Postgraduate Diploma
Sustainable Product Design

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Postgraduate Diploma
Sustainable Product Design

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

Website: www.techtitute.com/in/design/postgraduate-diploma/postgraduate-diploma-sustainable-product-design

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01

Introduction

Sustainability is a key concept in today's society. We are constantly looking for the best solutions to challenges such as the consumption of non-recyclable materials or inefficient production. For this reason, one of the most sought-after professional profiles today is Sustainable Product Design, a key position in many companies in the industrial sector. In response to this situation, TECH has created this program, which focuses on providing the designer with the best and latest techniques in this field, so that he/she can become a highly sought-after specialist by all types of companies. And it will provide you with this knowledge from an online teaching system that will adapt completely to your circumstances, allowing you to study when and where you want

You will deepen, from a 100% online methodology, in the main techniques of Sustainable Product Design, preparing you to face all the current challenges of industrial design"

The growing importance of concepts such as sustainability in industrial processes has led to a boom in various professional profiles. Thus, nowadays many companies in the design field are looking for specialists in Sustainable Design who can carry out their projects in an effective way. However, such experts are in short supply, so any designer who is able to prepare and excel will immediately gain numerous job opportunities.

This program, therefore, has been developed in response to the current needs of the sector, and will provide students with the best and latest knowledge in this important area of design. From the importance of the prestige and corporate identity of a company, through the procedures of Sustainable Design and Ecodesign, to the handling of different materials and *Packaging* Design.

The professional will therefore be able to adapt to the contemporary reality of this discipline by accessing innovative content, presented using the most advanced educational resources: interactive summaries, practical activities, videos, lectures, master classes and case studies. These resources will be available 24 hours a day for consultation, since TECH's 100% online methodology does not subject students to schedules or oblige them to travel, as it adjusts to their routines and responsibilities.

This Postgraduate **Diploma in Sustainable Product Design** contains the most complete and up-to-date program on the market. The most important features include:

- The development of case studies presented by experts in sustainable product design.
- 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 self-assessment can be used to improve learning.
- Its special emphasis on innovative methodologies
- 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

Sustainable Design is a fundamental discipline nowadays and with this program you will learn everything you need to advance your career in that direction"

Sustainable Product Design is a complex area that requires the best didactic resources to understand its advances, and that is precisely what TECH offers: Multimedia materials that will make it easy to keep up to date in this field"

TECH's online learning system will adapt to you completely, without subjecting you to schedules or travel and allowing you to access its contents 24 hours a day.

This program will allow you to delve into issues such as corporate image and the importance of Sustainable Design in business reputation.

The program's teaching staff includes professionals from the sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will allow the professional a situated and contextual learning, that is, a simulated environment that will provide an immersive training programmed to train in real situations.

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

02

Objectives

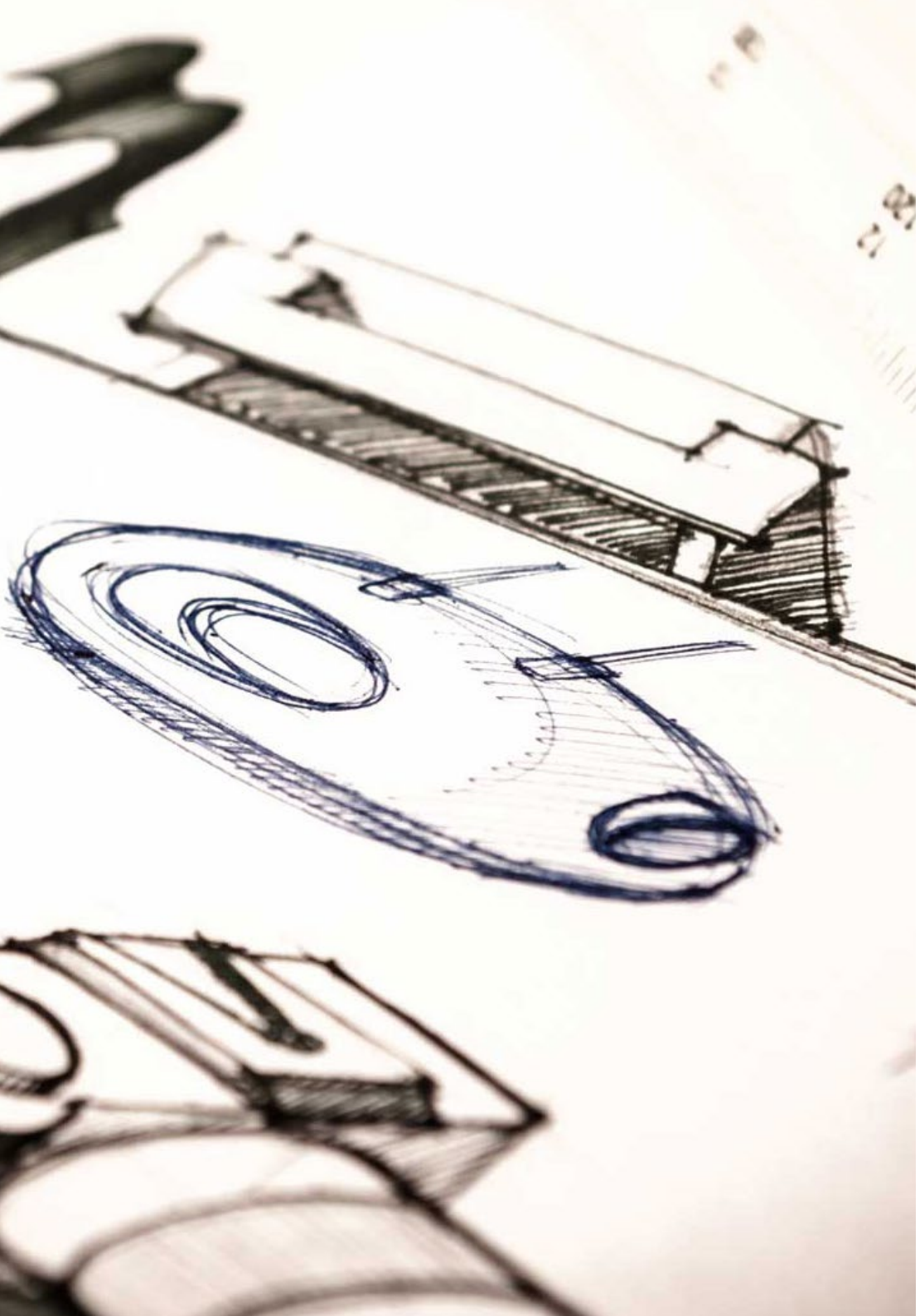
The main objective of this Postgraduate Diploma in Sustainable Product Design is to promote the student professionally, bringing him/her closer to the latest developments in this important field of design. Thus, upon completion of the degree, you will be in a position to occupy an important position in a large design or industrial company, advising and guiding production processes to meet sustainability criteria.

You will experience a great professional progress once you complete this Postgraduate Diploma, specially elaborated to respond to the current challenges in the field of Sustainable Design"

General Objectives

- Understand the basic concepts that are part of the communication policy of an organization: Its identity, its culture, how it communicates, its image, its brand, its reputation and social responsibility.
- To know the basics of design, as well as the references, styles and movements that have shaped it from its beginnings to the present day.
- Recognize the sustainability setting and environmental context.
- Ability to develop a Sustainable Product Design strategy

Achieve all your goals in the world of Product Design by excelling with your new knowledge in sustainability"



Specific Objectives

Module 1. Corporate Image

- Understand which are the strategic areas that a graphic manager must manage in the communicative process of the Graphic and Visual Identity of Brands.

Module 2. Materials

- Analyze and evaluate materials used in engineering based on their properties.
- Understand, analyze and evaluate the processes of corrosion and degradation of materials.
- Evaluate and analyze the different techniques for non-destructive testing of materials

Module 3. Sustainable Design

- Recognize the sustainability setting and environmental context.
- Know the main tools for environmental impact analysis
- Recognize the importance of Sustainability in Design.
- Know the environmental regulations relevant to design

Module 4. Packaging Design

- Promote in students the global vision of packaging and label design, understanding it as an activity in which many factors must be taken into account, from the product it accompanies to its physical and socioeconomic context
- Train students, through practice, in the competence for the professional development of packaging and label design projects.

03

Structure and Content

This Postgraduate Diploma in Sustainable Product Design is structured in 4 specialized modules and has been designed by leading professionals in this creative field. Thus, they have been responsible for including the most relevant knowledge in this area, so that this degree will offer students a deeper understanding of issues such as the brand identity project, materials and their properties or the ecological footprint in design, among many other aspects.

In this program you will find all the contents you will need to orient your career towards Sustainable Product Design"

Module 1. Corporate Image

1.1. Identity
- 1.1.1. Idea of Identity
- 1.1.2. Why is Identity Sought?
- 1.1.3. Types of Identity
- 1.1.4. Digital Identity

1.2. Corporate Identity
- 1.2.1. Definition. Why have a Corporate Identity?
- 1.2.2. Factors Influencing Corporate Identity
- 1.2.3. Corporate Identity Components
- 1.2.4. Identity Communication
- 1.2.5. Corporate Identity, *Branding* and Corporate Image

1.3. Corporate Image
- 1.3.1. Characteristic of the Corporate Image
- 1.3.2. What is Corporate Image for?
- 1.3.3. Types of Corporate Image
- 1.3.4. Examples:

1.4. Basic identifying signs
- 1.4.1. The Name or *Naming*
- 1.4.2. Logotypes
- 1.4.3. Monograms
- 1.4.4. The Imagotypes

1.5. Identity Memorization Factors
- 1.5.1. Originality
- 1.5.2. The Symbolic Value
- 1.5.3. Pregnancy
- 1.5.4. Repetition

1.6. Methodology for the Branding process
- 1.6.1. Study of the Sector and Competition
- 1.6.2. *Briefing*, Template
- 1.6.3. Define Brand Strategy and Personality. Values
- 1.6.4. Target Audience

1.7. The Customer
- 1.7.1. Intuit what the Customer is Like
- 1.7.2. Customer Typologies
- 1.7.3. The Meeting Process
- 1.7.4. The Importance of Knowing the Customer
- 1.7.5. Establish Budget

1.8. Corporate Identity Manual
- 1.8.1. Construction Standards and Application of the Mark
- 1.8.2. Corporate Typography
- 1.8.3. Corporate Colors
- 1.8.4. Other Graphic Elements
- 1.8.5. Examples of Corporate Manuals

1.9. Identity Redesign
- 1.9.1. Reasons to Choose an Identity Redesign
- 1.9.2. Managing a Change in Corporate Identity
- 1.9.3. Good practice. Visual References
- 1.9.4. Malpractice. Visual References

1.10. Brand Identity Project
- 1.10.1. Presentation and Explanation of the Project. Referrals
- 1.10.2. Brainstorming Market Analysis
- 1.10.3. Target Audience, Brand Value
- 1.10.4. First Ideas and Sketches. Creative Techniques
- 1.10.5. Establishment of the Project. Fonts and Colors
- 1.10.6. Delivery and Correction of Projects

Module 2. Materials

2.1. Material Properties
- 2.1.1. Mechanical Properties
- 2.1.2. Electrical Properties
- 2.1.3. Optical Properties
- 2.1.4. Magnetic Properties

2.2. Metallic Materials I. Ferrous

2.3. Metallic Materials II. Non-Ferrous

2.4. Polymeric Materials
- 2.4.1. Thermoplastics
- 2.4.2. Thermosetting Plastics

2.5. Ceramic Materials
2.6. Composite Materials
2.7. Biomaterials
2.8. Nanomaterials
2.9. Corrosion and Degradation of Materials
- 2.9.1. Types of Corrosion
- 2.9.2. Oxidation of Metals
- 2.9.3. Corrosion Control

2.10. Non-Destructive Testing
- 2.10.1. Visual Inspections and Endoscopies
- 2.10.2. Ultrasound
- 2.10.3. X-Rays
- 2.10.4. Eddy Currents (Eddy)
- 2.10.5. Magnetic Particles
- 2.10.6. Penetrating Liquids
- 2.10.7. Infrared Thermography

Module 3. Sustainable Design

3.1. Environmental Status
- 3.1.1. Environmental Context
- 3.1.2. Environmental Perception
- 3.1.3. Consumption and Consumerism

3.2. Sustainable Production
- 3.2.1. Ecological Footprint
- 3.2.2. Biocapacity
- 3.2.3. Ecological Deficit

3.3. Sustainability and Innovation
- 3.3.1. Production Processes
- 3.3.2. Process Management
- 3.3.3. Implementation of the Production
- 3.3.4. Productivity by Design

3.4. Introduction. Ecodesign
- 3.4.1. Sustainable Development
- 3.4.2. Industrial Ecology
- 3.4.3. Eco-Efficiency
- 3.4.4. Introduction to the Concept of Ecodesign

3.5. Ecodesign Methodologies
- 3.5.1. Methodological Proposals for the Implementation of Ecodesign
- 3.5.2. Project Preparation (Driving Forces, Legislation
- 3.5.3. Environmental Aspects

3.6. Life Cycle Assessment (LCA)
- 3.6.1. Functional Unit
- 3.6.2. Inventory
- 3.6.3. Impact Ratio
- 3.6.4. Generation of Conclusions and Strategy

3.7. Improvement Ideas (Ecodesign Strategies)
- 3.7.1. Reduce Impact
- 3.7.2. Increase Functional Unit
- 3.7.3. Positive Impact

3.8. Circular Economy
- 3.8.1. Definition
- 3.8.2. Evolution
- 3.8.3. Success Stories

3.9. *Cradle to Cradle*
- 3.9.1. Definition
- 3.9.2. Evolution
- 3.9.3. Success Stories

3.10. Environmental Regulations
- 3.10.1. Why Do We Need a Regulation?
- 3.10.2. Who Makes the Regulations?
- 3.10.3. European Union Environmental Framework
- 3.10.4. Regulations in the Development Process

Module 4. *Packaging* Design

4.1. Introduction to *Packaging*
- 4.1.1. Historical Perspective
- 4.1.2. Functional Characteristics
- 4.1.3. Description of System-Product and Life Cycle

4.2. *Packaging* Research
- 4.2.1. Sources of information
- 4.2.2. Field Work
- 4.2.3. Comparisons and Strategies

4.3. Structural *Packaging*
- 4.3.1. Analysis of Specific Needs
- 4.3.2. Shape, Color, Odor, Volume and Textures
- 4.3.3. Packaging Ergonomics

4.4. *Packaging* Marketing
- 4.4.1. Relationship of *the Pack* with the Brand and the Product
- 4.4.2. Brand Image Application
- 4.4.3. Examples:

4.5. *Packaging* Communication
- 4.5.1. Relationship of the Pack with the Product, the Customer and the User
- 4.5.2. Relationship of the Pack with the Product, the Customer and the User
- 4.5.3. Experience Design

4.6. Materials and Production Processes
- 4.6.1. Glass
- 4.6.2. Paper and Cardboard
- 4.6.3. Metal
- 4.6.4. Plastic fluids
- 4.6.5. Natural Materials Composites

4.7. Sustainability Applied to Packaging
- 4.7.1. Ecodesign Strategies
- 4.7.2. Life Cycle Analysis
- 4.7.3. The *Pack* as Waste

4.8. Food Legislation
- 4.8.1. Specific Regulations: Identification and
- 4.8.2. Plastics Regulations
- 4.8.3. Regulatory Trends

4.9. Innovation in *Packaging*
- 4.9.1. Differentiation with *Packaging*
- 4.9.2. Latest Trends
- 4.9.3. *Design For All*

4.10. Packaging Projects
- 4.10.1. Study Cases
- 4.10.2. Packaging Strategy
- 4.10.3. Practical Exercise

This is the most complete Sustainable Product Design program on the market. Don't think twice and enroll"

04

Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

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 Re-learning, 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".

At TECH we use the Case Method

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

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

We are the first online university to combine Harvard Business School case studies with a 100% online learning system based on repetition.

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

A learning method that is different and innovative.

This intensive program in Design at TECH Technological University will prepare you to face all the challenges in this area, both nationally and internationally. We are committed to promoting personal and professional growth, the best way to walk towards success, so TECH uses case studies from Harvard Business School, with which we have a strategic agreement that allows us to bring our students the materials of the best university in the world.

> *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 by 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 we face 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.

Re-Learning Methodology

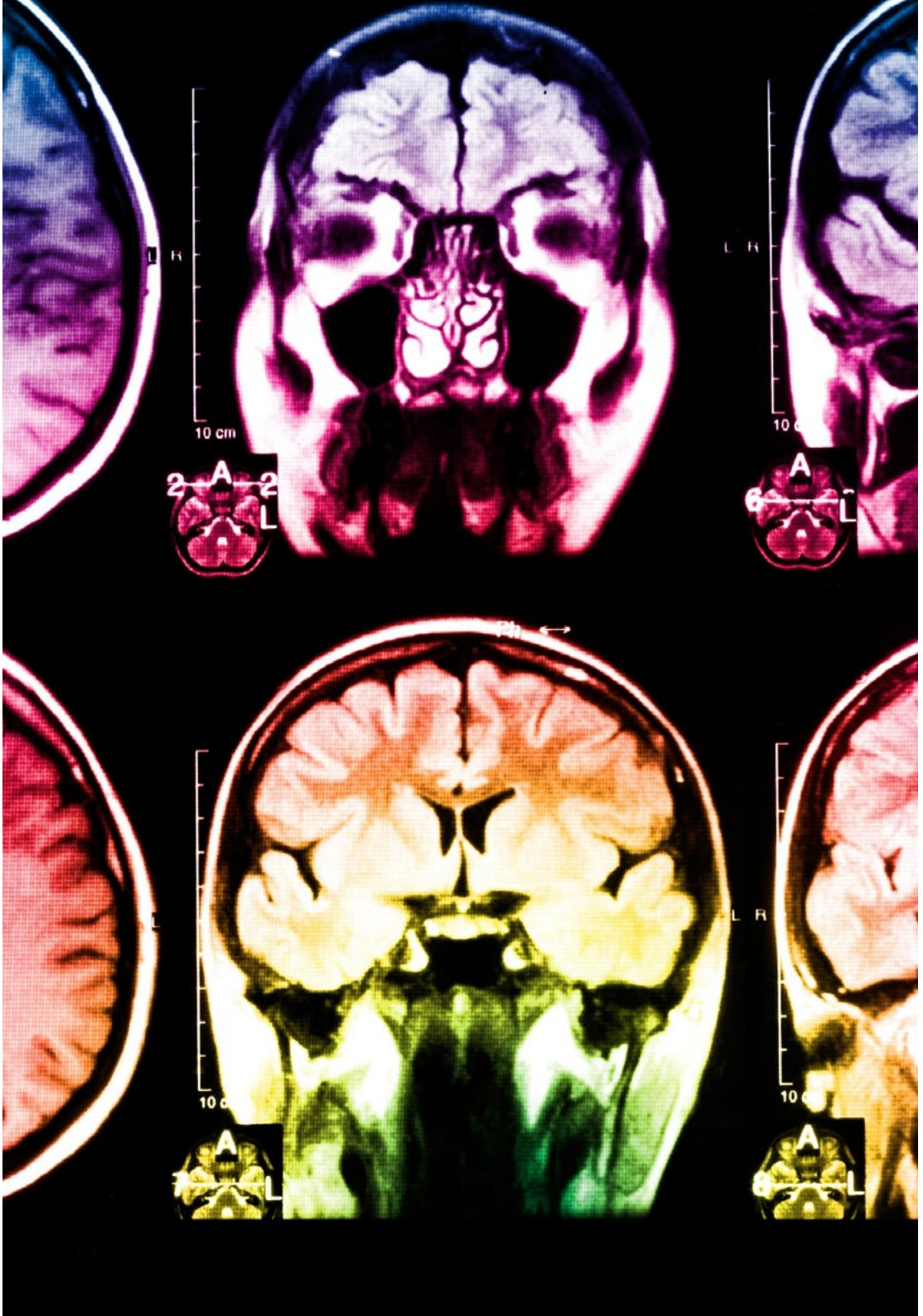
Our university is the first in the world to combine the Harvard University *case studies method* with a 100% online learning system based on repetition, combining 8 different didactic elements in each lesson.

We enhance Harvard *case studies* with the best 100% online teaching method: Re-learning.

> *In 2019 we obtained the best learning results of all Spanish-language 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 Re-learning.

Our university is the only Spanish-speaking university qualified 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 Spanish online university indicators.



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

Re-learning 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.

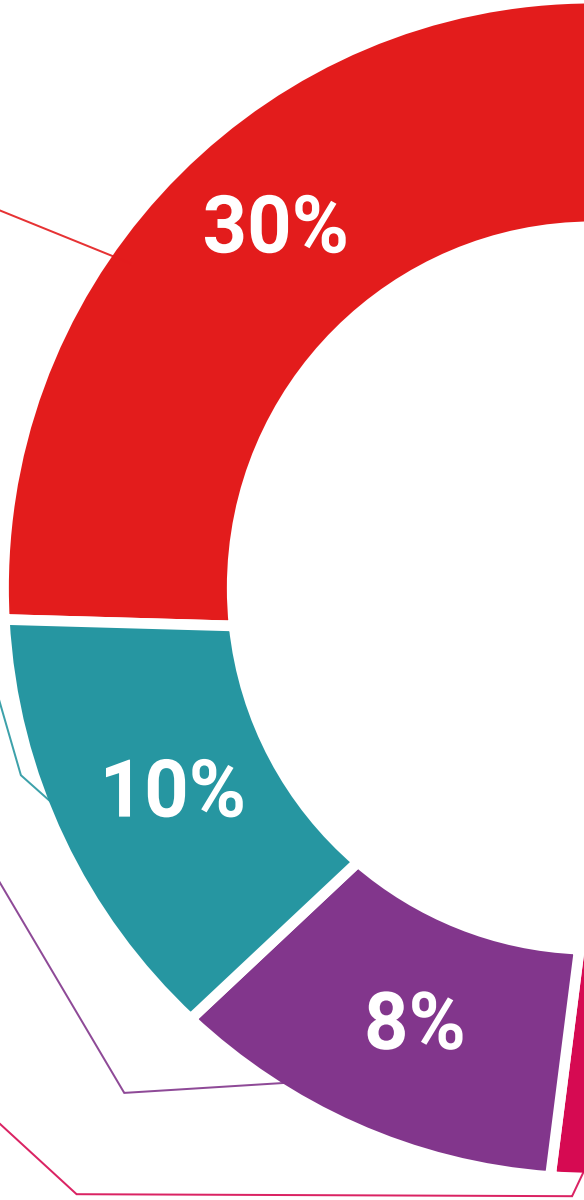
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

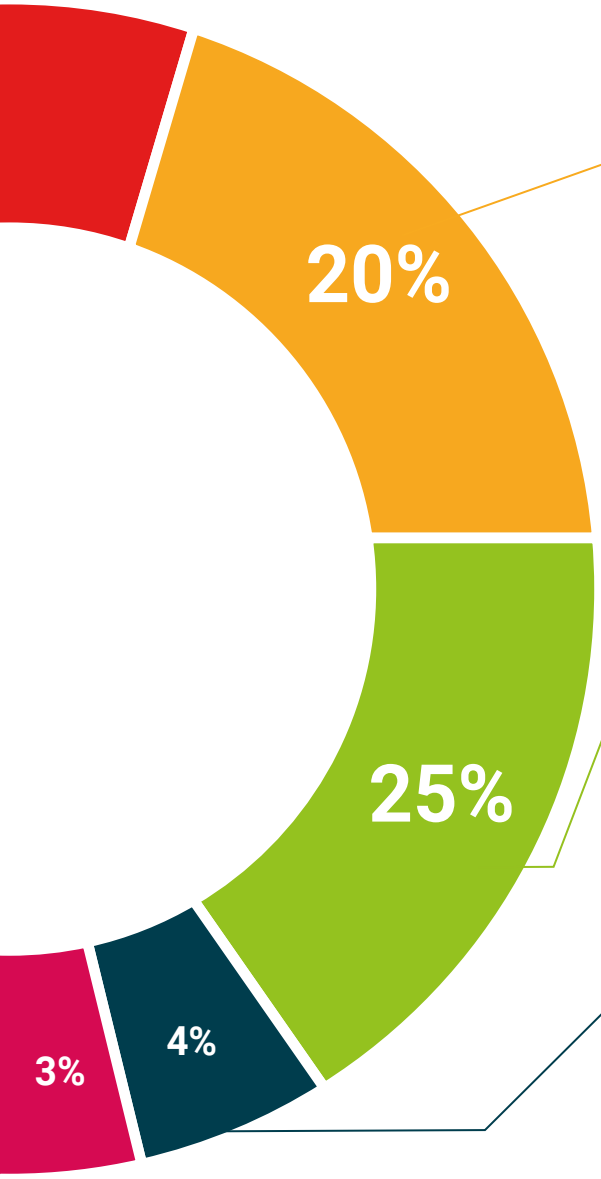
Practising Skills and Abilities

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

Additional Reading

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





Case Studies

They will complete a selection of the best case studies in the field used at Harvard. Cases that are presented, analyzed, and supervised by the best senior management specialists in Latin America.

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 multimedia content presentation training Exclusive system was awarded by Microsoft as a "European Success Story".

Testing & Re-testing

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 your goals.

05

Certificate

This Postgraduate Diploma in Sustainable Product Design guarantees, in addition to the most rigorous and up-to-date training, access to a University Expert degree issued by TECH Technological University.

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

This **Postgraduate Certificate in Sustainable Product Design** contains the most complete and up-to-date program on the market.

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

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

Title: **Postgraduate Certificate in Sustainable Product Design**

Official Nº of Hours: **600 hours.**


tech technological university

Awards the following

CERTIFICATE

to

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

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Sustainable Product Design

This is a qualification awarded by this University, with 6 ECTS credits and equivalent to 600 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 certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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