4.5. Advantages and Disadvantages of E-commerce Versus Traditional Commerce

14.5. Digital Marketing to Reinforce a Brand
14.5.1. Online Strategies to Improve Your Brand's Reputation
14.5.2. *Branded Content and Storytelling*

14.6. Digital Marketing to Attract and Retain Customers
14.6.1. Loyalty and Engagement Strategies through the Internet
14.6.2. *Visitor Relationship Management*
14.6.3. Hypersegmentation

14.7. Managing Digital Campaigns
14.7.1. What is a Digital Advertising Campaign?
14.7.2. Steps to Launch an Online Marketing Campaign
14.7.3. Mistakes in Digital Advertising Campaigns

14.8. Sales Strategy
14.8.1. Sales Strategy
14.8.2. Sales Methods

14.9. Corporate Communication
14.9.1. Concept
14.9.2. The Importance of Communication in the Organization
14.9.3. Type of Communication in the Organization
14.9.4. Functions of Communication in the Organization
14.9.5. Elements of Communication
14.9.6. Communication Problems
14.9.7. Communication Scenarios

14.10. Digital Communication and Reputation
14.10.1. Online Reputation
14.10.2. How to Measure Digital Reputation?
14.10.3. Online Reputation Tools
14.10.4. Online Reputation Report
14.10.5. Online Branding

Module 15. Executive Management

15.1. General Management
15.1.1. The Concept of General Management
15.1.2. The Role of the CEO
15.1.3. The CEO and their Responsibilities
15.1.4. Transforming the Work of Management

15.2. Manager Functions: Organizational Culture and Approaches
15.2.1. Manager Functions: Organizational Culture and Approaches

15.3. Operations Management
15.3.1. The Importance of Management
15.3.2. Value Chain
15.3.3. Quality Management

15.4. Public Speaking and Spokesperson Education
15.4.1. Interpersonal Communication
15.4.2. Communication Skills and Influence
15.4.3. Communication Barriers

15.5. Personal and Organizational Communications Tools
15.5.1. Interpersonal Communication
15.5.2. Interpersonal Communication Tools
15.5.3. Communication in the Organization
15.5.4. Tools in the Organization

15.6. Communication in Crisis Situations
15.6.1. Crisis
15.6.2. Phases of the Crisis
15.6.3. Messages: Contents and Moments

15.7. Preparation of a Crisis Plan
15.7.1. Analysis of Possible Problems
15.7.2. Planning
15.7.3. Adequacy of Personnel

15.8. Emotional Intelligence
15.8.1. Emotional Intelligence and Communication
15.8.2. Assertiveness, Empathy, and Active Listening
15.8.3. Self-Esteem and Emotional Communication

15.9. Personal Branding
15.9.1. Strategies for Personal Brand Development
15.9.2. Personal Branding Laws
15.9.3. Tools for Creating Personal Brands

15.10. Leadership and Team Management
15.10.1. Leadership and Leadership Styles
15.10.2. Leader Capabilities and Challenges
15.10.3. Managing Change Processes
15.10.4. Managing Multicultural Teams

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:
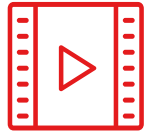
Study Material

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%
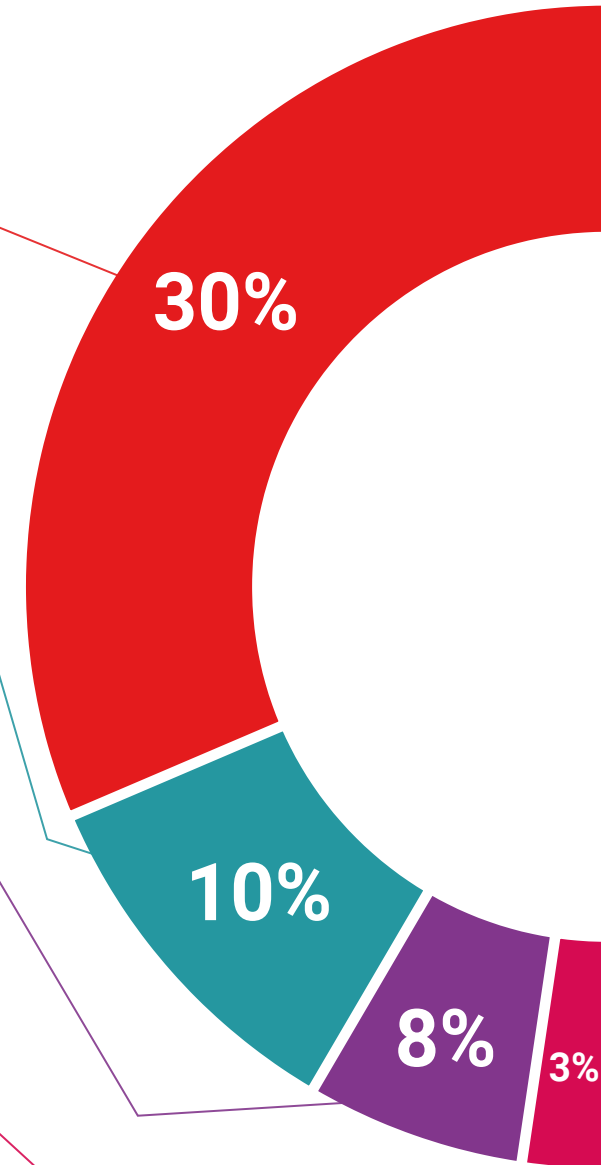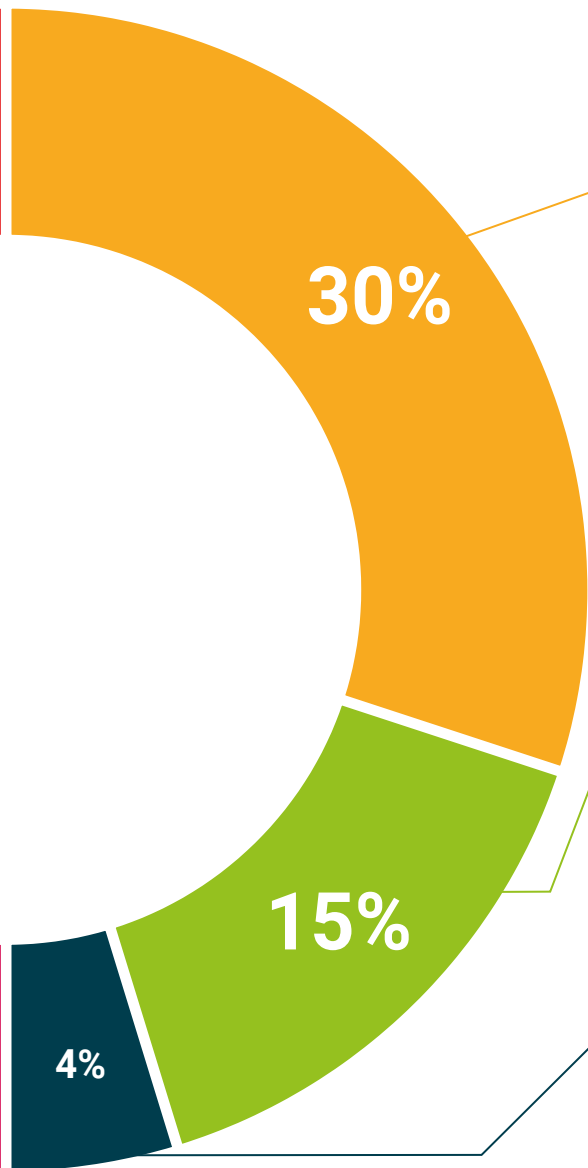
Case Studies

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.

Our Students' Profiles

The Executive Master's Degree is aimed at university graduates who have previously completed any of the following degrees in the field of Engineering, Computer Science or Business.

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

The program is also open to professionals who, as university graduates in any field, have two years of work experience in the field of Industry 4.0.

If you are looking for growth and improvement in Industry 4.0, this is a program designed for professionals like you"

Average Age

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

Years of Experience

More than 15 years **24%**

Up to 5 years **17%**

5 to 10 years **30%**

10 to 15 years **29%**

Training

Computing **32%**

Economics and Business **25%**

Engineering **35%**

Social Sciences **8%**

Educational Profile

Corporate Management **23%**

Project Manager **32%**

Entrepreneurs **30%**

Industry **15%**
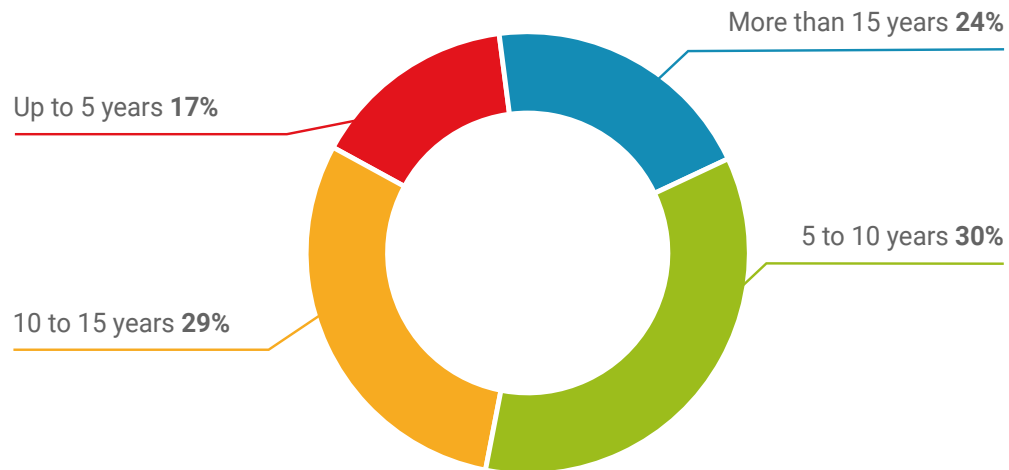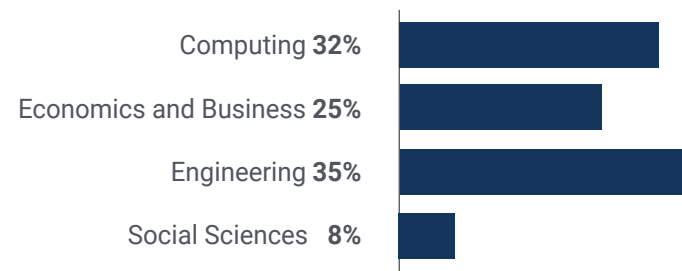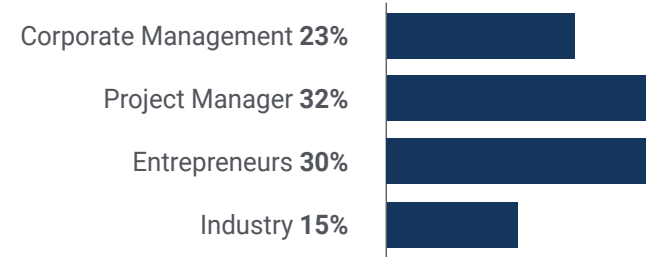
Geographical Distribution

USA **9%**

Spain **38%**

Mexico **36%**

Colombia **17%**
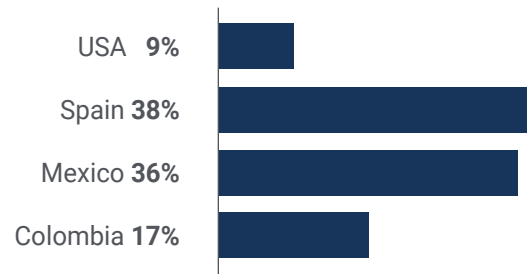
José Manuel Pérez

Degree in Economics

"I was looking for a program that would lead me to undertake with the guarantees of knowing everything I needed to know about digital transformation and its application in different sectors, and in this program I have found it. And its teaching methodology has made things easy for me, without imposing schedules, being able to study at my own pace"

09

Course Management

TECH has brought together in this program a management and teaching staff with high qualifications and professional experience in the field of Digital Transformation and Industry 4.0. The mastery of the updating processes of this sector, as well as its human quality have been decisive for its inclusion in this program. In this way, professionals who enter this 100% online program will obtain the essential learning to succeed in a sector on the rise.

TECH has brought together professionals with experience and management skills in the digital sector and Industry 4.0. Acquire the most advanced knowledge from the best"

International Guest Director

With over 20 years of experience in designing and leading global **talent acquisition teams,** Jennifer Dove is an expert in **technology recruitment and strategy.** Throughout her career, she has held senior positions in several technology organizations within Fortune 50 companies such as NBC Universal and Comcast. Her track record has allowed her to excel in competitive, high-growth environments.

As **Vice President of Talent Acquisition at Mastercard** she is responsible for overseeing talent onboarding strategy and execution, collaborating with business leaders and **HR Managers** to meet operational and strategic hiring objectives. In particular, she aims to **build diverse, inclusive and high-perfoming teams** that drive innovation and growth of the company's products and services. In addition, she is adept at using tools to attract and retain the best people from around the world. She is also responsible for **amplifying Mastercard's employer brand** and value proposition through publications, events and social media.

Jennifer Dove has demonstrated her commitment to continuous professional development by actively participating in networks of HR professionals and contributing to the onboarding of numerous employees at different companies. After earning her bachelor's degree in **Organizational Communication** from the University of Miami, she is now a graduate of the University of Miami.

On the other hand, it has been recognized for its ability to lead organizational transformations, **integrate technologies into recruitment processes** and develop leadership programs that prepare institutions for future challenges. She has also successfully implemented **wellness programs** that have significantly increased employee satisfaction and retention.

Ms. Dove, Jennifer

- Vice President of Talent Acquisition at Mastercard, New York, United States
- Director of Talent Acquisition at NBCUniversal Media, New York, USA
- Head of Recruitment at Comcast
- Director of Recruiting at Rite Hire Advisory, New York, USA
- Executive Vice President of the Sales Division at Ardor NY Real Estate
- Director of Recruitment at Valerie August & Associates
- Account Executive at BNC
- Account Executive at Vault
- Graduated in Organizational Communication from the University of Miami

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

International Guest Director

A technology leader with decades of experience in **major technology multinationals,** Rick Gauthier has developed prominently in the field of clouds services and end-to-end process improvement. He has been recognized as a leader and manager of highly efficient teams, showing a natural talent for ensuring a high level of engagement among his employees.

He possesses innate gifts in strategy and executive innovation, developing new ideas and backing his success with quality data. His background at **Amazon h**as allowed him to manage and integrate the company's IT services in the United States. At **Microsoft** he has led a team of 104 people, responsible for providing corporate-wide IT infrastructure and supporting product engineering departments across the company.

This experience has allowed him to stand out as a high-impact manager with remarkable abilities to increase efficiency, productivity and overall customer satisfaction.

D. Gauthier, Rick

- Regional IT Director at Amazon, Seattle, USA
- Senior Program Manager at Amazon
- Vice President of Wimmer Solutions
- Senior Director of Productive Engineering Services at Microsoft
- Degree in Cybersecurity from Western Governors University
- Technical Certificate in Commercial Diving from Divers Institute of Technology
- B.S. in Environmental Studies from The Evergreen State College

"

Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"

International Guest Director

Romi Arman is a renowned international expert with more than two decades of experience in **Digital Transformation, Marketing, Strategy** and **Consulting**. Through that extended trajectory, he has taken different risks and is a permanent advocate for **innovation** and **change** in the business environment. With that expertise, he has collaborated with CEOs and corporate organizations from all over the world, pushing them to move away from traditional business models. In this way, he has helped companies such as Shell Energy become **true market leaders,** focused on their **customers** and the **digital world.**

The strategies designed by Arman have a latent impact, as they have enabled several corporations **to improve the experiences of consumers, staff** and **shareholders** alike. The success of this expert is quantifiable through tangible metrics such as **CSAT, employee engagement** in the institutions where he has practiced and the growth of the **EBITDA financial indicator** in each of them.

Also, in his professional career, he has nurtured and **led high-performance teams** that have even received awards for their **transformational potential.** With Shell, specifically, the executive has always set out to overcome three challenges: meeting **customers' complex decarbonization** demands **supporting** a "cost-effective decarbonization" and **overhauling** a fragmented **data, digital and technology landscape.** Thus, his efforts have shown that in order to achieve sustainable success, it is essential to start from the needs of consumers and lay the foundations for the transformation of processes, data, technology and culture.

In addition, the executive stands out for his mastery of the **business applications** of **Artificial Intelligence,** a subject in which he holds a postgraduate degree from the London Business School. At the same time, he has accumulated experience in **IoT** and **Salesforce.**

Mr. Arman, Romi

- Digital Transformation Director (CDO) at Shell Energy Corporation, London, UK
- Global Director of E-Commerce and Customer Service at Shell Energy Corporation
- National Key Account Manager (OEM and automotive retailers) for Shell in Kuala Lumpur, Malaysia
- Senior Management Consultant (Financial Services Sector) for Accenture based in Singapore
- Graduate of the University of Leeds
- Graduate Diploma in Business Applications of AI for Senior Executives from London Business School
- CCXP Customer Experience Professional Certification
- IMD Executive Digital Transformation Course

"

Do you want to update your knowledge with the highest educational quality? TECH offers you the most updated content in the academic market, designed by authentic experts of international prestige"

International Guest Director

Manuel Arens is an **experienced data management professional** and leader of a highly qualified team. In fact, Arens holds the position of **global purchasing manager** in Google's Technical Infrastructure and Data Center division, where he has spent most of his professional career. Based in Mountain View, California, he has provided solutions for the tech giant's operational challenges, such as master **data integrity, vendor data updates** and **vendor prioritization**. He has led data center supply chain planning and vendor risk assessment, generating improvements in vendor risk assessment, resulting in process improvements and workflow management that have resulted in significant cost savings.

With more than a decade of work providing digital solutions and leadership for companies in diverse industries, he has extensive experience in all aspects of strategic solution delivery, including **marketing, media analytics, measurement** and **attribution.** In fact, he has received a number of accolades for his work, including the **BIM Leadership Award,** the **Search Leadership Award,** the **Lead Generation Export Program Award** and the **Export Lead Generation Program Award and the EMEA Best Sales Model Award.**

Arens also served as Sales Manager in Dublin, Ireland. In this role, he built a team of 4 to 14 members over three years and led the sales team to achieve results and collaborate well with each other and cross-functional teams. He also served as **Senior Industry Analyst,** Hamburg, Germany, creating storylines for over 150 clients using internal and third-party tools to support analysis. He developed and wrote in-depth reports to demonstrate his mastery of the subject matter, including understanding the **macroeconomic and political/regulatory factors affecting technology adoption and diffusion.**

He has also led teams at companies such as Eaton, Airbus and Siemens, where he gained valuable account management and supply chain experience. He is particularly noted for continually exceeding expectations by **building valuable customer relationships** and **working seamlessly with people at all levels of an organization,** including stakeholders, management, team members and customers. His data-driven approach and ability to develop innovative and scalable solutions to industry challenges have made him a prominent leader in his field.

Mr. Arens, Manuel

- Global Procurement Manager at Google, Mountain View, USA
- Senior Manager, B2B Analytics and Technology, Google, USA
- Sales Director - Google, Ireland
- Senior Industry Analyst at Google, Germany
- Accounts Manager - Google, Ireland
- Accounts Payable at Eaton, UK
- Supply Chain Manager at Airbus, Germany

Bet on TECH! You will have access to the best didactic materials, at the forefront of technology and education, implemented by internationally renowned specialists in the field"

International Guest Director

Andrea La Sala is an **experienced Marketing executive** whose projects have had a **significant impact** on the **Fashion environment**. Throughout his successful career he has developed different tasks related to **Products**, **Merchandising** and **Communication**. All of this linked to with prestigious brands such as **Giorgio Armani, Dolce&Gabbana, Calvin Klein,** among others.

The results of this **high-profile international executive** have been linked to his proven ability to **synthesize information** in clear frameworks and execute **concrete actions** aligned to **specific business objectives**. In addition, he is recognized for his **proactivity** and **adaptability to fast-paced** work rhythms. To all this, this expert adds a **strong commercial awareness, market vision** and a **genuine passion** for **products**.

As **Global Brand and Merchandising Director** at **Giorgio Armani,** he has overseen a variety of **Marketing strategies** for **apparel** and **accesories**. His tactics have also focused on the **retail environment** and **consumer needs** and **behavior**. In this La Sala has also been responsible for shaping the commercialization of products in different markets, acting as **team leader** in the **Design, Communication** and **Sales departments.**

On the other hand, in companies such as **Calvin Klein** or **Gruppo Coin,** he has undertaken projects to boost the **structure,** and **development** of **different collections**. He has been in charge of creating **effective calendars** for buying and selling **campaings.** He has also been in charge of the **terms, costs, processes** and **delivery times** of different operations.

These experiences have made Andrea La Sala one of the main and most qualified **corporate leaders** in **Fashion** and **Luxury**. A high managerial capacity with which he has managed to effectively **implement the positive positioning** of **different brands** and redefine their key performance indicators (KPIs).

Ms. La Sala, Andrea

- Global Brand & Merchandising Director Armani Exchange at Giorgio Armani, Milan, Italy
- Merchandising Director at Calvin Klein
- Brand Manager at Gruppo Coin
- Brand Manager at Dolce&Gabbana
- Brand Manager at Sergio Tacchini S.p.A.
- Market Analyst at Fastweb
- Graduate of Business and Economics at Università degli Studi del Piemonte Orientale

"The most qualified and experienced professionals at international level are waiting for you at TECH to offer you a first class teaching, updated and based on the latest scientific evidence. What are you waiting for to enroll?"

International Guest Director

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

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

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

As for his training, the executive has several Masters and postgraduate studies at prestigious centers such as the **University of Berkeley,** in the United States, and the **University of Copenhagen,** in Denmark. Through this continuous updating, the expert has attained cutting-edge competencies. Thus, he has come to be considered a **born leader** of the **new global economy,** centered on the drive for data and its infinite possibilities.

Mr. Gram, Mick

- Director of Business Intelligence and Analytics at Red Bull, Los Angeles, United States
- Business Intelligence Solutions Architect for Walmart Data Cafe
- Independent Business Intelligence and Data Science Consultant
- Director of Business Intelligence at Capgemini
- Senior Analyst at Nordea
- Senior Business Intelligence Consultant at SAS
- Executive Education in AI and Machine Learning at UC Berkeley College of Engineering
- Executive MBA in e-commerce at the University of Copenhagen
- B.Sc. and M.Sc. in Mathematics and Statistics at the University of Copenhagen

"

Study at the best online university in the world according to Forbes! In this MBA you will have access to an extensive library of multimedia resources, developed by internationally renowned professors"

International Guest Director

Scott Stevenson is a distinguished expert in the **Digital Marketing** sector who, for more than 19 years, has been linked to one of the most powerful companies in the entertainment industry, **Warner Bros. Discovery.** In this role, he has played a fundamental role in **overseeing logistics** and **creative workflows** across various digital platforms, including social media, search, display and linear media.

This executive's leadership has been crucial in driving in production **strategies** in **paid media**, resulting in a **marked improvement** which has resulted in **company's conversion** rates. At the same time, he has assumed other roles, such as Director of Marketing Services and Traffic Manager at the same multinational during his former management.

Stevenson has also been involved in the global distribution of video games and **digital property campaigns**. He was also responsible for introducing operational strategies related to the formation, completion and delivery of sound and image content for **television commercials and trailers.**

In addition, he holds a Bachelor's degree in Telecommunications from the University of Florida and a Master's Degree in Creative Writing from the University of California, which demonstrates his proficiency in **communication** and **storytelling.** In addition, he has participated at Harvard University's School of Professional Development in cutting-edge programs on the use of **Artificial Intelligence** in **business.** Therefore, his professional profile stands as one of the most relevant in the current field of **Marketing** and **Digital Media.**

Mr. Stevenson, Scott

- Director of Digital Marketing at Warner Bros. Discovery, Burbank, United States
- Traffic Manager at Warner Bros. Entertainment.
- M.A. in Creative Writing from the University of California
- B.S. in Telecommunications from the University of Florida

"

Achieve your academic and career goals with the best qualified experts in the world! The faculty of this MBA will guide you through the entire learning process"

International Guest Director

Eric Nyquist, Ph.D., is a leading **international sports professional** who has built an impressive career, noted for his **strategic leadership** and ability to drive change and **innovation** in **world-class** sports organizations.

In fact, he has held senior roles such as **Director of Communications and Impact** at **NASCAR,** based in **Florida, USA.** With many years of experience behind him at NASCAR, Dr. Nyquist has also held several leadership positions, including **Senior Vice President of Strategic Development** and **General Manager of Business Affairs,** managing more than a dozen disciplines ranging from **strategic development** to **entertainment marketing.**

Nyquist has also made a significant mark on Chicago's top sports franchises. As **Executive Vice President** of the **Chicago Bulls** and **Chicago White Sox** franchises, he has demonstrated his ability to drive **business** and **strategic success** in the world of **professional sports..**

Finally, it is worth noting that he began his career in sports while working in **New York** as a senior **strategic analyst** for **Roger Goodell** in the **National Football League (NFL)** and, prior to that, as a **Legal Intern** with the **United States Football Federation.**

Mr. Nyquist, Eric

- Director of Communications and Impact at NASCAR, Florida, USA
- Senior Vice President of Strategic Development at NASCAR, Florida, United States
- Vice President of Strategic Planning at NASCAR
- Senior Director of Business Affairs at NASCAR
- Executive Vice President at Chicago White Sox Franchises
- Executive Vice President at Chicago Bulls Franchises
- Manager of Business Planning at the National Football League (NFL)
- Business Affairs/Legal Intern with the United States Soccer Federation
- Juris Doctor from the University of Chicago
- Master's Degree in Business Administration-MBA from the University of Chicago Booth School of Business
- B.A. in International Economics from Carleton College

"

Thanks to this university program, 100% online, you will be able to combine your studies with your daily obligations, under the guidance of the leading international experts in the field of your interest. Enroll now!"

Management

Mr. Segovia Escobar, Pablo

- Chief Executive of the Defense Sector in TECNOBIT company of the Oesía Group
- Project Manager at Indra
- Master's Degree in Companies Administration and Management by the National University of Distance Education
- Postgraduate in Strategic Management Function
- Member of the English Spanish Association of People with High Intellectual Quotient
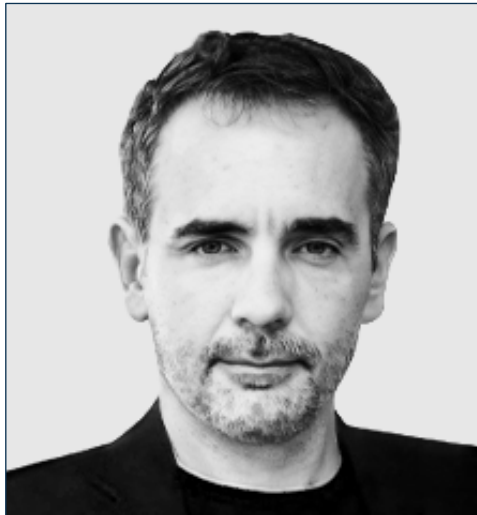
Mr. Diezma López, Pedro

- Chief Innovation Officer and CEO of Zerintia Technologies
- Founder of the technology company Acuilae
- Member of the Kebala Group for business incubation and promotion
- Consultant for technology companies such as Endesa, Airbus or Telefónica
- Wearable "Best Initiative" Award in eHealth 2017 and "Best Technological "Solution" 2018 for occupational safety

Professors

Ms. Sánchez López, Cristina

- CEO and founder of Acuilae
- Artificial Intelligence consultant at ANHELA IT
- Creator of Ethyka Software for computer systems security
- Software Engineer for Acceture Group, serving clients such as Banco Santanter, BBVA and Endesa
- Master's Degree in Data Science at KSchool
- Degree in Statistics from the Complutense University Madrid

Mr. Montes, Armando

- Expert in drones, robots and electronics, and 3D printers
- EMERTECH collaborator developing technology products such as Smart Vest
- Customer Order and Fulfillment Specialist for GE Renewable Energy
- CEO of the School of Superheroes Foundation related to 3D printing and the implementation of smart robots

Mr. Castellano Nieto, Francisco

- Head of Indra Company Maintenance Area
- Consultant for Siemens, Allen-Bradley, and other companies
- Industrial Electronic Technical Engineer by the Universidad Pontificia from Comillas

Mr. Asenjo Sanz, Álvaro

- IT Consultant for Capitole Consulting
- Project Manager for Kolokium Blockchain Technologies
- IT Engineer for Aubay, Tecnocom, Humantech, Ibermatica and Acens Technologies
- Degree from Computer Engineering of Systems at the Complutense University of Madrid

Mr. González Cano, José Luis

- Lighting Designer
- Vocational training teacher in electronic systems, telematics (CISCO certified instructor), radio communications, IoT
- Degree in Optics and Optometry from the Complutense University of Madrid
- Industrial Electronics Technician by Netecad Academy
- Member of: The Professional Association of Lighting Designers (Technical Consultant), Member of the Spanish Lighting Committee

10
Impact on Your Career

TECH is aware of the fact that taking a program of this nature requires a great deal of effort. For this reason, a university program has been designed that is taught exclusively online, where students can distribute the course load according to their needs. In this way, this program allows you to advance in your professional career while balancing it with a quality university education.

" *Access 24 hours a day easily from your computer to the library of multimedia resources that will lead you to know the advances in digital solutions in the primary or secondary sector*"

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

The MBA in Digital Transformation and Industry 4.0 from TECH is an intensive program that prepares you to face challenges and business decisions in the field of Industry 4.0. The main objective is to promote your personal and professional growth. Helping them achieve success.

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

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

A program of high academic standing to lead your career to success.

Time of Change

| During the program **25%** | During the first year **40%** | After 2 years **35%** |

Type of change

Internal Promotion **33%**

Change of Company **39%**

Entrepreneurship **28%**
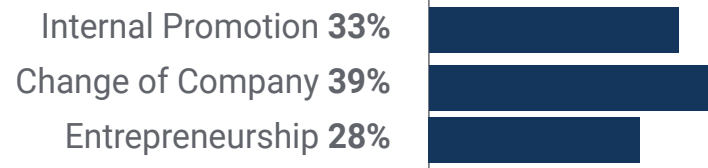
Salary increase

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

Salary before	A salary increase of	Salary after
€ 57,900	**25.22%**	**€ 72,500**

11
Benefits for Your Company

The MBA in Digital Transformation and Industry 4.0 contributes to organizations with highly qualified and updated professionals, also in a sector that has undergone countless changes in recent years.

Being part of this program is an excellent opportunity to access a network of contacts in which to find future professional partners, with a vision of entrepreneurship and progression in this booming sector.

" *Bring the latest advances and strategies applied in Digital Transformation and Industry 4.0 to your company. Grow professionally with TECH"*

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

01

Growth of talent and intellectual capital

The professional will introduce the company to new concepts, strategies, and perspectives that can bring about significant changes in the organization.

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 real project or develop new projects in the field of R & D or business development of your company.

06

Increased competitiveness

This program will equip students with the skills to take on new challenges and drive the organization forward.

12

Certificate

The MBA in Digital Transformation and Industry 4.0 guarantees students, in addition to the most rigorous and up-to-date education, access to an Executive Master's Degree issued by TECH Technological University.

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

This **MBA in Digital Transformation and Industry 4.0** contains the most complete and up-to-date program on the market.
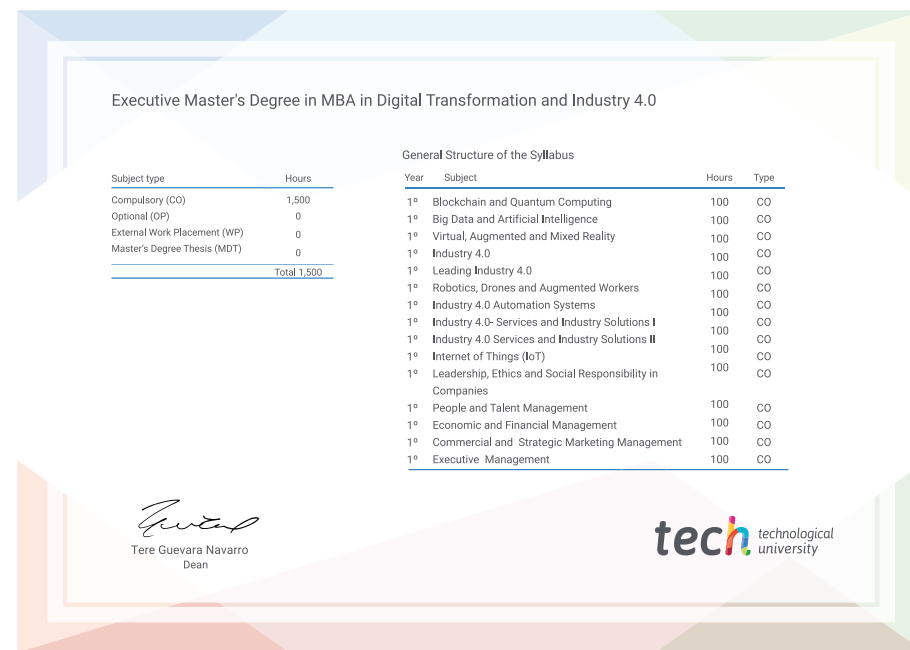
After the student has passed the assessments, they will receive their corresponding **Executive Master's Degree** issued by **TECH Technological University** by tracked delivery.

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

Title: **Executive Master's Degree in MBA in Digital Transformation and Industry 4.0**

Modality: **online**

Duration: **12 months**

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

MBA in Digital Transformation and Industry 4.0

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 MBA in Digital Transformation and Industry 4.0

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
1°	Blockchain and Quantum Computing	100	CO
1°	Big Data and Artificial Intelligence	100	CO
1°	Virtual, Augmented and Mixed Reality	100	CO
1°	Industry 4.0	100	CO
1°	Leading Industry 4.0	100	CO
1°	Robotics, Drones and Augmented Workers	100	CO
1°	Industry 4.0 Automation Systems	100	CO
1°	Industry 4.0- Services and Industry Solutions I	100	CO
1°	Industry 4.0 Services and Industry Solutions II	100	CO
1°	Internet of Things (IoT)	100	CO
1°	Leadership, Ethics and Social Responsibility in Companies	100	CO
1°	People and Talent Management	100	CO
1°	Economic and Financial Management	100	CO
1°	Commercial and Strategic Marketing Management	100	CO
1°	Executive Management	100	CO

Tere Guevara Navarro
Dean

tech technological university

*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.

tech technological university

Executive Master's Degree
MBA in Digital Transformation and Industry 4.0

- » Modality: **online**
- » Duration: **12 months**
- » Certificate: **TECH Technological University**
- » Schedule: **at your own pace**
- » Exams: **online**

Executive Master's Degree
MBA in Digital Transformation and Industry 4.0

tech technological university