Postgraduate Diploma

Business Development, Product Engineering and Project Management in Industrial Companies

tech technological university

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Postgraduate Diploma

Business Development, Product Engineering and Project Management in Industrial Companies

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/us/engineering/postgraduate-diploma/postgraduate-diploma-business-development-product-engineering-project-management-industrial-companies**

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01

Introduction

Product design and development is one of the greatest challenges facing any company. The main objective is to achieve a product that satisfies the needs of the consumer, using as few resources as possible. It is essential to work as a team and use techniques and methodologies that help to generate end-user-oriented solutions so that the products and services generated provide value to people. However, it is also essential to achieve the necessary management capacity to ensure that the development of the product and the business in general is successful. This TECH Technological University program has been designed thinking of all those qualities that the engineer must acquire to achieve success in such a competitive sector as this one.

Acquire the necessary skills to adequately manage industrial projects that favor the work of your company"

Society is immersed in a constantly changing environment and, therefore, it is necessary to know in detail the main keys to be able to face it and to be able to compete with guarantees of success. Therefore, companies must be able, through innovation and quality, to adapt to these changes, thanks to the creation of projects that are of great use to consumers. In this regard, the figure of the project manager takes on special relevance, since he/she must have the capacity to systematize and optimize the execution of plans.

The increasing complexity of projects, together with the scarcity of resources and the agility in the changes demanded by society, requires professionals with a broad specialization in the field of Project Management, which has made it one of the professions that has experienced the greatest growth in recent years, being one of the most demanded by companies and organizations to manage change.

Likewise, it should be taken into account that product design and development is one of the greatest challenges facing any company. A successful product design and development process is are necessary advanced product quality planning, from 3D construction, material definition and design verification; through prototype development to help improve the design; continuing with the development of the manufacturing process, all the necessary tooling for manufacturing, assembly and control, to validation with testing and dimensional analysis to ensure the quality of the final product and its manufacturing. Not to mention the importance of change management, which includes the analysis and reduction of variability, as well as the use of lessons learned and proven practices that help improve the performance of the final product.

In order to offer a higher qualification to professionals, TECH has designed this very complete program, whose content combines theoretical aspects and an essentially practical approach that provides engineers with the acquisition of a deep knowledge of the reality of the industrial company. In this way, this Postgraduate Diploma will provide the professional with the capacity and tools necessary to efficiently manage all aspects related to industrial management in order to be able to compete adequately both in the present and in a future full of challenges, opportunities and changes. Ultimately, the program will totally online provide engineering professionals a knowledge renewal , that will place them at the forefront of the latest developments in every relevant branch of knowledge.

This **Postgraduate Diploma in Business Development, Product Engineering and Project Management in Industrial Companies** contains the most complete and up-to-date program on the market. The most important features include:

- The development of practical cases presented by experts in *Industrial Management*
- The graphic, schematic, and 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 emphasis on innovative methodologies in Industrial Management
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

A program created with the sole purpose of promoting your personal and professional growth in industrial project management"

TECH Technological University puts at your disposal a large number of practical activities that will be very useful to develop your full potential in this field"

We offer you a 100% online Postgraduate Diploma that will allow you to combine your study time with the rest of your daily obligations.

Delve into the study of this program and become an expert business development engineer.

It includes in its teaching staff, professionals belonging to the field of engineering who contribute their work experience to this program, as well as renowned specialists from prestigious universities and reference societies.

Its multimedia content, developed with the latest educational technology, will allow professionals to learn in a contextual and situated learning environment, i.e., a simulated environment that will provide immersive specialization for real situations.

This program is designed around Problem-Based Learning, whereby the Engineer must try to solve the different professional practice situations that arise during the academic year For this purpose, the professional will be assisted by an innovative system of interactive videos made by renowned experts.

02

Objectives

This program TECH's is designed with the objective of strengthening the student's capabilities in everything related to project management for industrial companies, in addition to developing new skills that will be essential in their professional development. Undoubtedly, this is a high-quality program that will help the student to know in depth different areas of the development of a product or business in the industrial sector.

A highly academic program designed to offer quality education to students”

General Objectives

- Apply the main strategic keys to better compete in current and future times
- Master the tools to achieve excellence
- Define business strategies and deployment in an organization, process management, and structural typology to better adapt to changes
- Manage the projects presented with both conventional and agile methodologies
- 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
- Perform production planning and control with the objective of optimizing resources and adapting to demand as well as possible
- Manage quality throughout the organization and apply the most important tools for continuous improvement of products and processes

A highly advanced program for professionals who wish to develop in this very important sector"

Specific Objectives

Module 1. Strategic Tips to Improve Competitiveness

- Know in detail the importance of excellence and how to measure it
- Define the strategy in order to compete
- Implement and deploy the strategy throughout an organization using a balanced scorecard
- Discover, define and manage the fundamental processes for value generation in a 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
- Define the fundamental bases for the development of a new business through important work methodologies
- Implement and develop sustainability and social responsibility in company
- Properly manage the relationship with customers
- In-depth study of the internationalization aspect of the company's operations
- Manage change in a more appropriate way and integrate it as a necessity for a company to advance and progress in a highly competitive environment

Module 2. Product Design and Development

- Delve into the knowledge in the techniques, phases and tools related to the conceptual design that precedes the final design of the product, as well as the transformation of the customer's requirements into technical specifications that the product will have to comply with
- Establish all the "actors to be taken into account in the design and development process of a new product for its correct performance in terms of quality, time, cost, resources, communications and risks
- 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
- Carry out in-depth analysis of the phases related to the development of the manufacturing process until the moment the product is available according to the initial requirements
- Achieve a detailed understanding of the product validation process to ensure that it meets all expected quality requirements
- Delve into the processes of innovation and technology transfer to develop new products and processes and to establish a new state of the art

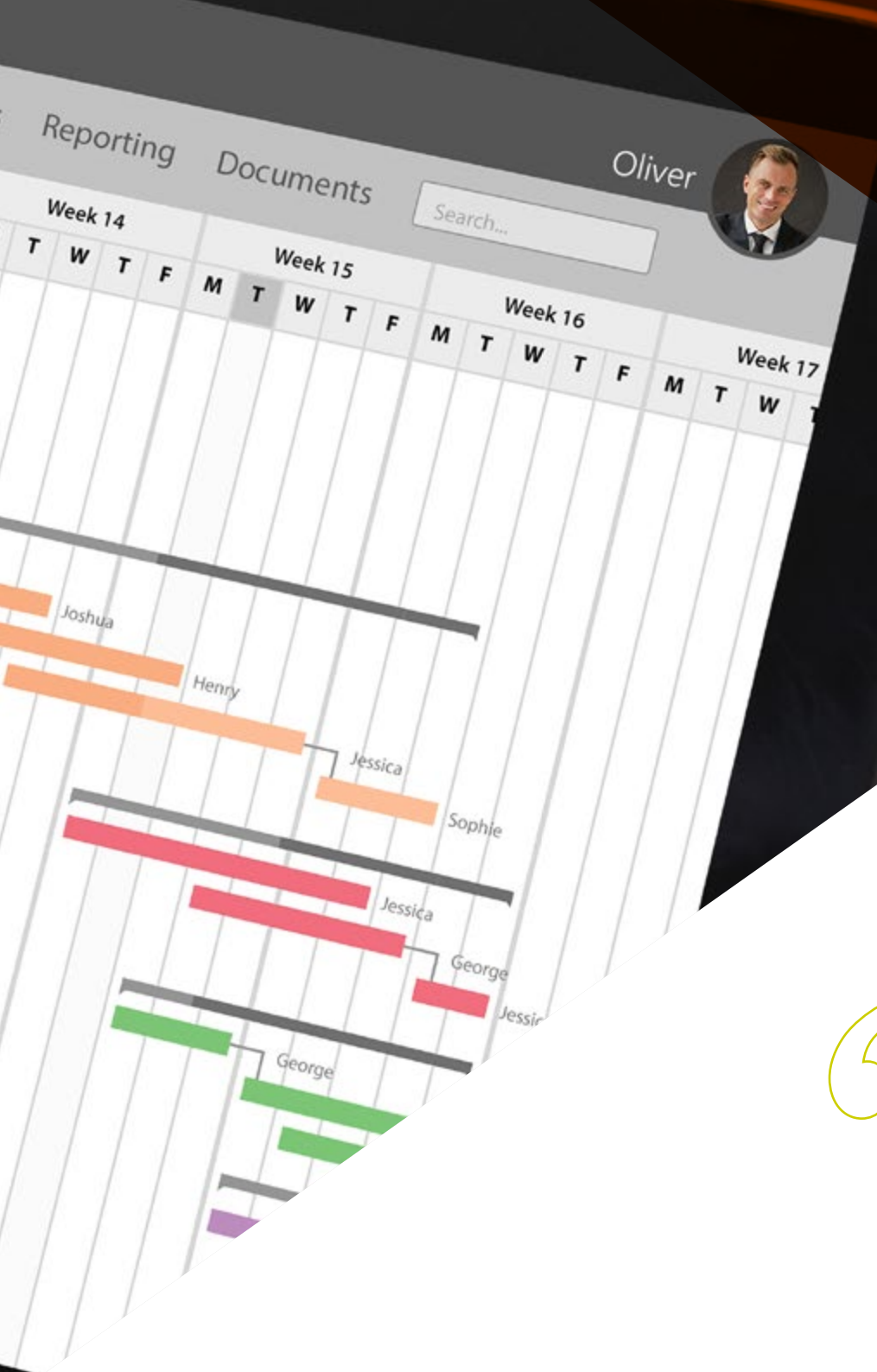
Module 3. Project Management

- Establish the objectives of the project
- Identify the business value of a project
- Define project launching factors
- Acquiring the skills of a project manager
- Identify and manage constraints and stakeholders in a project
- Establish the relationship between project management and corporate strategy
- Develop procedures and best practices in project management
- Develop professionally as a project manager

03

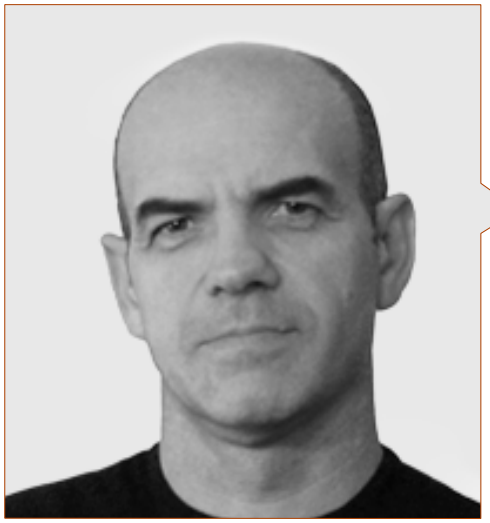
Course Management

TECH has professionals specialized in each area of knowledge, who contribute their work experience to the programs. A multidisciplinary team with recognized prestige that has come together to offer you all their knowledge in this area of great relevance. Professors who are committed to innovation and specialized study in order to succeed in a sector of great relevance in the industrial field and who, aware of the educational needs in this field, have designed a high-level program.



A multidisciplinary faculty that will offer you the broadest and most realistic vision of industrial project management. of industrial project management"

Management



Dr. Asensi, Francisco Andrés

- Business consultant and specialist in Industrial Management and Digital Transformation.
- Production and Logistics Coordinator at IDAI NATURE
- Coach in Strategic Coaching
- Organizational Manager for Talleres Lemar
- Organization and Management of companies for Lab Radio SA
- PhD in Industrial Engineering in Business Organization from the University of Castilla la Mancha
- Degree Industrial in Industrial Organization Engineer from the University Polytechnic of Valencia

Professors

Mr. Ibáñez Capella, Juan

- Project Manager at ITENE Technology Center
- Project Leader at IDOM Consulting
- Facilities and Projects Manager at Power Electronics
- Facilities Manager at Ferrovial Company
- Project Technician in High and Low Voltage, Solar PV Photovoltaic Projects
- Consultant for works in the galvanized steel plant SOLMED in Sagunto, the AVE high speed train station in Zaragoza, among others

Mr. Ponce Lucas, Miguel Enrique

- Technical Specialist and Lead Engineer, SRG Global
- Product Development Engineer at SRG Global
- Hardware Engineer at DAO Logic
- Degree in Industrial Engineering and Mechanical from the Polytechnic University of Valencia

Mr. Morado Vázquez. Eduardo

- Leading the Industrial Area in Bituminous Softeners and Plasticizers
- Responsible for Quality Assurance at Ford Motor Company
- Master's Degree in Occupational Risk Prevention from the University of Alcalá of Henares.
- Master's Degree in Business Administration from ESTEMA

04

Structure and Content

The content of the PROGRAM covers in a structured way all the areas of knowledge that the professional needs to know in depth, including the most interesting news and updates in the sector. A high-quality program that will allow the students to compete with solvency and sufficient capacity in the whole process of in the whole process of developing a business and products in the industrial field. A very well-structured program for engineers to enter an area of great relevance in their profession.

A very well-structured syllabus for you to learn with guarantees of success"

Module 1. Strategic Tips to Improve Competitiveness

1.1. Excellence in Today's Business
- 1.1.1. Adaptation to VUCA Environments
- 1.1.2. Satisfaction of Stakeholders
- 1.1.3. World Class Manufacturing
- 1.1.4. Measurement of Excellence: Net Promoter Score

1.2. Design of Business Strategy
- 1.2.1. General Strategy Definition Process
- 1.2.2. Definition of the Current Situation Positioning Models
- 1.2.3. Possible Strategic Moves
- 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 of Action
- 1.3.2. Need for a Balanced Scorecard
- 1.3.3. Perspectives to Be Used in CMI
- 1.3.4. Strategic Map
- 1.3.5. Phases to Implement a Good CMI
- 1.3.6. General Map of CMI

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

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

1.6. Business Model Design
- 1.6.1. Canvas Model for Business Model Design
- 1.6.2. Lean Startup 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 26000
- 1.7.2. Sustainable Development Goals SDGs
- 1.7.3. Agenda 2030

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

1.9. Management in International Environments
- 1.9.1. The Importance of Internationalization
- 1.9.2. Export Potential Diagnosis
- 1.9.3. Elaborating an Internationalization Plan
- 1.9.4. Implementing Internationalization Plans
- 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. Product Design and Development

2.1. QFD (Quality Function Deployment) in Product Design and Development
- 2.1.1. From the Voice of the Customer to Technical Requirements
- 2.1.2. The House of Quality/Phases in Development
- 2.1.3. Advantages and Limitations

2.2. Design Thinking
- 2.2.1. Design, Need, Technology and Strategy
- 2.2.2. Stages of the Process
- 2.2.3. Tools and Techniques Used

2.3. Concurrent Engineering
- 2.3.1. Fundamentals of Concurrent Engineering
- 2.3.2. Methodology of Concurrent Engineering
- 2.3.3. Tools Used

2.4. Programming. Planning and Definition
- 2.4.1. Requirements. Quality Management
- 2.4.2. Development Phases. Time Management
- 2.4.3. Materials, Feasibility, Processes. Cost Management
- 2.4.4. Project Equipment. Human Resource Management
- 2.4.5. Information. Communications Management
- 2.4.6. Risk Analysis. Risk Management

2.5. Products. Their Design (CAD) and Development
- 2.5.1. Information Management / PLM / Product Life Cycle
- 2.5.2. Modes and Effects of Product Failure
- 2.5.3. CAD Construction. Review
- 2.5.4. Product and Manufacturing Plans
- 2.5.5. Design Verification

2.6. Prototypes. Their Development
- 2.6.1. Rapid Prototyping
- 2.6.2. Control Plan
- 2.6.3. Experiment Design
- 2.6.4. The Analysis of Measurement Systems

2.7. Produtive Process. Design and Development
- 2.7.1. Modes and Effects of Process Failure
- 2.7.2. Design and Construction of Manufacturing Tools
- 2.7.3. Design and Construction of Control Tools (Gauges)
- 2.7.4. Adjustment Phase
- 2.7.5. Production Start-Up
- 2.7.6. Initial Evaluation of the Process

2.8. Product and Process. Its Validation
- 2.8.1. Evaluation of Measurement Systems
- 2.8.2. Validation Tests
- 2.8.3. Statistical Process Control (SPC)
- 2.8.4. Product Certification

2.9. Change Management. Improvement and Corrective Actions
- 2.9.1. Type of Change
- 2.9.2. Variability Analysis, Improvement
- 2.9.3. Lessons Learned and Practices Tested
- 2.9.4. Process of Change

2.10. Innovation and Technology Transfer
- 2.10.1. Intellectual Property
- 2.10.2. Innovation
- 2.10.3. Technological Transfer

Module 3. Project Management

3.1. The Project
- 3.1.1. Fundamental Project Components
- 3.1.2. Project Director
- 3.1.3. Project Environment

3.2. Project Scope Management
- 3.2.1. Scope Analysis
- 3.2.2. Project Scope Planning
- 3.2.3. Project Scope Control

3.3. Schedule Management
- 3.3.1. Importance of Planning
- 3.3.2. Project Planning Management Project Schedule
- 3.3.3. Trends in Time Management

3.4. Cost Management
- 3.4.1. Project Cost Analysis
- 3.4.2. Financial Project Selection
- 3.4.3. Project Cost Planning
- 3.4.4. Project Cost Control

3.5. Quality, Resources and Procurement
- 3.5.1. Total Quality and Project Direction
- 3.5.2. Project Resources
- 3.5.3. Acquisition. Recruitment System

3.6. Project Stakeholders and Communications
- 3.6.1. Importance of Stakeholders
- 3.6.2. Project Stakeholders Management
- 3.6.3. Project Communication

3.7. Project Risk Management
- 3.7.1. Fundamental Principles in Risk Management
- 3.7.2. Process Management for Project Risk Management
- 3.7.3. Trends in Risk Management

3.8. Integrated Project Management
- 3.8.1. Strategic Planning and Project Management
- 3.8.2. Project Management Plan
- 3.8.3. Implementation and Control Processes
- 3.8.4. Project Closing

3.9. Agile Methodologies I: Scrum
- 3.9.1. Agile and Scrum Principles
- 3.9.2. Scrum Team
- 3.9.3. Scrum Events
- 3.9.4. Scrum Artifacts

3.10. Agile Methodologies II: Kanban
- 3.10.1. Kanban Principles
- 3.10.2. Kanban and Scrumban
- 3.10.3. Certifications

The best program on the scene today, designed to provide you with superior knowledge in this field"

05

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

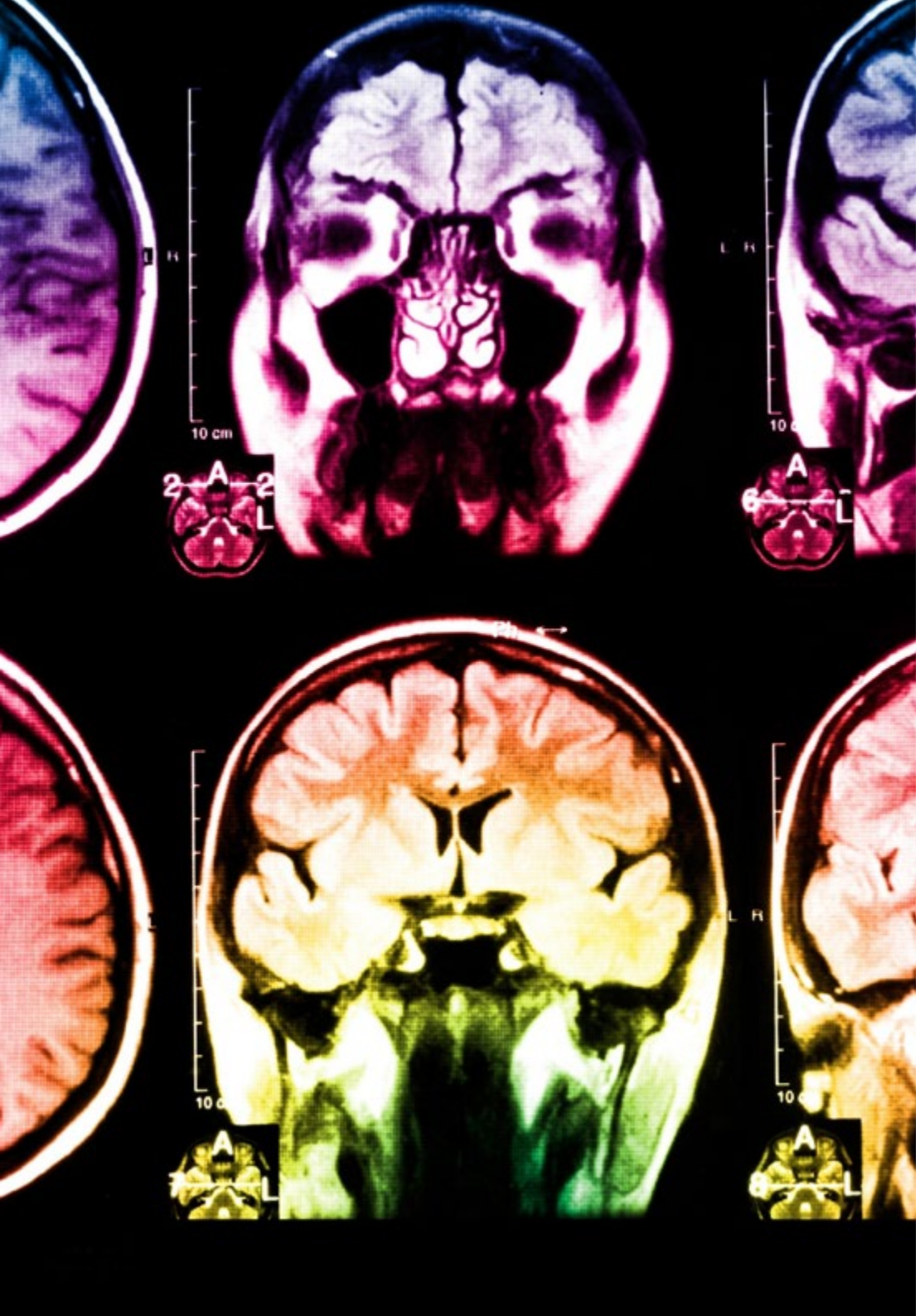
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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.

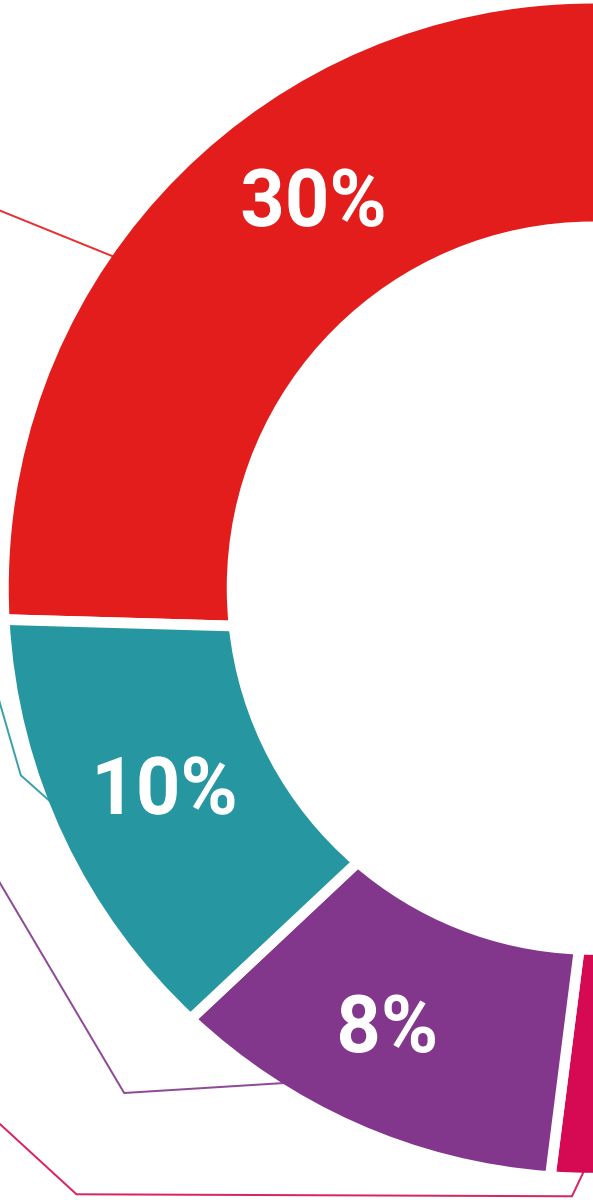
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

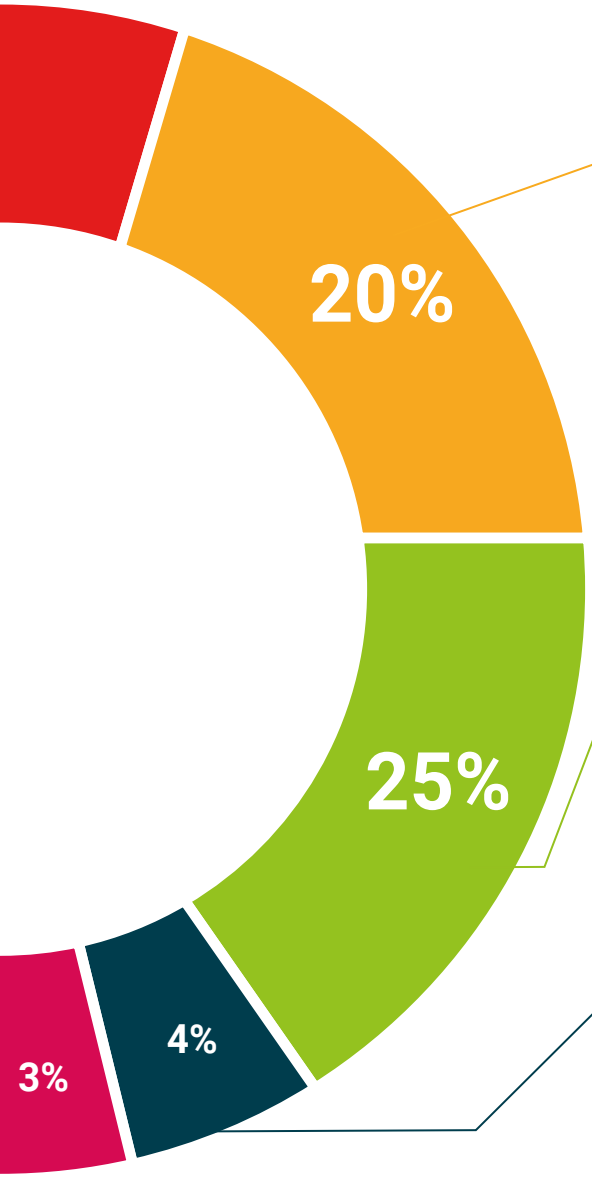
Practising Skills and Abilities

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.

06

Certificate

The Postgraduate Diploma in Business Development, Product Engineering and Project Management in Industrial Companies guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.

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

This **Postgraduate Diploma in Business Development, Product Engineering and Project Management in Industrial Companies** contains the Educational most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery*.

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

Title: **Postgraduate Diploma in Business Development, Product Engineering and Project Management in Industrial Companies**

Official Nº of Hours: **450 h.**


tech technological university

Awards the following

DIPLOMA

to

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

For having passed and accredited the following program

POSTGRADUATE DIPLOMA

in

Business Development, Product Engineering and Project Management in Industrial Companies

This is a qualification awarded by this University, equivalent to 450 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

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

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

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