Advanced Master's Degree

Industrial Management and Digital Transformation

tech global university

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Advanced Master's Degree
Industrial Management and Digital Transformation

- Modality: **online**
- Duration: **2 years**
- Certificate: **TECH Global University**
- Credits: **120 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/us/engineering/advanced-master-degree/advanced-master-degree-industrial-management-digitial-transformation**

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01

Introduction

Industrial processes have undergone enormous changes in recent years due to the emergence of digital concepts that have revolutionized the way in which multiple business tasks are performed. Thus, elements such as Blockchain, big data, artificial intelligence, augmented reality or the internet of things (IoT) have emerged in recent years and have brought about a drastic change in the way the industry manages its procedures. Engineers need to adapt to this new situation and, to do so, they need to acquire new work and management tools that they can apply to their work environment. This degree offers its students all the skills they need to succeed in this context, thanks to its highly specialized content taken directly from the professional environment.

Become an engineer specialized in digital transformation and apply your new knowledge in Blockchain, big data and artificial intelligence to your work"

For years now, Digital sphere has begun to occupy all kinds of spaces that were previously reserved for analog activities. Digitalization has radically transformed many tasks. Engineering and industry have not been exempt from this revolution, and digitalization has also made a strong entry into these disciplines.

Thus, concepts have become popular that will gradually gain more and more strength in today's society. Expressions such as *blockchain*, big data, artificial intelligence, augmented reality or the internet of things (IoT) are no longer as strange as they were a decade ago. These elements are here to stay and have already completely changed numerous professional fields. In the industrial field, these elements have brought about such a revolution that this area has already begun to be referred to as Industry 4.0.

Industry 4.0 integrates traditional engineering knowledge with these new concepts. Thus, industrial management has had to adapt to the new reality, incorporating more current notions to an area of study that until now had been very solid.

However, in order to become a true specialist in the field, an adequate learning process must be carried out to introduce these changes in the traditional industrial environment. For that reason, this Advanced Master's Degree in Industrial Management and Digital Transformation is the degree that any engineer looking to boost his or her career should take. Its contents are focused on professional practice and have been drawn from the experience of great specialists who have been innovating in these areas for years, making this program the best educational degree that an ambitious engineer eager for new knowledge could achieve.

This **Advanced Master's Degree in Industrial Management and Digital Transformation** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Practical cases presented by experts in industrial Engineering and Digital Transformation
- The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where the self-assessment process can be carried out to improve learning
- Its special focus on innovative methodologies in digital transformation applied to industrial management
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work
- Content that is accessible from any fixed or portable device with an Internet connection

Digital transformation is influencing all industrial processes today: specialize and become the most in-demand engineer in the profession"

Digital transformation is the present and the future: specialize and start applying this knowledge to your work"

Industrial management has undergone a revolution. If you want to learn how to adapt to this change, enroll in this Advanced Master's Degree.

Become an expert in Industrial Management and Digital Transformation and watch how quickly you achieve all your professional goals.

Its teaching staff includes professionals belonging to the field of industrial engineering and digital transformation, who bring their work experience to this program, as well as renowned specialists from leading companies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive training experience designed to train for real-life situations.

This program is designed around Problem-Based Learning, whereby the student must try to solve the different professional practice situations that arise during the course. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

02

Objectives

The main objective of this Advanced Master's Degree in Industrial Management and Digital Transformation is to offer its students the best knowledge in the field, so that they can adapt to the current reality of their profession. Thanks to the tools that this degree will give them, students will be able to apply all the digital transformation skills they will have acquired to their work, so that their professional life in the industrial field will benefit and they will thus be able to progress dramatically.

If you want to turn your career around and become the most valuable member of your company, this Advanced Master's Degree is what you are looking for"

General objectives

- Apply the main strategic keys to better compete in current and future times
- Manage projects presented with both conventional and agile methodologies
- Adequately manage human resources so that they can offer the company all the potential required of them and contribute the maximum possible value
- Interpret the economic and financial data of the company, while being able to use and develop the necessary tools for a better management of all aspects related to business finances
- Better manage all the necessary steps and phases in the design and development of new products
- Plan and control production in order to optimize resources and adapt as best as possible to demand
- Manage quality throughout the organization and apply the most important tools for continuous improvement of products and processes
- Apply the Lean Manufacturing work philosophy, with the objective of reducing waste to optimize resources and give the company the necessary flexibility and response to market demands
- Develop better management of the entire supply chain and improve the flow of materials from suppliers to shipment of products to the customer
- Utilize and develop the latest trends in digitization and Industry 4.0 in order to be better prepared to compete in the rapidly changing new markets
- Conduct a comprehensive analysis of the profound transformation and radical paradigm shift being experienced in the current global digitalization process
- Provide in-depth knowledge and the necessary technological tools to face and lead the technological leap and the challenges currently present in companies
- Mastering the digitalization procedures of companies and the automation of their processes to create new fields of wealth in areas such as creativity, innovation and technological efficiency
- Leading digital change in industrial companies

Specific objectives

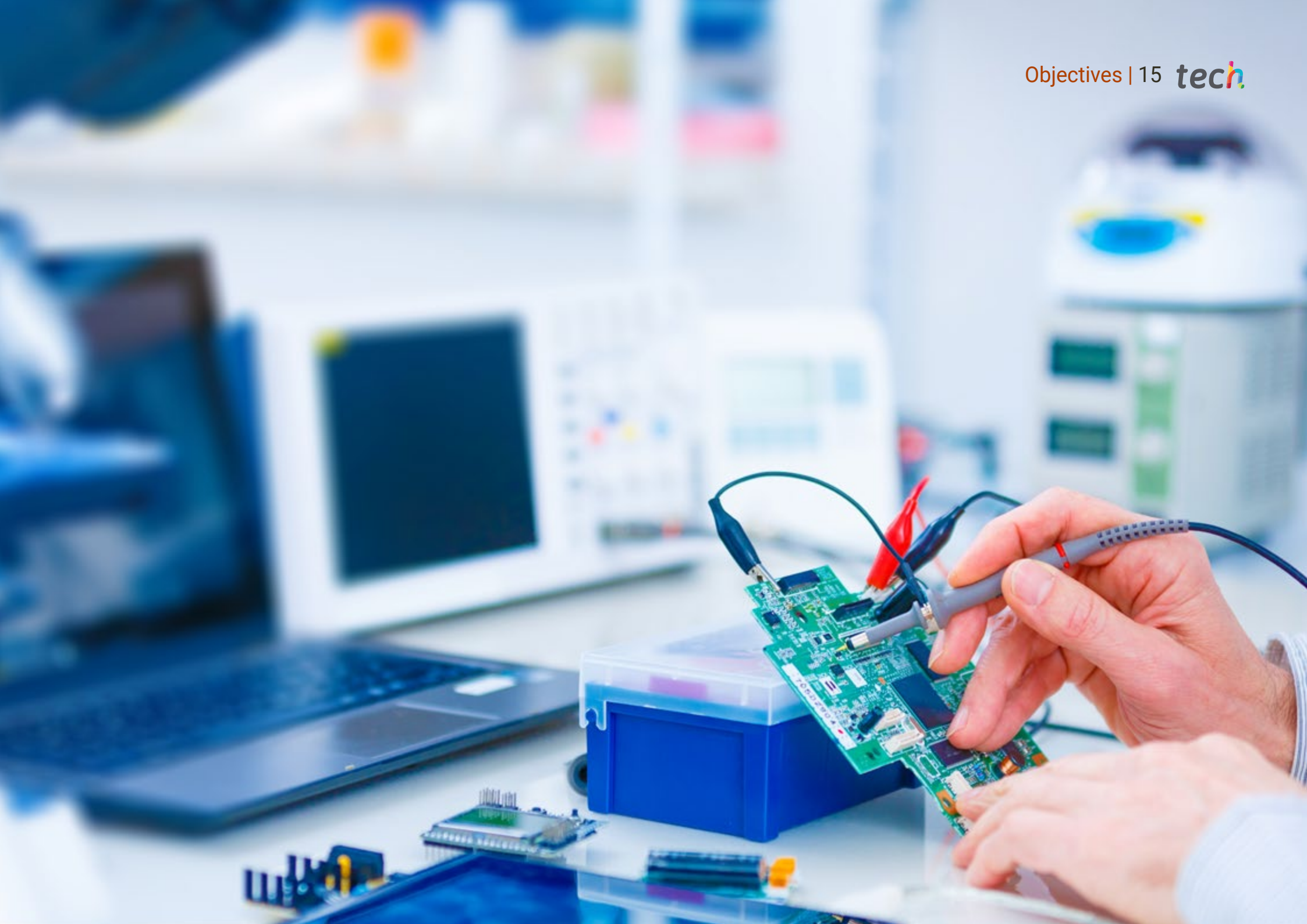
- Know in detail the importance of excellence and how to measure it
- Define The Digital transformation strategy to be able to compete in the market
- Implement and deploy the strategy throughout the organization using the balanced scorecard
- Discover, define and manage the fundamental processes of value generation in the company
- Analyze the different structural typologies that exist and the new trend of the need to develop agile organizations with a rapid response to the turbulent environment.
- Properly manage the relationship with customers
- Deepen the internationalization aspect of the company's operations
- Manage change in a more appropriate way and integrate it as a necessity for the company to advance and progress in a highly competitive environment
- Establish project objectives and identify the value of the business
- Acquire the skills of a project manager
- Analyze the main indicators of people management and how to use the information they report
- Detect possible risk situations in people management before they have a negative impact on the organization, triggering the implementation of preventive actions
- Conduct a comprehensive analysis of the current business environment
- Interpreting a balance sheet to avoid future risks
- Prepare, analyze and report the income statement to the management team to facilitate decision-making
- Reliable forecasting, management and monitoring of business cash flows
- Knowledge of S/T and L/T financing instruments
- Effectively managing our relationships with the banking sector
- Manage and optimize organizational costs
- Analyze, evaluate and choose the best investment options for the business
- Master the accounting perspective of corporate transactions between companies
- Deepen our focus on foreign markets to diversify our business geographically
- Deepen in the techniques, their phases and the tools related to the conceptual design that precedes the final design of the product, as well as the translation of the final customer's requirements into technical specifications that the product will have to comply with
- In-depth breakdown of the design process of a new product from CAD design through failure analysis and drawing through to agreement that the design will meet requirements
- Analyze available prototyping options for proper evaluation of the initial design
- Analyze in detail the phases related to the development of the manufacturing process until the product is available according to the initial requirements
- Deepen the innovation and technology transfer processes for the development of novel products and processes and the establishment of a new state of the art
- Understand the role of advanced planning and the production plan in reducing incidents and problems in the development of production activities

- Address the importance of production planning as a key tool for company profitability
- Acquire all the knowledge to lead the continuous transformations required in production plants
- Develop all the necessary skills to understand the application of the most proven production planning and control methodologies such as Just-in-time or the theory of constraints
- Reflect on the importance of implementing organizational systems aimed at improving delivery times and immediate response to market requirements
- Delve into the fundamentals of Lean Thinking and their main differences compared to traditional manufacturing processes
- Analyze waste in the company, distinguishing the value of each process and the types of waste that can be found
- Establish the 5S principles and how they can help improve productivity, as well as deepen its implementation in the company
- Make a comprehensive analysis of operational Lean tools such as SMED, JIDOKA, POKAYOKE, batch reduction and POUS
- Delve into the importance of Lean production monitoring, planning and control tools such as visual management, standardization, production leveling and cellular manufacturing
- Delve into the principles of the Kaizen method for continuous improvement and the different methodologies, as well as the main obstacles that can be encountered for the implementation of Kaizen in the company
- Identify KPIs that can help measure the results of Lean implementation
- Establish the importance of quality management throughout all areas of the company
- Identify the quality costs associated with quality management and implement a system to monitor and improve them
- Know in detail the ISO 9001 quality management standard and how to implement it in the company
- Analyze the ISO 14000 environmental and ISO 450001 occupational health and safety standards and their integration with the quality system to avoid duplication of documentation
- Deepen in the EFQM model, in its new edition, in order to be able to develop it in the company if we want to take a step further towards excellence
- Apply the main quality tools that can be used in the management and improvement of product and process quality
- Establish the importance of continuous improvement and the use of the two main methodologies: the PDCA cycle with the application to the implementation of Lean Manufacturing and Six-Sigma
- In-depth knowledge of supplier quality and how to manage it, the different types of audits and how to carry them out, aspects of testing and the laboratory
- In-depth breakdown of the challenges of the logistics function, its key activities and the associated costs and value realization of the logistics function and deep dive into the different types of supply chains
- Apply the principles of Lean philosophy to supply chain management and the application of a Lean system to the logistics function
- Mastering warehouse management and its automation
- Manage procurement and supplier relationship management and the development of effective procurement management
- Apply new tools and information systems to logistics control
- Know in detail the importance of managing reverse logistics, as well as the operations and costs associated with it

- Research about new trends and strategies in the logistics function and their implementation in the company
- Analyze the differentiating factors of successful supply chains and the differentiating elements of the value chain
- Delve into pandemic logistics, the different scenarios and analyze the critical points of the supply chain in the current scenario, as well as the types of supply chains for the distribution of key elements such as vaccines
- Lead and face the new business models and challenges associated with the development and implementation of Industry 4.0
- Deepen the need for digital transformation suggested by the new business challenges in order to successfully face the near future
- In-depth knowledge and auditing of industrial automation projects as a fundamental part of today's production and management processes
- Identify and interpret the management software of the different departments of a current company
- Identify the software that allows to obtain a global and transversal vision of a company or business
- Discover the importance of data in the control, monitoring, management and improvement of the company
- Establish how machine learning and artificial intelligence techniques can contribute to solve the company's current problems and define and project its future
- 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
- 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
- Know the main existing wearable devices, their usefulness, the security systems to be applied in any IoT model and its variant in the industrial world, called IIoT
- Develop, from all available data, the Digital Twin of the facilities/systems/assets integrated in an IoT network
- Better understanding of the main automation and control systems, their connectivity, the types of industrial communications and the type of data they exchange
- Convert the production process facilities into a true Smart factory
- Be able to deal with large amounts of data, define their analysis and derive value from them
- Define continuous monitoring, predictive and prescriptive maintenance models
- Acquire in-depth knowledge of the fundamentals of blockchain technology and its value propositions
- Lead the creation of blockchain-based projects and apply this technology to different business models and the use of tools such as Smart Contracts
- Acquire important knowledge about one of the technologies that will revolutionize our future, such as quantum computing
- Deepen the knowledge of the fundamental principles of artificial intelligence
- Obtain a practical knowledge of one of the most widespread applications such as Chatbots and virtual assistants
- Acquire expert knowledge on the characteristics and fundamentals of virtual reality, augmented reality and mixed reality, as well as their differences

- Use applications of each of these technologies and develop solutions with each of them individually and in an integrated manner, combining them to define immersive experiences
- Analyze the origins of the so-called Fourth Industrial Revolution and the Industry 4.0 concept
- In-depth study of the key principles of Industry 4.0, the technologies on which they are based and the potential of all of them in their application to the different productive sectors
- Convert any manufacturing facility into a Smart Factory and be prepared for the challenges and challenges that come with it
- 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
- Entering the world of robotics and automation
- Choose a robotic platform, prototype and know in detail simulators and robot operating system (ROS)
- Deepen your understanding of the applications of artificial intelligence to robotics oriented to predict behaviors and optimize processes
- Study robotics concepts and tools, as well as use cases, real examples and integration with other systems and demonstration
- Analyze the most intelligent robots that will there in the coming years and how humanoid machines will be trained to perform in complex and challenging environments
- 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
- In-depth knowledge of the primary and secondary economic sectors, as well as the technological impact they are experiencing
- Find out how technologies are revolutionizing the agricultural, livestock, industrial, energy and construction sectors
- Possess 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
- Knowing the technological trends of the future

The digital transformation has brought about irreversible changes in the industrial management of companies: adapt and progress in your career"



03

Skills

Students of this Advanced Master's Degree in Industrial Management and Digital Transformation will acquire a series of skills and aptitudes related to the application of digital transformation in industrial business management. Thus, engineers and professionals who complete this degree will be able to carry out different business management tasks, starting from an industrial perspective, but using the tools of the digital revolution that has taken place in recent years.

Your new skills will make you the most valuable member of your company"

General Skills

- Master the necessary tools for industrial management, from the international context, through the development of projects and operation plans
- Apply acquired knowledge and problem-solving skills in current and global environments within broader industry-related contexts
- Integrate knowledge and gain an in-depth understanding of the different uses of industrial management, as well as the importance of its use in today's world
- Understand and internalize the scope of digital and industrial transformation applied to foundation systems for efficiency and competitiveness in today's market
- Perform critical analysis, evaluation and synthesis of new and complex ideas related to the field of industrial management in engineering
- Promote, in professional contexts, technological, social or cultural progress within a knowledge-based society, following sustainable precepts
- Develop an Industry 4.0 oriented strategy
- Have a thorough knowledge of the fundamental elements to successfully carry out a digital transformation process adapted to the new market rules
- Develop an advanced knowledge of the new emerging and exponential technologies that are affecting the vast majority of industrial and business processes in the market
- Adapt to the current market situation governed by automation, robotization and IoT platforms and apply the necessary tools to lead technological innovation and digital transformation processes

Specific Skills

- Efficiently manage all aspects related to industrial management to be able to compete adequately both in the present and in a future full of challenges, opportunities and changes
- Apply the main strategic keys to better compete in current and future times
- Master the tools to achieve excellence, define the business strategy and its deployment throughout the organization, process management, and structural typology to be used to better adapt to changes, as well as aspects to be taken into account for sustainability, customer management, internationalization of the company and change management, which is becoming more and more constant
- Manage projects presented with both conventional and agile methodologies
- Properly manage HR so that they can offer the company all the potential required of them and provide the maximum possible value
- Interpret the economic and financial data of the company, while being able to use and develop the necessary tools for a better management of all aspects related to business finances
- Better manage all the necessary steps and phases in the design and development of new products
- Plan and control production in order to optimize resources and adapt as best as possible to demand

- Manage quality throughout the organization and apply the most important tools for continuous improvement of products and processes
- Apply the Lean Manufacturing work philosophy with the objective of reducing waste to optimize resources and give the company the necessary flexibility and response to market demands
- Develop better management of the entire supply chain and improve the flow of materials from suppliers to shipment of products to the customer
- Utilize and develop the latest trends in digitization and Industry 4.0 in order to be better prepared to compete in the rapidly changing new markets
- Securing an existing IoT ecosystem or creating a secure one by deploying intelligent security systems
- Automate production systems with the integration of robots and industrial robotics systems
- Maximize value creation for the customer by applying Lean Manufacturing to the digitalization of our production process
- Know how the blockchain works and the characteristics of the so-called networks
- Use the main techniques of artificial intelligence such as Machine Learning and Deep learning), Neural Networks, and the applicability and use of Natural Language Recognition
- 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
- Create truly useful Chatbots and virtual assistants
- Create virtual worlds and elevate User Experience (UX) enhancement
- Integrate the benefits and main advantages of Industry 4.0

- Learn more about the key factors of the digital transformation of industry and the industrial internet
- Leading the new business models derived from Industry 4.0
- Develop future production models
- Facing the challenges of Industry 4.0 and understanding its effects
- Mastering the essential technologies of Industry 4.0
- Lead manufacturing digitization processes and identify and define digital capabilities in an organization
- Define the architecture behind a Smart Factory
- Reflecting on technological markers in the post-covid era and in the era of absolute virtualization
- Learn more about the current situation in the digital transformation
- Use RPA (Robotic Process Automation) to automate processes in companies, gain efficiency and reduce costs
- Address the major challenges facing robotics and automation, such as transparency and ethics

Our objective is very simple: to offer you quality training with the best teaching methods currently available, so you can reach new heights of excellence in your profession"

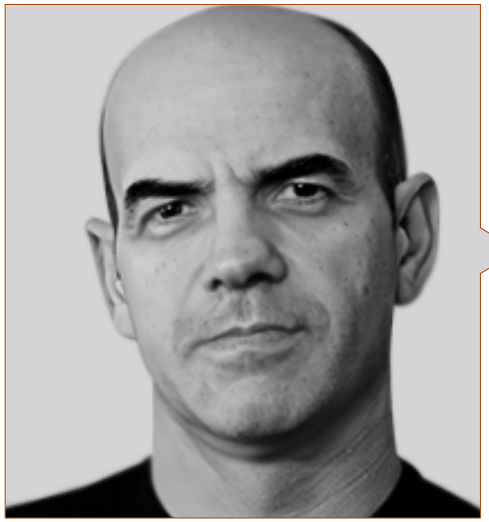
04

Course Management

This Advanced Master's Degree in Industrial Management and Digital Transformation is taught by the best faculty, specialized in industrial management, industrial engineering and digital transformation, and has extensive professional experience in these fields. In this way, students can be sure that they will obtain the best possible education, while taking advantage of the knowledge that these experts will pass on to them so that they can apply it to their own work environment. In this way, teachers will provide a direct transmission of content that students will be able to use immediately in their careers.

This faculty will give you all the keys to succeed in your job"

Management

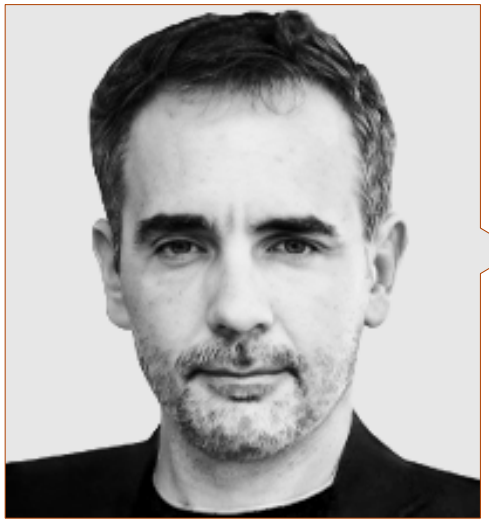


Dr. Asensi, Francisco Andrés

- Engineering, Quality, Production, Logistics, Information Systems and RRHH, in companies of several industrial sectors
- Industrial Engineer in Industrial Organization from the Polytechnic University of Valencia
- Doctor of Industrial Engineering in Business Organization from the University of Castilla la Mancha (UCLM)
- He has implemented and developed a multitude of management systems for excellence (Quality, Scorecard, Lean Manufacturing, Continuous Improvement and Process Improvement) in several industrial companies
- Coach in Strategic Coaching
- Author of various business books "The Adaptive Enterprise", "Lean Manufacturing: Key Indicators used to efficiently manage Continuous Improvement", "Lean Manufacturing: Keys to material flow improvement"

Mr. Segovia Escobar, Pablo

- He is the commercial manager of the Aftermarket and Industry 4.0 area applied to the support of systems at Indra
- Industrial Engineer, Project Management Professional (PMP) from the Program Management Institute
- Sales Manager and Program Manager with extensive experience (more than 12 years) in project management
- Master's Degree in Business Administration and Management
- Postgraduate in Strategic Management Function



Mr. Diezma López, Pedro

- Entrepreneur, writer, TEDx speaker and expert in emerging and exponential technologies
- Founder of the technology companies Acuilae (Artificial Intelligence), Ethyka and Zerintia Technologies
- Wearable "Best Initiative" Award in eHealth 2017 and"Best Technological "Solution" 2018 for occupational safety
- One of the world's leading experts in Wearable Technology and the Internet of Things (IoT)

Professors

Mrs. Aleixandre Andreu, María José

- Director of Commercial Banking of Caja del Mediterráneo and Banco Sabadell
- Diploma in Business Sciences from the UV
- Tutor of Internships at Valencia University years 1998 to 2007
- Internship Tutor at Polytechnic University of Valencia
- Technique and skills for trainers from the Autonomous University of Barcelona
- Completed a 2-year course on Office Management taught by Fundesem
- EPFA EFA Certification
- LCCI Certification from Carlos III University
- II Office Managers Course, internal training. Caja de Ahorros del Mediterraneo, practical and theoretical training

Mr. Asenjo Sanz, Álvaro

- More than 12 years of experience in the IT world
- Technical Engineer in Computer Systems from the UCM
- He has participated in software development, consulting and IT project management
- Part of the Kolokium team
- He has been a professor of Computer Science at the European University of Madrid
- He is part of the faculty of the EOI and Kschool where he participates in several Blockchain courses

Mr. Cámara Madrid, José Antonio
- Quality Manager with extensive experience in the company Indra
- Electronic Engineer
- Professor of Advanced Degree in Mechatronics and Electronic Maintenance
- Qualifying master's degree for teachers specializing in Industrial Technologies

Mr. Castellano Nieto, Francisco
- Extensive experience in industrial environments as a development engineer in R&D department in the sector of automatic packaging machines for solids, granulates and liquids, packaging machines, palletizers and distribution chains; solutions with technologies from Siemens, Allen-Bradley (Rockwell Automation), Schneider, Omron and Beckhoff
- Industrial Electronic Technical Engineer by the Universidad Pontificia de Comillas I.C.A.I.
- Responsible for the maintenance of defense equipment in the aeronautical, naval and terrestrial sectors at Indra

Mr. Del Olmo, Daniel
- Founder of Enira engineering S.L., with two products recognized as innovative in Industry 4.0 by official organizations (FactoryBI and Smart Extrusion)
- Industrial Engineering Degree, specializing in Electronics and Automation
- Lecturer in the MBA Master in Operations at the European University of Valencia
- Professionally, he has worked mainly in multinational companies in the industrial automation and automotive sector as Plant Engineering Manager
- Toyota Production System (TPS) experience during a 4-year tenure at NHK Springs Co LTD. Japan was trained in Japan

Mr. Giner Sanchis, David
- Portfolio and Program Manager in a Project Management Office (PMO). By monitoring compliance with BSC indicators and actions established for alignment with the company's strategy
- Chemical Engineer with a Master's Degree in Project Management from the Polytechnic University of Valencia and an Official Master's Degree in Project Management from the European University of Valencia
- 6+ years as a project manager in the industrial sector, monitoring and communicating progress against project/deployment plan, timeline and key milestones
- Has the following project certificates: Management Professional (PMP), Project Management Office Certified Practitioner (PMO-CP), Agile Scrum Foundation y DesignThinking Professional Certificate (DTPC)

Mr. Lucero Palau, Tomás
- Director of Operations, Quality, Engineering and Maintenance in several industrial and automotive companies
- Industrial Engineer from the Polytechnic University of Valencia
- MBA by ESTEMA Business School
- Expert in Lean Management, applied to various consultancy companies
- Speaker at the ABC of Operations and Logistics course at EDEM

Mr. Ibáñez Capella, Juan
- Head of Facilities and Projects at Power Electronics in Valencia where he was in charge of the execution of the project for the new headquarters of the company with 50,000m2 of floor space and 10,000m2 of office space
- Industrial Engineer from the Polytechnic University of Valencia
- Executive MBA IESE Business School. Navarra University
- Project Manager Professional PMP® #2914541
- He has been responsible for Facilities Projects at Ferrovial
- He has participated in the execution of important projects such as the galvanized steel plant SOLMED in Sagunto (Valencia), the works of the AVE high speed train station in Zaragoza or the works of the 32nd edition of the America's Cup in Valencia

Mrs. Mollá Latorre, Korinna
- Responsible for international projects at AITEX, Instituto Tecnológico Textil, where she has acquired extensive experience in the management of large projects and teams related to textile materials and technologies, as well as operations, logistics and supply chain management in the textile industry

- Industrial Engineer, specialized in Industrial Organization from the Polytechnic University of Valencia.
- Certified by the American Production and Inventory Control Society (USA) in Production and Inventory Management and in Integrated Resource Management
- Director of Operations and Logistics for Colortex, S.A., implementing a Lean Manufacturing system in the company's operations
- Project Technician for AIJU, Technological Institute of Toys

Mr. Morado, Eduardo

- Quality Assurance at Ford Motor Company
- Industrial Engineer in Product Design from the UPV
- Implementation and leadership of engineering projects in manufacturing plants in the automotive and chemical sectors, for leading multinationals (Spain, UK, Germany, Mexico)
- MBA and Upper Master's Degree in Occupational Risk Prevention
- Extensive experience as Key User and Trainer in the implementation of Quality, Safety and Environmental Management Systems (ISO, OSHAS, GMP), ERPs (SAP, Ross) and quality management tools (6-Sigma, FMEA, 8D, QCP), and as PM of engineering and maintenance, continuous and process improvement (TPM, R&M, APQP, LRR, PSM, SMED, Poka-Yoke...)
- Collaboration as a mentor for students at the UPV and in different initiatives of non-profit organizations and foundations for the promotion of STEM in young people between 6 and 18 years of age

Mr. Montes, Armando

- Expert in drones, robots and electronics, and 3D printers
- Creator of several state-of-the-art technological solutions and projects such as Emertech or Smart Vest. EMERTECH is a project that aims to develop a cutting-edge technological platform (drones and artificial intelligence) to support emergency, rescue and disaster relief situations

Mr. Navarra, Francisco

- Professional of Human Resources with more than 20 years of experience
- More than 10 years working at ISTOBAL, providing experience in collective and individual bargaining; talent recruitment and retention; development of remuneration, compensation and benefits policies; and occupational risk prevention, including plans for the prevention of psychosocial risks
- Academic background in Psychology
- Extensive communication and liaison skills with all levels of staff and management

Mr. Ponce Lucas, Miguel Enrique

- Head of various technical departments (Product Development, Advanced Engineering, Project Management, Innovation, Quality Management)
- Degree in Industrial Engineering (Mechanical) from the Universidad Politécnica De Valencia
- Development of the quality management system in accordance with ISO TS 16949 and IATF 16949
- Participation in patents for new products
- Development of the change management system
- Head of the global knowledge management system
- Development of the global engineering education system

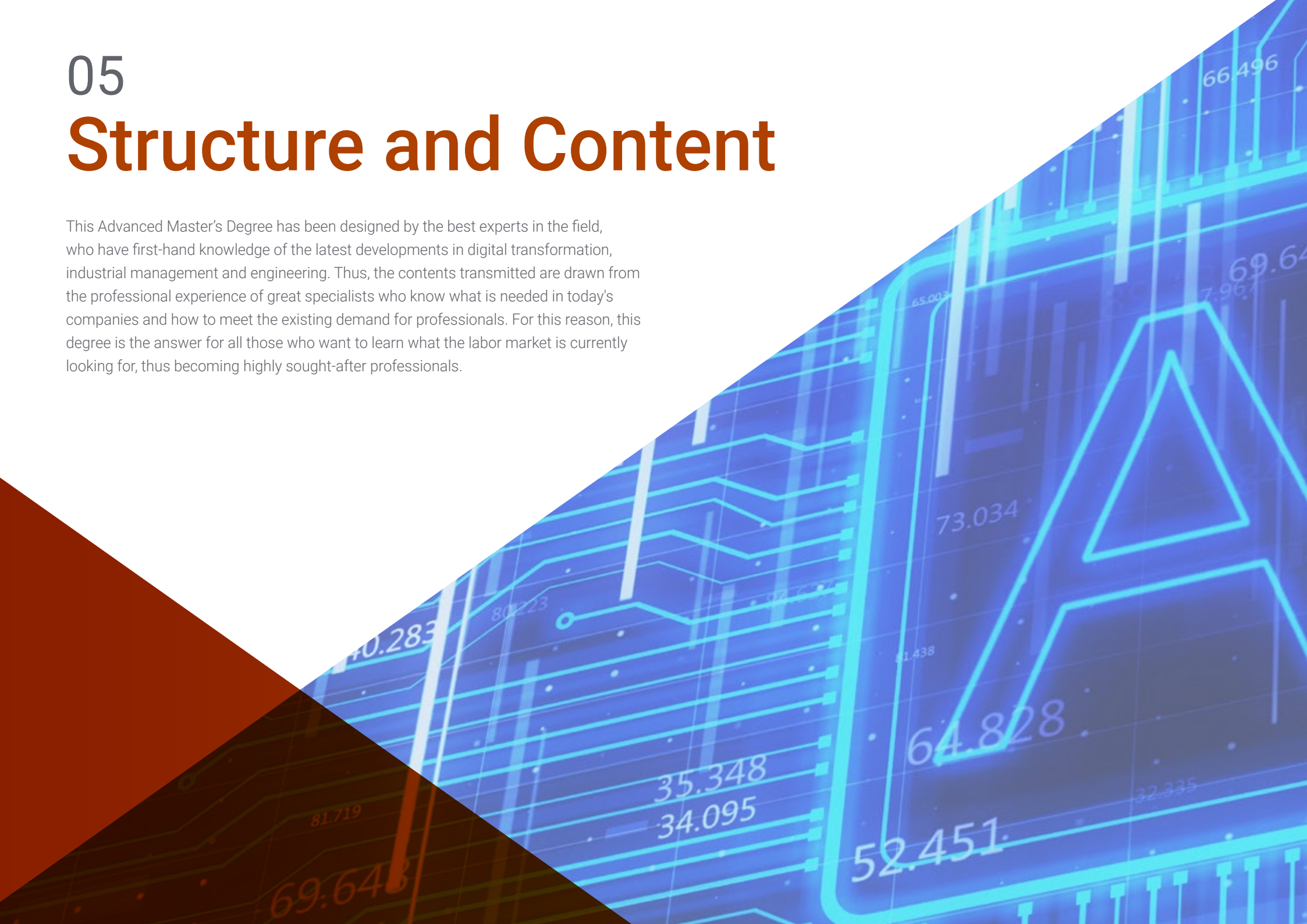
Mrs. Sánchez López, Cristina

- 20 years of experience in IT (Software Engineer) for the Accenture Group for large clients such as Banco de Santander, BBVA, Endesa or Barclays Bank
- CEO and founder of Acuilae and ETHYKA
- Degree in Statistics from the Complutense University Madrid
- Master's Degree in Data Science

05

Structure and Content

This Advanced Master's Degree has been designed by the best experts in the field, who have first-hand knowledge of the latest developments in digital transformation, industrial management and engineering. Thus, the contents transmitted are drawn from the professional experience of great specialists who know what is needed in today's companies and how to meet the existing demand for professionals. For this reason, this degree is the answer for all those who want to learn what the labor market is currently looking for, thus becoming highly sought-after professionals.



The best content for the most demanding professionals"

Module 1. Strategic Keys to Improve Competitiveness

1.1. Excellence in the Current Company
- 1.1.1. Adaptation to VUCA Environments
- 1.1.2. Satisfaction of Key Constituents (Stakeholders)
- 1.1.3. World Class Manufacturing
- 1.1.4. Measure of Excellence: Net Promoter Score

1.2. Business Strategy Design
- 1.2.1. General Strategy Definition Process
- 1.2.2. Definition of the Current Situation Positioning Models
- 1.2.3. Possible Strategic Movements
- 1.2.4. Strategic Models of Action
- 1.2.5. Functional and Organizational Strategies
- 1.2.6. Environmental and Organizational Analysis SWOT Analysis for Decision-Making

1.3. Strategy Deployment Balanced Scorecard
- 1.3.1. Mission, Vision, Values and Principles
- 1.3.2. Need for a Balanced Scorecard
- 1.3.3. Perspectives to Be Used in the BSC
- 1.3.4. Strategic Map
- 1.3.5. Phase to Implement a Good BSC
- 1.3.6. General Map of a BSC

1.4. Process Management
- 1.4.1. Process Description
- 1.4.2. Types of Process Main Processes
- 1.4.3. Process Prioritization
- 1.4.4. Process Representation
- 1.4.5. Measuring Processes for Improvement
- 1.4.6. Process Map
- 1.4.7. Process Reengineering

1.5. Structural Typologies Agile Organizations. ERR
- 1.5.1. Structural Typologies
- 1.5.2. The Company Viewed as an Adaptable System
- 1.5.3. The Horizontal Company
- 1.5.4. Characteristics and Key Factors of Agile Organizations (ERR)
- 1.5.5. Organizations of the Future: the TEAL Organization

1.6. Design of Business Models
- 1.6.1. Canvas Model for Business Model Design
- 1.6.2. Lean Start Up Methodology in the Creation of New Businesses and Products
- 1.6.3. The Blue Ocean Strategy

1.7. Corporate Social Responsibility and Sustainability
- 1.7.1. Corporate Social Responsibility (CSR): ISO Business School 26000
- 1.7.2. Sustainable Development Goals SDGs
- 1.7.3. The 2030 Agenda

1.8. Customer Management
- 1.8.1. The Need to Manage Customer Relationships
- 1.8.2. Elements of Customer Management
- 1.8.3. Technology and Customer Management. CRM

1.9. Management in International Environments
- 1.9.1. The Importance of the Internationalisation
- 1.9.2. Diagnosis of Export Potential
- 1.9.3. Elaboration of the Internationalisation Plan
- 1.9.4. Implementation of the Internationalization Plan
- 1.9.5. Export Assistance Tools

1.10. Change Management
- 1.10.1. The Dynamics of Change in Companies
- 1.10.2. Obstacles to Change
- 1.10.3. Factors of Adaptation to Change
- 1.10.4. Kotter's Methodology for Change Management

Module 2. Project Management

2.1. The Project
- 2.1.1. Fundamental Elements of the Project
- 2.1.2. The Project Manager
- 2.1.3. The Environment in Which Projects Operate

2.2. Project Scope Management
- 2.2.1. Scope Analysis
- 2.2.2. Project Scope Planning
- 2.2.3. Project Scope Control

2.3. Schedule Management
- 2.3.1. The Importance of the Planning
- 2.3.2. Manage Project Planning Project Schedule
- 2.3.3. Trends in Time Management

2.4. Cost Management
- 2.4.1. Project Cost Analysis
- 2.4.2. Financial Selection of Projects
- 2.4.3. Project Cost Planning
- 2.4.4. Project Cost Control

2.5. Quality, Resources and Acquisitions
- 2.5.1. Total Quality and Project Management
- 2.5.2. Project Resources
- 2.5.3. Acquisition The Contracting System

2.6. Project Stakeholders and Their Communications
- 2.6.1. The Importance of Stakeholders
- 2.6.2. Project Stakeholder Management
- 2.6.3. Project Communications

2.7. Project Risk Management
- 2.7.1. Fundamental Principles of Risk Management
- 2.7.2. Management Processes for Project Risk Management
- 2.7.3. Trends in Risk Management

2.8. Integrated Project Management
- 2.8.1. Strategic Planning and Project Management
- 2.8.2. Project Management Plan
- 2.8.3. Execution and Control Processes
- 2.8.4. Project Closure

2.9. Agile Methodologies I: Scrum
- 2.9.1. Agile and Scrum Principles
- 2.9.2. The ScrumTeam
- 2.9.3. Scrum Events
- 2.9.4. Scrum Artefacts

2.10. Agile Methodologies II: Kanban
- 2.10.1. Kanban Principles
- 2.10.2. Kanban and Scrumban
- 2.10.3. Certifications

Module 3. Leadership and People Management

3.1. The Role of the Leader
- 3.1.1. Leadership in Effective People Management
- 3.1.2. Types of Decision-Making. Style in People Management
- 3.1.3. The Leader Coach
- 3.1.4. Self-directed Teams and Empowerment

3.2. Team Motivation
- 3.2.1. Needs and Expectations
- 3.2.2. Effective Recognition
- 3.2.3. How to Enhance Team Cohesion?

3.3. Communication and Conflict Resolution
- 3.3.1. Intelligent Communication
- 3.3.2. Constructive Conflict Management
- 3.3.3. Conflict Resolution Strategies

3.4. Emotional Intelligence in People Management
- 3.4.1. Emotion, Feeling and State of Mind
- 3.4.2. Emotional Intelligence
- 3.4.3. Ability Model (Mayer and Salovey): Identify, Use, Understand and Manage
- 3.4.4. Emotional Intelligence and Personnel Selection

3.5. Indicators in People Management
- 3.5.1. Productivity
- 3.5.2. Personnel Rotation
- 3.5.3. Talent Retention Rate
- 3.5.4. Staff Satisfaction Rate
- 3.5.5. Average Time Vacancies Pending Filling
- 3.5.6. Average Training Time
- 3.5.7. Average Time to Reach Goals
- 3.5.8. Absenteeism Levels
- 3.5.9. Occupational Accidents

3.6. Performance Evaluation
- 3.6.1. Performance Evaluation Components and Cycle
- 3.6.2. 360º Evaluation
- 3.6.3. Performance Management: A Process and a System
- 3.6.4. Management by Objectives
- 3.6.5. Operation of the Performance Evaluation Process

3.7. Training Plan
- 3.7.1. Fundamental Principles
- 3.7.2. Identification of Training Requirements
- 3.7.3. Training Plan
- 3.7.4. Training and Development Indicators

3.8. Identification of Potential
- 3.8.1. Potential
- 3.8.2. Soft Skills as a Key High Potential Initiator
- 3.8.3. Methodologies for Identifying Potential: Learning Agility Assessment (Lominger) and Growth Factors

3.9. The Talent Map
- 3.9.1. George Odiorne- 4 Boxes Matrix
- 3.9.2. 9-Box Matrix
- 3.9.3. Strategic Actions to Achieve Effective Talent Outcomes

3.10. Talent Development Strategy and ROI
- 3.10.1. 70-20-10 Learning Model for Soft Skills
- 3.10.2. Career Paths and Succession
- 3.10.3. Talent ROI

Module 4. Corporate Finance An Economic-Financial Approach

4.1. The Company in Our Environment
- 4.1.1. Production Costs
- 4.1.2. Companies in Competitive Markets
- 4.1.3. Monopolistic Competition

4.2. Analysis of Financial Statements I: The Balance
- 4.2.1. The Assets CP and LP Resources
- 4.2.2. Liabilities CP and LP Obligations
- 4.2.3. Net Assets Shareholder Returns

4.3. Analysis of Financial Statements II: the Income Statement
- 4.3.1. The Structure of the Income Statement Income, Costs, Expenses and Profit or Loss
- 4.3.2. Main Ratios to Analyze the Income Statement
- 4.3.3. Profitability Analysis

4.4. Treasury Management
- 4.4.1. Collections and Payments Cash-Forecast
- 4.4.2. Impact and Management of Treasury Deficits/Surplus Corrective Measures
- 4.4.3. Effect Flows Analysis
- 4.4.4. Bad Debt Portfolio Management and Impact

4.5. Sources of Financing to CP and LP
- 4.5.1. CP Financing, Instruments
- 4.5.2. LP Financing, Instruments
- 4.5.3. Types of Interest and Their Structure

4.6. Interaction between the Company and the Bank
- 4.6.1. The Financial System and the Banking Business
- 4.6.2. Corporate Banking Products
- 4.6.3. The Company Analyzed by the Bank

4.7. Analytical or Cost Accounting
- 4.7.1. Cost Types. Decisions Based on Costs
- 4.7.2. Full Costing
- 4.7.3. Direct Costing
- 4.7.4. Cost Model by Center and by Activity

4.8. Investment Analysis and Valuation
- 4.8.1. The Company and the Investment. Decisions Scenarios and Situations
- 4.8.2. Investment Valuation
- 4.8.3. Company Valuation

4.9. Corporate Accounting
- 4.9.1. Capital Increase and Reduction
- 4.9.2. Dissolution, Liquidation and Transformation of Companies
- 4.9.3. Combination of Companies: Mergers and Acquisitions

4.10. Foreign Trade Finance
- 4.10.1. Foreign Markets: The Decision to Export
- 4.10.2. The Foreign Exchange Market
- 4.10.3. International Payment and Collection Methods
- 4.10.4. Transportation, Incoterms and Insurance

Module 5. Design and Product Development

5.1. QFD in Product Design and Development (Quality Function Deployment)
- 5.1.1. From the Voice of the Customer to Technical Requirements
- 5.1.2. The House of Quality/Phases for its Development
- 5.1.3. Advantages and Limitations

5.2. Design Thinking
- 5.2.1. Design, Need, Technology and Strategy
- 5.2.2. Process Stages
- 5.2.3. Used Tools and Techniques

5.3. Concurrent Engineering
- 5.3.1. Concurrent Engineering Fundamentals
- 5.3.2. Concurrent Engineering Methodologies
- 5.3.3. Used Tools

5.4. Program. Planning and Definition
- 5.4.1. Requirements. Quality Management
- 5.4.2. Development Phases Time Management
- 5.4.3. Materials, Feasibility, Processes Cost Management
- 5.4.4. Project Team Human Resource Management
- 5.4.5. Information. Communication Management
- 5.4.6. Risk Analysis Risk Management

5.5. Product. Design (CAD) and Development
- 5.5.1. Information Management/PLM/Product Life Cycle
- 5.5.2. Product Failure Modes and Effects
- 5.5.3. CAD Construction Reviews
- 5.5.4. Product and Manufacturing Drawings
- 5.5.5. Design Verification

5.6. Prototypes. Development
- 5.6.1. Rapid Prototyping
- 5.6.2. Control Plan
- 5.6.3. Experiment Design
- 5.6.4. Analysis of Measuring Systems

5.7. Productive Process. Design and Development.
- 5.7.1. Modes and Effects of Process Failure
- 5.7.2. Design and Construction of Manufacturing Tooling
- 5.7.3. Design and Construction of Checking Fixtures (Gauges)
- 5.7.4. Adjustment Phases
- 5.7.5. Production Start-Up
- 5.7.6. Initial Process Evaluation

5.8. Product and Process. Validation
- 5.8.1. Evaluation of Measurement Systems
- 5.8.2. Validation Tests
- 5.8.3. Statistical Process Control (SPC)
- 5.8.4. Product Certification

5.9. Change Management. Improvement and Corrective Actions
- 5.9.1. Types of change
- 5.9.2. Variability Analysis, Improvement
- 5.9.3. Lessons Learned and Proven Practices
- 5.9.4. Process of Change

5.10. Innovation and Technology Transfer
- 5.10.1. Intellectual Property
- 5.10.2. Innovation
- 5.10.3. Technology Transfer

Module 6. Production Planning and Control

6.1. Phases of Production Planning
- 6.1.1. Advanced Planning
- 6.1.2. Sales Forecasting, Methods
- 6.1.3. Takt-Time Definition
- 6.1.4. Material Plan-MRP- Minimum Stock
- 6.1.5. Personnel Plan
- 6.1.6. Equipment Needs

6.2. Production Plan (PDP)
- 6.2.1. Factors to Consider
- 6.2.2. Push Planning
- 6.2.3. Pull Planning
- 6.2.4. Mixed Systems

6.3. Kanban
- 6.3.1. Types of Kanban
- 6.3.2. Kanban Uses
- 6.3.3. Autonomous Planning: 2-Bin Kanban

6.4. Production Control
- 6.4.1. PDP Deviations and Reporting
- 6.4.2. Production Performance Monitoring: OEE
- 6.4.3. Total Capacity Tracking: TEEP

6.5. Production Organization
- 6.5.1. Production Team
- 6.5.2. Process Engineering
- 6.5.3. Maintenance
- 6.5.4. Material Control

6.6. Total Productive Maintenance (TPM)
- 6.6.1. Corrective Maintenance
- 6.6.2. Autonomous Maintenance
- 6.6.3. Preventative Maintenance
- 6.6.4. Predictive Maintenance
- 6.6.5. Maintenance Efficiency Indicators MTBF - MTTR

6.7. Plant Layout
- 6.7.1. Conditioning Factors
- 6.7.2. In-Line Production
- 6.7.3. Production in Work Cells
- 6.7.4. Applications
- 6.7.5. SLP Methodology

6.8. Just-In-Time (JIT)
- 6.8.1. Description and Origins of JIT
- 6.8.2. Objectives
- 6.8.3. Application of JIT Product Sequencing

6.9. Theory of Constraints (TOC)
- 6.9.1. Fundamental Principles
- 6.9.2. The 5 Steps of TOC and Its Application
- 6.9.3. Advantages and Disadvantages

6.10. Quick Response Manufacturing (QRM)
- 6.10.1. Description
- 6.10.2. Key Points for Structuring
- 6.10.3. QRM Implementation

Module 7. Lean manufacturing

7.1. Lean Thinking
- 7.1.1. Structure of the Lean System
- 7.1.2. Lean Principles
- 7.1.3. Lean Versus Traditional Manufacturing Processes

7.2. Waste in the Company
- 7.2.1. Value Vs. Waste in Lean Environments
- 7.2.2. Types of Waste (MUDAS)
- 7.2.3. Lean Process of Thinking

7.3. The 5 S
- 7.3.1. 5S Principles and How They Can Help Improve Productivity
- 7.3.2. The 5 S: Seiri, Seiton, Seiso, Seiketsu and Shitsuke
- 7.3.3. Implementation of the 5 S in the Company

7.4. Lean Diagnostic Tools. Vsm. Value Stream Maps
- 7.4.1. Value Adding Activities (VA), Necessary Activities (NNVA) and Non-Value Adding Activities (NVA)
- 7.4.2. The 7 Tools of Value Stream mapping(Value Stream Mapping)
- 7.4.3. Process Activity Mapping
- 7.4.4. Supply Chain Response Mapping
- 7.4.5. The Production Variety Funnel
- 7.4.6. Quality Filter Mapping
- 7.4.7. Demand Amplification Mapping
- 7.4.8. Decision Point Analysis
- 7.4.9. Mapping of the Physical Structure

7.5. Lean Operational Tools
- 7.5.1. Smed
- 7.5.2. Jidoka
- 7.5.3. Pokayoke
- 7.5.4. Batch Reduction
- 7.5.5. Pous

7.6. Lean Tools for Production Monitoring, Planning and Control
- 7.6.1. Visual Management
- 7.6.2. Standardization
- 7.6.3. Production Leveling (Heijunka)
- 7.6.4. Cellular Manufacturing

7.7. The KAIZEN Method for Continuous Improvement
- 7.7.1. KAIZENPrinciples
- 7.7.2. KAIZEN Methodologies Kaizen Blitz, Gemba Kaizen, Kaizen Teian
- 7.7.3. Problem Solving Tools A3, Report,
- 7.7.4. Main Obstacles to KAIZEN Implementation

7.8. Roadmap for Lean Implementation
- 7.8.1. General Aspects of Implementation
- 7.8.2. Phases of Implementation
- 7.8.3. Information Technologies in Lean Implementation
- 7.8.4. Success Factors in Lean Implementation

7.9. KPIs for Measuring Lean Performance
- 7.9.1. OEE- Overall Equipment Efficiency
- 7.9.2. TEEP- Total Effective Equipment Effectiveness Performance
- 7.9.3. FTT- First-Time Quality
- 7.9.4. DTD- Dock to Dock Time
- 7.9.5. OTD- On-Time Delivery
- 7.9.6. BTS- Manufacturing According to Program
- 7.9.7. ITO- Inventory Turnover Rate
- 7.9.8. VAR- Value Added Ratio
- 7.9.9. PPMs- Parts Per Million Defects
- 7.9.10. FR- Delivery Fulfillment Rate
- 7.9.11. IFA-Accident Frequency Index

7.10. The Human Dimension of Lean Staff Participation Systems
- 7.10.1. The Lean Project Team Application of Teamwork
- 7.10.2. Operator Versatility
- 7.10.3. Improvement Groups
- 7.10.4. Suggestion Programs

Module 8. Quality Management

8.1. Total Quality
- 8.1.1. Total Quality Management
- 8.1.2. External and Internal Customer
- 8.1.3. Quality Costs
- 8.1.4. Continuous Improvement and the Deming Philosophy

8.2. ISO 9001:15 Quality Management System
- 8.2.1. The 7 Principles of ISO 9001:15 Quality Management
- 8.2.2. The Process Approach
- 8.2.3. ISO 9001:15 Requirements
- 8.2.4. Stages and Recommendations for Implementation
- 8.2.5. Deployment Objectives in a Hoshin-Kanri-type Model
- 8.2.6. Certification Audit

8.3. Integrated Management Systems
- 8.3.1. Environmental Management System ISO Business School 14000
- 8.3.2. Occupational Risk Management System: ISO Business School 45001
- 8.3.3. Integration of Management Systems

8.4. Excellence in Management: EFQM Model
- 8.4.1. Principles and Fundamentals of EFQM Model
- 8.4.2. New Criteria of the EFQM Model
- 8.4.3. EFQM Diagnostic Tool: REDER Matrixes

8.5. Quality Tools
- 8.5.1. Basic Tools
- 8.5.2. SPC Statistical Process Control
- 8.5.3. Control Plan and Control Guidelines for Product Quality Management

8.6. Advanced Tools and Troubleshooting Tools
- 8.6.1. FMEA
- 8.6.2. 8D Report
- 8.6.3. The 5 Whys
- 8.6.4. The 5W + 2H
- 8.6.5. Benchmarking

8.7. Continuous Improvement Methodology I: PDCA
- 8.7.1. The PDCA Cycle and Its Stages
- 8.7.2. Application of the PDCA Cycle to Lean Manufacturing Development
- 8.7.3. Keys to Success of PDCA Projects

8.8. Continuous Improvement Methodology II: Six-Sigma
- 8.8.1. Six-Sigma Description
- 8.8.2. Six-Sigma Principles
- 8.8.3. Six-Sigma Project Selection
- 8.8.4. Six-Sigma Project Stages DMAIC Methodology
- 8.8.5. Six-Sigma Roles
- 8.8.6. Six-Sigma and Lean Manufacturing

8.9. Quality Suppliers. Audits. Testing and Laboratory
- 8.9.1. Reception Quality Concerted Quality
- 8.9.2. Internal Audits Management System
- 8.9.3. Product and Process Audits
- 8.9.4. Phases to Perform Audits
- 8.9.5. Auditor Profile
- 8.9.6. Testing, Laboratory and Metrology

8.10. Organizational Aspects of Quality Management
- 8.10.1. Management's Role in Quality Management
- 8.10.2. Organization of the Quality Area and the Relationship with Other Areas
- 8.10.3. Quality Circles

Module 9. The Logistics Function, Key to Compete

9.1. Logistical Function of and the Supply Chain
- 9.1.1. Logistics Is the Key to a Company's Success
- 9.1.2. Logistics Challenges
- 9.1.3. Key Activities to Logistics How to Obtain Logistic Function Value
- 9.1.4. Types of Supply Chain
- 9.1.5. Supply Chain Management
- 9.1.6. Logistics Costs

9.2. Logistics Optimization Strategies
- 9.2.1. Cross-Docking Strategy
- 9.2.2. Application of Agile Methodology to Logistics Management
- 9.2.3. Outsourcing of Logistic Processes
- 9.2.4. Picking or Efficient Order Picking

9.3. Lean Logistics
- 9.3.1. Lean Logistics in Supply Chain Management
- 9.3.2. Analysis of Waste in the Logistics Chain
- 9.3.3. Application of a Lean System in Supply Chain Management

9.4. Warehouse Management and Automation
- 9.4.1. The Role of Warehouses
- 9.4.2. Warehouse Management
- 9.4.3. Stocks Management
- 9.4.4. Warehouse Typology
- 9.4.5. Load Units
- 9.4.6. Organization of a Warehouse
- 9.4.7. Storage and Handling Elements

9.5. Procurement Management
- 9.5.1. The Role of Distribution as an Essential Part of Logistics. Internal Vs. External Logistics
- 9.5.2. The Traditional Relationship with Suppliers
- 9.5.3. The New Paradigm of Supplier Relationships
- 9.5.4. How to Classify and Select New Suppliers?
- 9.5.5. How to Develop Effective Procurement Management

9.6. Information Systems and Logistics Control
- 9.6.1. Requirements of a Logistics Information and Control System
- 9.6.2. 2 Types of Information Systems and Logistics Control
- 9.6.3. Big Data Applications in Logistics Management
- 9.6.4. The Importance of Data in Logistics Management
- 9.6.5. The Balanced Scorecard Applied to Logistics Main Management and Control Indicators

9.7. Reverse Logistics
- 9.7.1. Keys to Reverse Logistics
- 9.7.2. Reverse Vs. Direct Logistics Flows
- 9.7.3. Operations within the Framework of Reverse Logistics
- 9.7.4. How to Implement a Reverse Distribution Channel?
- 9.7.5. Final Alternatives for Products in the Reverse Channel
- 9.7.6. Costs of Reverse Logistics

9.8. New Logistic Strategies
- 9.8.1. Artificial Intelligence and Robotization
- 9.8.2. Green Logistics and Sustainability
- 9.8.3. Internet of Things Applied to Logistics
- 9.8.4. The Digitized Warehouse
- 9.8.5. E-businessand the New Distribution Models
- 9.8.6. The Importance of Last Mile Logistics

9.9. Retail Chain Benchmarking
- 9.9.1. Commonalities of Successful Value Chains
- 9.9.2. Inditex Group Value Chain Analysis
- 9.9.3. Amazon Value Chain Analysis

9.10. Pandemic Logistics
- 9.10.1. General Scenario
- 9.10.2. Critical Supply Chain Issues in a Pandemic Scenario
- 9.10.3. Implications of Cold Chain Requirements on the Establishment of the Vaccine Supply Chain
- 9.10.4. Types of Supply Chains for the Distribution of Vaccines

Module 10. Industry 4.0 and Business Intelligence The Digitized Company

10.1. Process Automation: RPA
- 10.1.1. Automatable Administrative Processes
- 10.1.2. Software Structure
- 10.1.3. Examples of Application

10.2. MES, SCADA, GMAO, SGA, MRPII Systems
- 10.2.1. Product Control with MES Systems
- 10.2.2. Engineering and Maintenance SCADA and GMAO
- 10.2.3. Procurement and Logistics: SGA and MPRII

10.3. Business Intelligence Software
- 10.3.1. Fundamentals of BI
- 10.3.2. Software Structure
- 10.3.3. Application Possibilities

10.4. ERP Software
- 10.4.1. ERP Description
- 10.4.2. Use Reach
- 10.4.3. Leading ERPs in the Market

10.5. IoT and Business Intelligence
- 10.5.1. IoT: the Connected World
- 10.5.2. Data Sources
- 10.5.3. Total Control through IoT + BI
- 10.5.4. Blockchain

10.6. Main BI Software in the Market
- 10.6.1. PowerBI
- 10.6.2. Qlik
- 10.6.3. Tableau

10.7. Microsoft POWER BI
- 10.7.1. Features
- 10.7.2. Examples of Application
- 10.7.3. The Future of PowerBI

Module 11. Internet of Things (IoT)

11.1. Cyber-physical Systems (CPS) in the Industry 4.0 Vision
- 11.1.1. Internet of Things (IoT)
- 11.1.2. Components Involved in IoT
- 11.1.3. Cases and Applications of IoT

11.2. Internet of Things and Cyber-Physical Systems
- 11.2.1. Computing and Communication Capabilities to Physical Objects
- 11.2.2. Sensors, Data and Elements in Cyber-Physical Systems

11.3. Device Ecosystem
- 11.3.1. Typologies, Examples and Uses
- 11.3.2. Applications of the Different Devices

11.4. IoT Platforms and Their Architecture
- 11.4.1. IoT Market Typologies and Platforms
- 11.4.2. Operation of an IoT Platform

11.5. Digital Twins
- 11.5.1. Digital Twin
- 11.5.2. Uses and Applications the Digital Twin

11.6. Indoor & Outdoor Geolocation (Real Time Geospatial)
- 11.6.1. Indoor and Outdoor Geolocation Platforms
- 11.6.2. Implications and Challenges of Geolocation in an IoT Project

11.7. Security Intelligence Systems
- 11.7.1. Typologies and Platforms for Security Systems Implementation
- 11.7.2. Components and Architectures in Intelligent Safety Systems

11.8. IoT and IIoT Platform Security
- 11.8.1. Security Components in an IoT System
- 11.8.2. IoT Security Implementation Strategies

11.9. Wearables at Work
- 11.9.1. Types of Wearables in Industrial Environments
- 11.9.2. Lessons Learned and Challenges in Implementing Wearables in the Workplace

11.10. Implementing an API to Interact with a Platform
- 11.10.1. Types of APIs Involved in an IoT Platform
- 11.10.2. API Market
- 11.10.3. Strategies and Systems to Implement API Integrations

Module 12. Industry 4.0 Automation Systems

12.1. Industrial Automation
- 12.1.1. Automization
- 12.1.2. Architecture and Components
- 12.1.3. Safety

12.2. Industrial Robotics
- 12.2.1. Fundamentals of Industrial Robotics
- 12.2.2. Models and Impact on Industrial Processes

12.3. PLC Systems and Industrial Control
- 12.3.1. PLC Evolution and Status
- 12.3.2. Evolution of Programming Languages
- 12.3.3. Computer Integrated Automation CIM

12.4. Sensors and Actuators
- 12.4.1. Classification of Transducers
- 12.4.2. Types of Sensors
- 12.4.3. Standardization of Signals

12.5. Monitor and Manage
- 12.5.1. Types of Actuators
- 12.5.2. Feedback Control Systems

12.6. Industrial Connectivity
- 12.6.1. Standardized Fieldbuses
- 12.6.2. Connectivity

12.7. Proactive / Predictive Maintenance
- 12.7.1. Predictive Maintenance
- 12.7.2. Fault Identification and Analysis
- 12.7.3. Proactive Actions Based on Predictive Maintenance

12.8. Continuous Monitoring and Prescriptive Maintenance
- 12.8.1. Prescriptive Maintenance Concept in Industrial Environments
- 12.8.2. Selection and Exploitation of Data for Selfdiagnostics

12.9. Lean Manufacturing
- 12.9.1. Lean Manufacturing
- 12.9.2. Benefits Lean Implementation in Industrial Processes

12.10. Industrialized Processes in Industry 4.0. Use Case
- 12.10.1 Project Definition
- 12.10.2. Technological Selection
- 12.10.3. Connectivity
- 12.10.4. Data Exploitation

Module 13. Blockchain and Quantum Computing

13.1. Aspects of Decentralization
- 13.1.1. Market Size, Growth, Companies and Ecosystem
- 13.1.2. Blockchain Fundamentals

13.2. Background: Bitcoin, Ethereum, etc.
- 13.2.1. Popularity of Decentralized Systems
- 13.2.2. Evolution of Decentralized Systems

13.3. Blockchain Operation and Examples
- 13.3.1. Types of Blockcahin and Protocols
- 13.3.2. Wallets, Mining and More

13.4. Characteristics of Blockchain Networks
- 13.4.1. Functions and Properties of BlockChain Networks
- 13.4.2. Applications: Cryptocurrencies, Reliability, Chain of Custody, etc

13.5. Types of Blockchain
- 13.5.1. Public and Private Blockchains
- 13.5.2. Hard and Soft Forks

13.6. Smart Contracts
- 13.6.1. Inteligent Contracts and Their Potential
- 13.6.2. Smart Contract Applications

13.7. Industry Use Models
- 13.7.1. Blockchain Applications by Industry
- 13.7.2. Blockchain Success Stories by Industry

13.8. Security and Cryptography
- 13.8.1. Objectives of Cryptography
- 13.8.2. Digital Signatures and Hash Functions

13.9. Cryptocurrencies and Uses
- 13.9.1. Types of Cryptocurrencies Bitcoin, HyperLedger, Ethereum, Litecoin, etc
- 13.9.2. Current and Future Impact of Cryptocurrencies
- 13.9.3. Risks and Regulations

13.10. Quantum Computing
- 13.10.1. Definition and Keys
- 13.10.2. Uses of Quantum Computing

Module 14. Big Data and Artificial Intelligence

14.1. Fundamental Principles of Big Data
- 14.1.1. Big Data
- 14.1.2. Tools to Work With Big Data

14.2. Data Mining and Warehousing
- 14.2.1. Data Mining Cleaning and Standardization
- 14.2.2. Information Extraction, Machine Translation, Sentiment Analysis, etc
- 14.2.3. Types of Data Storage

14.3. Data Intake Applications
- 14.3.1. Principles of Data intake
- 14.3.2. Data Ingestion Technologies to Serve Business Needs

14.4. Viewing Data
- 14.4.1. The Importance of Data Visualization
- 14.4.2. Tools to Carry It Out Tableau, D3, matplotlib (Python), Shiny®

14.5. Machine Learning
- 14.5.1. Understanding Machine Learning
- 14.5.2. Supervised and Unsupervised Learning
- 14.5.3. Types of Algorithms

14.6. Neural Networks (Deep Learning)
- 14.6.1. Neural Network: Parts and Functionality
- 14.6.2. Types of Networks CNN, RNN
- 14.6.3. Applications of Neural Networks; Image Recognition and Natural Language Interpretation
- 14.6.4. Generative Text Networks: LSTM

14.7. Natural Language Recognition
- 14.7.1. PLN (Processing Natural Language)
- 14.7.2. Advanced PLN Techniques: Word2vec, Doc2vec

14.8. Chatbots and Virtual Assistants
- 14.8.1. Types of Assistants: Voice and Text Assistants
- 14.8.2. Fundamental Parts for the Development of an Assistant: Intents, Entities and Dialog Flow
- 14.8.3. Integrations: Web, Slack, WhatsApp, Facebook
- 14.8.4. Assistance Development Tools: DialogFlow, Watson Assistant

14.9. Emotions, Creativity and Personality in IA
- 14.9.1. We Understand How Detect Emotions Using Algorithms
- 14.9.2. Creating a Personality: Language, Expressions and Content

14.10. Future of Artificial Intelligence

14.11. Reflections

Module 15. Virtual, Augmented and Mixed Reality

15.1. Market and Tendencies
- 15.1.1. Current Market Situation
- 15.1.2. Reports and Growth by Different Industries

15.2. Differences Between Virtual, Augmented and Mixed Reality
- 15.2.1. Differences Between Immersive Realities
- 15.2.2. Immersive Reality Typology

15.3. Virtual Reality Cases and Uses
- 15.3.1. Origin and Fundamentals of Virtual Reality
- 15.3.2. Cases Applied to Different Sectors and Industries

15.4. Augmented Reality Cases and Uses
- 15.4.1. Origin and Fundamentals of Augmented Reality
- 15.4.2. Cases Applied to Different Sectors and Industries

15.5. Mixed and Holographic Reality
- 15.5.1. Origin, History and Fundamentals of Mixed and Holographic Reality
- 15.5.2. Cases Applied to Different Sectors and Industries

15.6. 360º Photography and Video
- 15.6.1. Camera Typology
- 15.6.2. Uses of 360 Images
- 15.6.3. Creating a Virtual Space in 360 Degrees

15.7. Virtual World Creation
- 15.7.1. Platforms for the Creation of Virtual Environments
- 15.7.2. Strategies for the Creation of Virtual Environments

15.8. User Experience (UX)
- 15.8.1. Components in the User Experience
- 15.8.2. Tools for the Creation of User Experiences

15.9. Devices and Glasses for Immersive Technologies
- 15.9.1. Device Typology on the Market
- 15.9.2. Glasses and Wearables Functioning, Models and Uses
- 15.9.3. Smart Glasses Applications and Evolution

15.10. Future Immersive Technologies
- 15.10.1. Tendencies and Evolution
- 15.10.2. Challenges and Opportunities

Module 16. 4.0 Industry

16.1. Definitions of 4.0 Industry
- 16.1.1. Features

16.2. Benefits of the 4.0 Industry
- 16.2.1. Key Factors
- 16.2.2. Main Advantages

16.3. Industrial Revolutions and Vision of Future
- 16.3.1. Industrial Revolutions
- 16.3.2. Keys Factors in Each Revolution
- 16.3.3. Technological Principles a Basis for Possible New Revolutions

16.4. The Digital Transformation of the Industry
- 16.4.1. Characteristics of the Digitization of the Industry
- 16.4.2. Disruptive Technologies
- 16.4.3. Applications in the Industry

16.5. Forth Industrial Revolution Key Principles of Industry 4.0
- 16.5.1. Definitions
- 16.5.2. Key Principles and Applications

16.6. 4.0 Industry and Industrial Internet
- 16.6.1. Origin of IIoT
- 16.6.2. Operation
- 16.6.3. Steps to Follow for its Implementation
- 16.6.4. Benefits

16.7. Smart Factory Principles
- 16.7.1. Smart Factory
- 16.7.2. Elements That Define a Smart Factory
- 16.7.3. Steps to Deploy a Smart Factory

16.8. Status of the 4.0 Industry
- 16.8.1. Status of the 4.0 Industry in Different Sectors
- 16.8.2. Barriers to the Implementation of 4.0 Industry

16.9. Challenges and Risks
- 16.9.1. DAFO Analysis
- 16.9.2. Challenges

16.10. Role of Technological Capabilities and the Human Factor
- 16.10.1. Disruptive Technologies in Industry 4.0
- 16.10.2. The Importance of the Human Factor Key Factor

Module 17. Leading Industry 4.0

17.1. Leadership Abilities
- 17.1.1. Human Factor Leadership Factors
- 17.1.2. Leadership and Technology

17.2. Industry 4.0 and the Future of Production
- 17.2.1. Definitions
- 17.2.2. Production Systems
- 17.2.3. Future of Digital Production Systems

17.3. Effects of Industry 4.0
- 17.3.1. Effects and Challenges

17.4. Essential Technologies in Industry 4.0
- 17.4.1. Definition of Technologies
- 17.4.2. Characteristics of Technologies
- 17.4.3. Applications and Impacts

17.5. Digitization of Manufacturing
- 17.5.1. Definitions
- 17.5.2. Benefits of the Digitization of Fabrication
- 17.5.3. Digital Twin

17.6. Digital Capabilities in an Organization
- 17.6.1. Development Digital Capabilities
- 17.6.2. Understanding the Digital Ecosystem
- 17.6.3. Digital Vision of the Business

17.7. Architecture Behind a Smart Factory
- 17.7.1. Areas and Functionalities
- 17.7.2. Connectivity and Security
- 17.7.3. Case Uses

17.8. Technology Markers in the Postcovid Era
- 17.8.1. Technological Challenges in the Postcovid Era
- 17.8.2. New Case Uses

17.9. The Era of Absolute Virtualization
- 17.9.1. Virtualisation
- 17.9.2. The New Era of Virtualization
- 17.9.3. Advantages

17.10. Current Situation in Digital Transformation Gartnet Hype
- 17.10.1. Gartnet Hype
- 17.10.2. Analysis of Technologies and Their Status
- 17.10.3. Data Exploitation

Module 18. Robotics, Drones and Augmented Workers

18.1. Robotics
- 18.1.1. Robotics, Societies and Cinema
- 18.1.2. Components and Parts of Robot

18.2. Robotics and Advanced Automation: Simulators, Cobots
- 18.2.1. Transfer of Learning
- 18.2.2. Cobots and Case Uses

18.3. RPA (Robotic Process Automatization)
- 18.3.1. Understanding RPA and its Functioning
- 18.3.2. RPA Platforms, Projects and Roles

18.4. Robot as a Service (RaaS)
- 18.4.1. Challenges and Opportunities for Implementing Raas Services and Robotics in Enterprises
- 18.4.2. Functioning of a Raas system

18.5. Drones and Automated Vehicles
- 18.5.1. Components and Functioning of Drones
- 18.5.2. Uses, Types and Applications of Drones
- 18.5.3. Evolution of Drones and Autonomous Vehicles

18.6. The Impact of 5G
- 18.6.1. Evolution of Communications and Implications
- 18.6.2. Uses of 5G Technology

18.7. Augmented Workers
- 18.7.1. Human-Machine Integration in Industrial Environments
- 18.7.2. Challenges in Worker-Robot Collaboration

18.8. Challenges in the Collaboration between Workers and Robots
- 18.8.1. Ethical Challenges in Robotics and Artificial Intelligence
- 18.8.2. Monitoring, Transparency and Traceability Methods

18.9. Prototyping, Components and Evolution
- 18.9.1. Prototyping Platforms
- 18.9.2. Phases to Make a Prototype

18.10. Future of Robotics
- 18.10.1. Trends in Robotization
- 18.10.2. New Types of Robots

Module 19. Industry 4.0 - Industry Services and Solutions (I)

19.1. Industry 4.0 and Business Strategies
- 19.1.1. Factors of Business Digitalization
- 19.1.2. Roadmap for Business Digitalization

19.2. Digitalization of Processes and the Value Chain
- 19.2.1. The Vale Chain
- 19.2.2. Key Steps in the Digitization of Processes

19.3. Sector Solutions Primary Sector
- 19.3.1. The Primary Economic Sector
- 19.3.2. Characteristics of Each Subsector

19.4. Digitization of the Primary Sector: Smart Farms
- 19.4.1. Main Characteristics
- 19.4.2. Keys Factors of Digitization

19.5. Digitization of the Primary Sector: Digital Agriculture and Intelligence
- 19.5.1. Main Characteristics
- 19.5.2. Keys Factors of Digitization

19.6. Sector Solutions Secondary Sector
- 19.6.1. The Secondary Economic Sector
- 19.6.2. Characteristics of Each Subsector

19.7. Digitization of the Secondary Sector: Smart Factory
- 19.7.1. Main Characteristics
- 19.7.2. Keys Factors of Digitization

19.8. Digitization of the Secondary Sector: Energy
- 19.8.1. Main Characteristics
- 19.8.2. Keys Factors of Digitization

19.9. Digitization of the Secondary Sector: Construction
- 19.9.1. Main Characteristics
- 19.9.2. Keys Factors of Digitization

19.10. Digitization of the Secondary Sector: Mining
- 19.10.1. Main Characteristics
- 19.10.2. Keys Factors of Digitization

Module 20. Industry 4.0 - Industry Services and Solutions (II)

20.1. Tertiary Sector Solutions
- 20.1.1. Tertiary Economic Sector
- 20.1.2. Characteristics of Each Subsector

20.2. Digitization of the Tertiary Sector: Transport
- 20.2.1. Main Characteristics
- 20.2.2. Keys Factors of Digitization

20.3. Digitization of the Tertiary Sector: e-Health
- 20.3.1. Main Characteristics
- 20.3.2. Keys Factors of Digitization

20.4. Digitization of the Tertiary Sector: Smart Hospitals
- 20.4.1. Main Characteristics
- 20.4.2. Keys Factors of Digitization

20.5. Digitization of the Tertiary Sector: Smart Cities
- 20.5.1. Main Characteristics
- 20.5.2. Keys Factors of Digitization

20.6. Digitization of the Tertiary Sector: Logistics
- 20.6.1. Main Characteristics
- 20.6.2. Keys Factors of Digitization

20.7. Digitization of the Tertiary Sector: Tourism
- 20.7.1. Main Characteristics
- 20.7.2. Keys Factors of Digitization

20.8. Digitization of the Tertiary Sector: Fintech
- 20.8.1. Main Characteristics
- 20.8.2. Keys Factors of Digitization

20.9. Digitization of the Tertiary Sector: Mobility
- 20.9.1. Main Characteristics
- 20.9.2. Keys Factors of Digitization

20.10. Future Technological Tendencies
- 20.10.1. New Technological Innovations
- 20.10.2. Application Trends

A highly academic program that will be fundamental for your professional development"

06

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"

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"

You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.

The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. 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 professional reality is taken into account.

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

The case method is the most widely used learning system in the best faculties in the world. 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 that you are presented with in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

Relearning Methodology

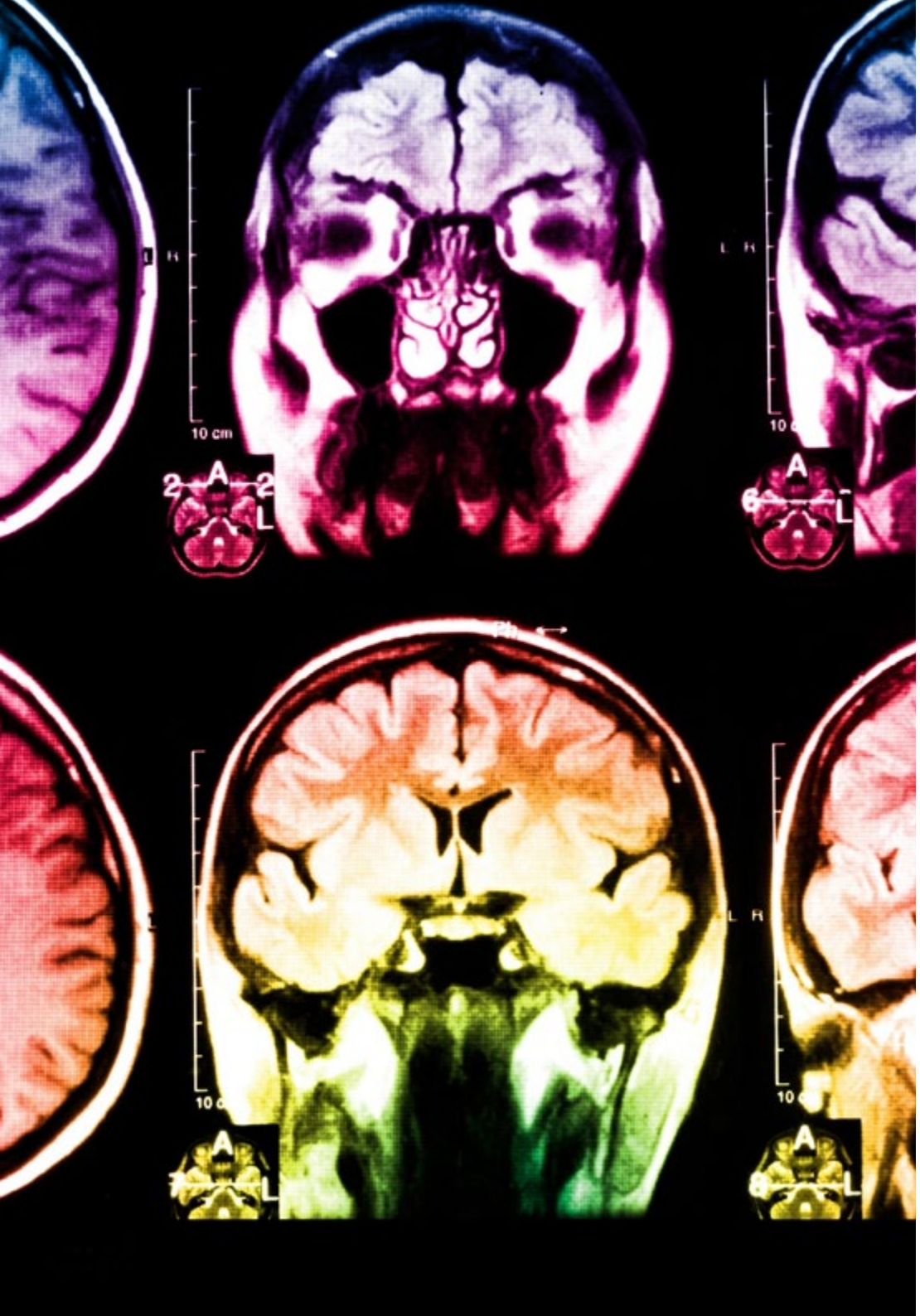
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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

In 2019, we obtained the best learning results of all online universities in the world.

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 university is the only one in the world authorized to employ 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. This methodology has 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, and financial markets and 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 training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for 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.

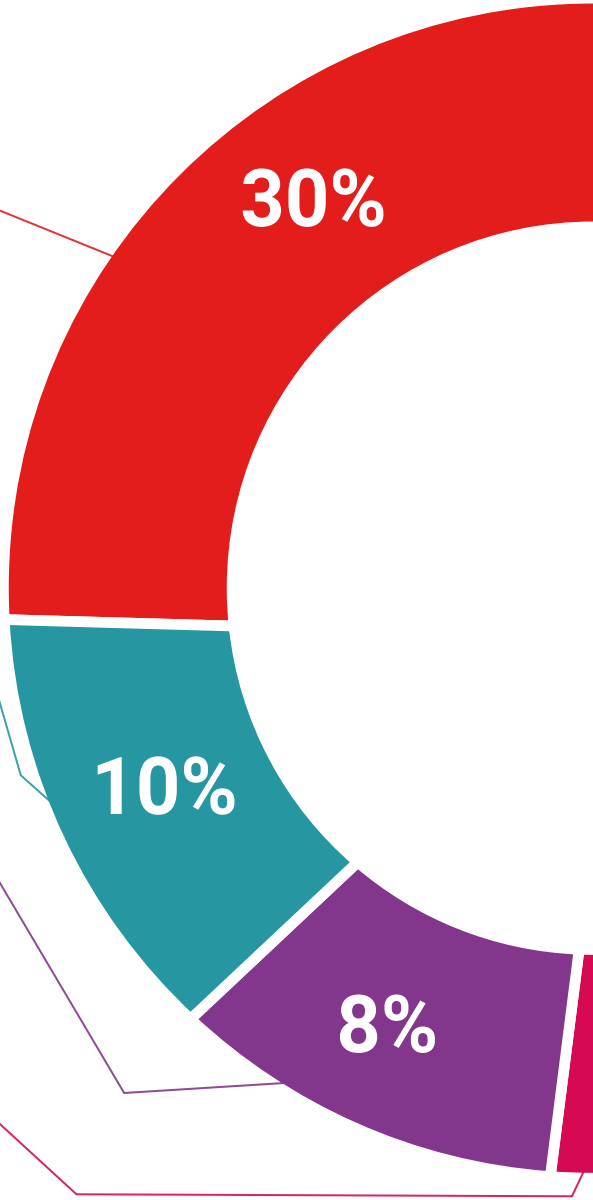
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

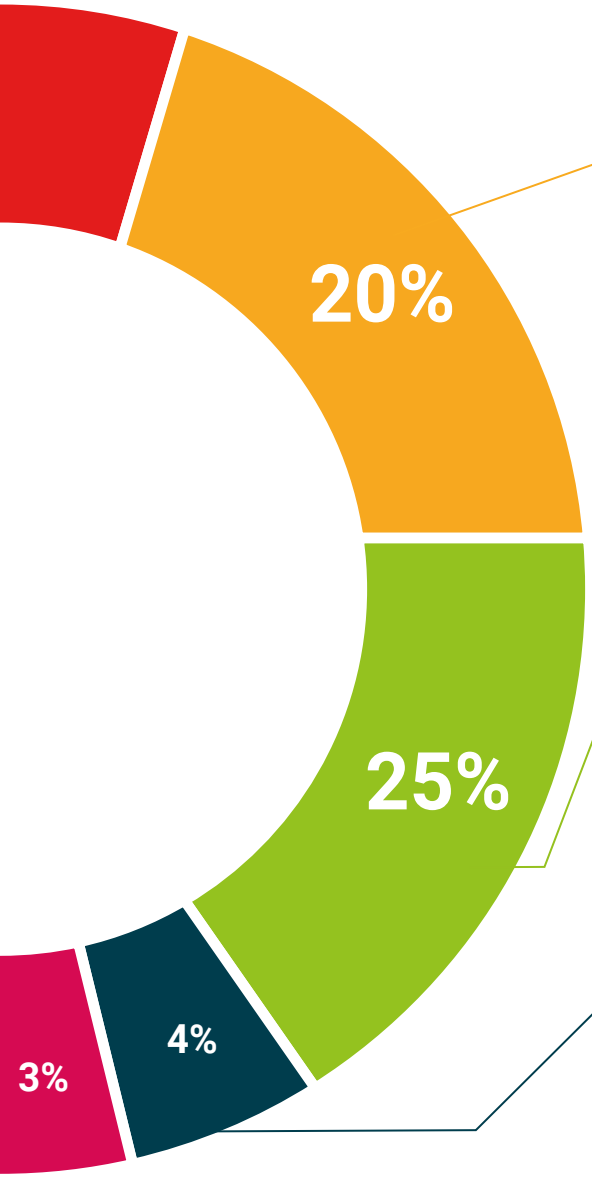
Practising Skills and Abilities

They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.

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 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.

07

Certificate

The Advanced Master's Degree in Industrial Management and Digital Transformation guarantees you, in addition to the most rigorous and updated training, access to a Advanced Master's Degree issued by TECH Global University.

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

This program will allow you to obtain your **Advanced Master's Degree diploma in Industrial Management and Digital Transformation** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (***official bulletin***). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Advanced Master's Degree in Industrial Management and Digital Transformation**

Modality: **online**

Duration: **2 years**

Accreditation: **120 ECTS**


tech global university

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

Advanced Master's Degree in Industrial Management and Digital Transformation

This is a program of 3,000 hours of duration equivalent to 120 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates


Advanced Master's Degree in Industrial Management and Digital Transformation

General Structure of the Syllabus

Year	Subject	ECTS	Type
1º	Strategic Keys to Improve Competitiveness	6	CO
1º	Project Management	6	CO
1º	Leadership and People Management	6	CO
1º	Corporate Finance An Economic-Financial Approach	6	CO
1º	Design and Product Development	6	CO
1º	Production Planning and Control	6	CO
1º	Lean manufacturing	6	CO
1º	Quality Management	6	CO
1º	The Logistics Function, Key to Compete	6	CO
1º	Industry 4.0 and Business Intelligence The Digitized Company	6	CO

Year	Subject	ECTS	Type
2º	Internet of Things (IoT)	6	CO
2º	Industry 4.0 Automation Systems	6	CO
2º	Blockchain and Quantum Computing	6	CO
2º	Big Data and Artificial Intelligence	6	CO
2º	Virtual, Augmented and Mixed Reality	6	CO
2º	4.0 Industry	6	CO
2º	Leading Industry 4.0	6	CO
2º	Robotics, Drones and Augmented Workers	6	CO
2º	Industry 4.0 - Industry Services and Solutions (1)	6	CO
2º	Industry 4.0 - Industry Services and Solutions (II)	6	CO

Dr. Pedro Navarro Illana
Rector

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

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Advanced Master's Degree
Industrial Management and Digital Transformation

- Modality: **online**
- Duration: **2 years**
- Certificate: **TECH Global University**
- Credits: **120 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Advanced Master's Degree

Industrial Management and Digital Transformation

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