

# Professional Master's Degree Sustainable Product Design





## Professional Master's Degree Sustainable Product Design

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

Website: [www.techtitute.com/in/design/professional-master-degree/master-sustainable-product-design](http://www.techtitute.com/in/design/professional-master-degree/master-sustainable-product-design)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Skills

---

*p. 14*

04

Structure and Content

---

*p. 18*

05

Methodology

---

*p. 28*

06

Certificate

---

*p. 36*

# 01

# Introduction

Climate change, recent productive transformations and growing ecological awareness have turned Sustainable Design into a booming discipline. Thus, today, this field is increasingly in demand and its specialists have numerous career opportunities. This degree will give the designer access to the most cutting-edge knowledge in this area, and will bring him/her closer to the latest developments in issues such as circular economy or the most suitable materials for this type of creations. The program is developed through a 100% online methodology and has various multimedia resources to prepare the professional to face all the present and future challenges of this discipline.





“

*With this program, which is developed in a 100% online format, you will learn all the keys to advance your career through Sustainable Product Design"*

Growing social awareness of environmental problems has led to major changes in production and consumption patterns. Today, companies are not only looking for profitable business models, but also for sustainable ones. For this reason, one of the most sought-after professional profiles today is that of a product designer specialized in sustainability.

This is a figure that is increasingly in demand but, for the moment, is not very abundant. For that reason, becoming a great expert in this field can bring the designer closer to great job opportunities. Thus, this program has been specifically designed to provide the professional with the most outstanding techniques and tools for sustainable creation.

Throughout this Professional Master's Degree, you will be able to delve into issues such as entrepreneurship in the creative industries, renewable energies and international sustainable development or the main methodologies of eco-design, among many other innovative contents. All this, following an online teaching system that will allow the designer to combine his work with his studies, since it will allow him to choose the time and place to study, without being subjected to rigid schedules or uncomfortable trips to an academic center.

This **Professional Master's Degree 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 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 the self-assessment process can be carried out 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



*You will have at your disposal the latest contents on the main Eco-Design methodologies, presented with the most advanced multimedia resources"*

“

*Large design firms are looking for specialists to adapt to the new context of sustainability and this program will boost you professionally by making you an expert in this field”*

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

*This program will allow you to delve into issues such as the fundamentals of creativity or corporate social responsibility.*

*The best educational technology will be at your fingertips to become the best Designer Specializing in Sustainability in your environment.*



# 02 Objectives

This program aims to turn the student into an expert in Sustainable Product Design. And to achieve this goal, it has integrated the most cutting-edge knowledge in this booming area, providing the professional with the latest techniques and procedures in Sustainable Design, which are in demand in the labor market. Thus, at the end of this degree, you will have positioned yourself as a specialist that large companies in the sector will want to count on to develop their new creations.







“

All your professional goals will be quickly fulfilled when you have completed this Professional Master's Degree in Sustainable Product Design"



## General Objectives

---

- ♦ Master and apply the techniques and requirements for the design and calculation of lighting systems, seeking to comply with health, visual and energy criteria
- ♦ Knowing how to synthesize one's own interests, through observation and critical thinking, translating them into artistic creations
- ♦ Having a comprehensive approach to the Circular Economy in buildings in order to maintain a strategic vision of implementation and best practices
- ♦ Recognize the environment of Sustainability and the Environmental Context

“

*With this content you will be closer to achieving your personal goals. Don't think twice and enroll”*





## Specific Objectives

---

### Module 1. Design Fundamentals

- ◆ Connecting and correlating the different Design Areas, fields of application and professional branches
- ◆ Know the processes of Ideation, Creativity and Experimentation and know how to apply them to projects

### Module 2. Fundamentals of Creativity

- ◆ Learn how to plan, develop and present artistic productions, using effective strategies and their own creative contributions
- ◆ Losing the fear of artistic block and using techniques to combat it
- ◆ Investigate in oneself, in one's own emotional space and in what is around, in such a way that an analysis of these elements is carried out in order to use them in favor of one's own creativity

### Module 3. Design Theory and Culture

- ◆ Understand and communicate design-related concepts
- ◆ Reflect on Socio-economic Structures and their relationship with Culture
- ◆ Knowledge of Cultural and Creative Industries
- ◆ Introduce the student to Social Research Methodology
- ◆ Develop one's own judgement and become an autonomous and critical thinker

#### Module 4. Circular Economy

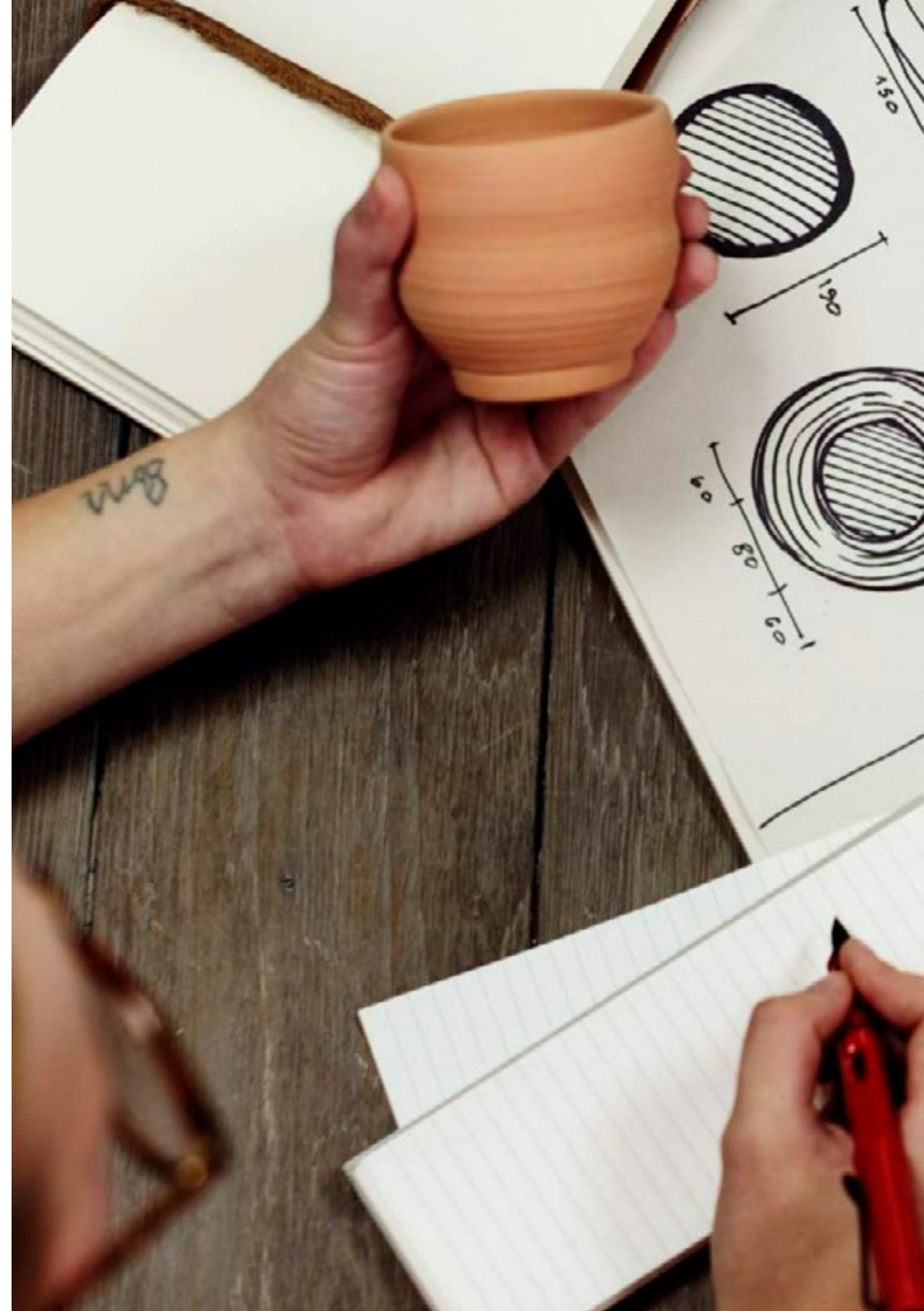
- ◆ Quantify through Life Cycle Analysis and Carbon Footprint Calculation the impact on Sustainability in the Management of Buildings for the development of improvement plans that allow Energy Savings and Reduction of the Environmental Impact produced by the buildings
- ◆ Master the criteria of Green Public Procurement in the Real Estate Sector in order to be able to face and attend them with criteria

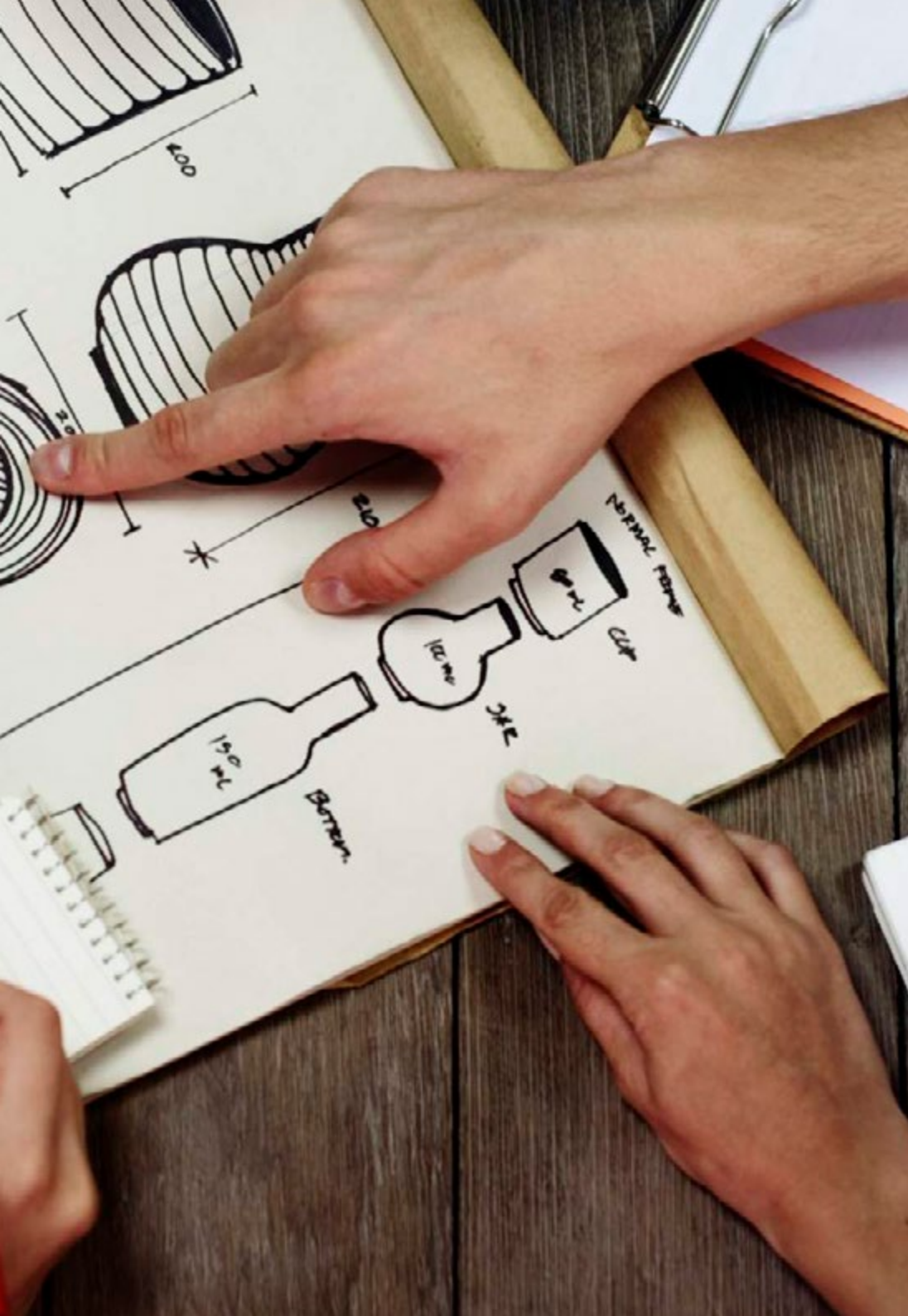
#### Module 5. Renewable Energies and Their Current Environment

- ◆ Deepen in the World Energy and Environmental Situation, as well as in other countries
- ◆ Know in detail the current Energy and Electricity Context from different perspectives: Structure of the Electricity System, operation of the Electricity Market, Regulatory Environment, analysis and evolution of the Electricity Generation System in the short, medium and long term
- ◆ Effectively pose and solve practical problems, identifying and defining the significant elements that constitute them
- ◆ Use the knowledge acquired to conceptualize Models, Systems and Processes in the field of Energy Technology
- ◆ Analyze the potential of Renewable Energies and Energy Efficiency from a multiple perspective: Technical, Regulatory, Economic and Market

#### Module 6. Technical modeling in Rhino

- ◆ Broad understanding of how NURBS modeling software works
- ◆ Working with precision modeling systems
- ◆ Working with an organization in the scenes





### Module 7. Entrepreneurship in the Creative Industries

- ◆ Knowing the Entrepreneurial Project, its life cycles and the Entrepreneur's Profile
- ◆ Deepen in the Generation of Ideas in the Creative Industry with Brainstorming and Drawstorming Techniques, among others
- ◆ Understand how to build the Personal Brand and elaborate a Marketing Plan around it

### Module 8. Sustainable Design

- ◆ Know the main Environmental Impact Analysis Instruments
- ◆ Recognize the importance of Sustainability in Design
- ◆ Knowing the relevant environmental regulations when designing a new product

### Module 9. Materials for Design

- ◆ Work with the most appropriate materials in each case, in the field of Product Design
- ◆ Explain and describe the main families of materials: Their manufacture, typologies, properties, etc

### Module 10. Ethics and Business

- ◆ Acquire an Integrating and Global Vision of the Design Practice, understanding the Social, Ethical and Professional Responsibility of the design activity and its role in society
- ◆ Know at a basic level the Regulatory, Legal, Organizational Structures and work patterns in the Artistic, Intellectual, Economic, Technological and Political Contexts, analyzing their development potential from the Design point of view
- ◆ Know and apply the terminology and methodology of the professional environment

# 03 Skills

This Professional Master's Degree in Sustainable Product Design will allow students to develop numerous skills in this creative field, by providing them with the best tools with which they will position themselves as true experts. Thus, with this program you will master aspects such as the choice of the best materials, the Circular Economy, Sustainable Design or Creative Principles focused on Sustainability.



A hand holding a pen is shown in the upper right corner, positioned over a sketch of a chair. The sketch is a wireframe drawing of a chair with a grid pattern on the seat and backrest. The background is a teal gradient that transitions into a white area where the quote is located.

“

*With this program you will improve your professional profile as a Sustainable Product Designer, positioning yourself as a prestigious professional in this creative field"*



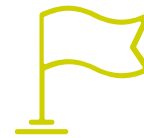
## General Skills

---

- ◆ To master the technical-economic criteria of the Generation Systems based on the use of Conventional Energies: Nuclear energy, large hydro, conventional thermal, combined cycle and the current Regulatory Environment of both conventional and renewable Generation Systems and their dynamics of evolution
- ◆ To have the necessary criteria to be able to identify and select, according to a briefing, the different ranges of materials, as well as to choose correctly, among a wide spectrum, when developing a design proposal for mass production, or to decide the most suitable ones for the realization of mock-ups or prototypes
- ◆ To know and apply the fundamentals of Professional Ethics and Social and Corporate Responsibility of designers
- ◆ Have the ability to search for information on public websites related to the electricity system and to elaborate this information
- ◆ Integrate language and semantics in the ideation processes of a project, relating them to its objectives and use values







## Specific Skills

---

- ◆ Learn in detail how to execute commands in Rhino
- ◆ Creating the basis of geometries with Rhino
- ◆ Edit and transform geometries with Rhino
- ◆ Developing a Sustainable Product Design Strategy
- ◆ Study the Cultural Markets, potential niche markets for the Design Company
- ◆ Apply the knowledge acquired to the understanding, conceptualization and modeling of systems and processes in the field of energy technology, particularly in the field of renewable energy sources
- ◆ Carry out operations in the electricity system market
- ◆ Critically analyze data and reach conclusions in the field of Energy Technology

“

*This program will make you an expert in technical modeling using Rhino software, one of the most prominent in the world of design”*

# 04

## Structure and Content

This Professional Master's Degree in Sustainable Product Design, which is composed of 10 specialized modules, provides the most advanced knowledge on issues such as design and its aesthetic-formal dimension, the creation of the artist's book, ethnographic practice in the anthropological understanding of design culture or legislation on circular economy, among many other relevant aspects.





“

*You won't find a more complete  
and in-depth content oriented  
to Sustainable Product Design"*

## Module 1. Design Fundamentals

- 1.1. Design History
  - 1.1.1. The Industrial Revolution
  - 1.1.2. The Stages of Design
  - 1.1.3. Architecture
  - 1.1.4. The Chicago School
- 1.2. Design Styles and Movements
  - 1.2.1. Decorative Design
  - 1.2.2. Modernist Movement
  - 1.2.3. Art Deco
  - 1.2.4. Industrial Design
  - 1.2.5. The Bauhaus
  - 1.2.6. World War II
  - 1.2.7. Transavantgarde
  - 1.2.8. Contemporary Design
- 1.3. Designers and Trends
  - 1.3.1. Interior Designers
  - 1.3.2. Graphic Designers
  - 1.3.3. Industrial or Product Designers
  - 1.3.4. Fashion Designers
- 1.4. Design Methodology
  - 1.4.1. Bruno Munari
  - 1.4.2. Gui Bonsiepe
  - 1.4.3. J. Christopher Jones
  - 1.4.4. L. Bruce Archer
  - 1.4.5. Guillermo González Ruiz
  - 1.4.6. Jorge Frascara
  - 1.4.7. Bernd Löbach
  - 1.4.8. Joan Costa
  - 1.4.9. Norberto Chaves
- 1.5. Language in Design
  - 1.5.1. Objects and the Subject
  - 1.5.2. Semiotics of Objects
  - 1.5.3. The Object Layout and its Connotation
  - 1.5.4. Globalization of Signs
  - 1.5.5. Proposal
- 1.6. Design and its Aesthetic-Formal Dimension
  - 1.6.1. Visual Elements
    - 1.6.1.1. The Shape
    - 1.6.1.2. The Measurement
    - 1.6.1.3. The Color
    - 1.6.1.4. Texture
  - 1.6.2. Relationship Elements
    - 1.6.2.1. Management
    - 1.6.2.2. Position
    - 1.6.2.3. Spatial
    - 1.6.2.4. Severity
  - 1.6.3. Practical Elements
    - 1.6.3.1. Representation
    - 1.6.3.2. Meaning
    - 1.6.3.3. Function
  - 1.6.4. Frame of Reference
- 1.7. Analytical Design Methods
  - 1.7.1. Pragmatic Design
  - 1.7.2. Analog Design
  - 1.7.3. Iconic Design
  - 1.7.4. Canonical Design
  - 1.7.5. Main Authors and Methodology
- 1.8. Design and Semantics
  - 1.8.1. Semantics
  - 1.8.2. The Significance
  - 1.8.3. Denotative Meaning and Connotative Meaning
  - 1.8.4. The Lexicon

- 1.8.5. Lexical Field and Lexical Family
- 1.8.6. Semantic Relationships
- 1.8.7. Semantic Change
- 1.8.8. Causes of Semantic Changes
- 1.9. Design and Pragmatics
  - 1.9.1. Practical Implications, Abduction and Semiotics
  - 1.9.2. Mediation, Body and Emotions
  - 1.9.3. Learning, Experience and Closing
  - 1.9.4. Identity, Social Relations and Objects
- 1.10. Current Design Context
  - 1.10.1. Current Design Issues
  - 1.10.2. Current Design Issues
  - 1.10.3. Contributions on Methodology

## Module 2. Fundamentals of Creativity

- 2.1. Creative Introduction
  - 2.1.1. Style in Art
  - 2.1.2. Educate your Eyes
  - 2.1.3. Can Anyone Be Creative?
  - 2.1.4. Pictorial Languages
  - 2.1.5. What do I Need? Materials
- 2.2. Perception as the First Creative Act
  - 2.2.1. What do you See? What do you Hear? What do you Feel?
  - 2.2.2. Perceives, Observes, Examines Attentively
  - 2.2.3. Portrait and Self-Portrait: Cristina Núñez
  - 2.2.4. Case Study: Photodialogue. Diving into Oneself
- 2.3. Facing the Blank Paper
  - 2.3.1. Drawing Without Fear
  - 2.3.2. The Notebook as a Tool
  - 2.3.3. The Artist's Book, What is It?
  - 2.3.4. References
- 2.4. Creating our Artist's Book
  - 2.4.1. Analysis and Gaming: Pencils and Markers
  - 2.4.2. Tricks to Loosen the Hand
  - 2.4.3. First Lines
  - 2.4.4. The Pen
- 2.5. Creating our Artist's Book II
  - 2.5.1. The Stain
  - 2.5.2. Waxes. Experimentation
  - 2.5.3. Natural Pigments
- 2.6. Creating our Artist's Book III
  - 2.6.1. Collage and Photomontage
  - 2.6.2. Traditional Tools
  - 2.6.3. Online Tools: Pinterest
  - 2.6.4. Experimentation with Image Composition
- 2.7. Doing Without Thinking
  - 2.7.1. What do we Achieve by Doing Without Thinking?
  - 2.7.2. Improvise: Henri Michaux
  - 2.7.3. Action Painting
- 2.8. The Critic as Artist
  - 2.8.1. Constructive Criticism
  - 2.8.2. Manifesto on Creative Criticism
- 2.9. The Creative Block
  - 2.9.1. What is Blocking?
  - 2.9.2. Extend your Limits
  - 2.9.3. Case Study: Getting your Hands Dirty
- 2.10. Study of our Artist's Book
  - 2.10.1. Emotions and their Management in the Creative Sphere
  - 2.10.2. Your Own World in a Notebook
  - 2.10.3. What Did I Feel? Self-analysis
  - 2.10.4. Case Study: Criticizing Myself

### Module 3. Design Theory and Culture

- 3.1. The Significance of Design in Contemporary Culture and Society
  - 3.1.1. Introduction to the Concept of Design Culture
  - 3.1.2. The Role of the Designer in the Context of Contemporary Society
  - 3.1.3. Material Culture and Social Values
  - 3.1.4. Globalization in Design
- 3.2. Information and Communication Theory
  - 3.2.1. Information Theory
  - 3.2.2. Information and Redundancy
  - 3.2.3. Communication Model
- 3.3. Aesthetics
  - 3.3.1. General Concept and Historical Background
  - 3.3.2. Aesthetics of Objects
  - 3.3.3. Aesthetics and its Categories
  - 3.3.4. Dichotomy Between Form and Function
  - 3.3.5. The New Definitions of Designer Roles
  - 3.3.6. Taste and Design
  - 3.3.7. Symbolic and Emotional Values
- 3.4. Semiology
  - 3.4.1. Semiotics
  - 3.4.2. Elements of Communication: Sign, Symbol and Message
  - 3.4.3. Visual Language
- 3.5. Ethical Dilemmas of Design in Contemporary Culture and Society
  - 3.5.1. The Axiological Dimension of Design
  - 3.5.2. Theory of Aesthetics
  - 3.5.3. Beauty and Ugliness
- 3.6. Cultural Anthropology
  - 3.6.1. Introduction to Cultural Anthropology
  - 3.6.2. Conceptual Framework of Anthropological Analysis
  - 3.6.3. Design Culture as an Object of Anthropological Study
  - 3.6.4. Ethnographic Practice in the Anthropological Understanding of Design Culture
  - 3.6.5. Introduction to Ethnographic Fieldwork

- 3.7. Sociology and Consumer Culture
  - 3.7.1. Sociology of Culture
  - 3.7.2. The Circuitry and Dynamics of Culture in Technologically Advanced Societies
  - 3.7.3. Design Scenarios in Today's Consumer Culture
  - 3.7.4. Design Consumption
- 3.8. Technology and Design
  - 3.8.1. Technological Determinism
  - 3.8.2. Construction of Social Imaginaries
  - 3.8.3. Social Change and Technology
- 3.9. Ethics, Design and Consumption
  - 3.9.1. Consumer Ethics
  - 3.9.2. Design Professional Ethics
  - 3.9.3. Design and Ethics
  - 3.9.4. Designer's Code of Ethics
- 3.10. Methods of Research and Experimentation Specific to the Subject Matter
  - 3.10.1. Research in Design
  - 3.10.2. Research Methodology

### Module 4. Circular Economy

- 4.1. Circular Economy Trend
  - 4.1.1. Origin of the Circular Economy
  - 4.1.2. Definition of Circular Economy
  - 4.1.3. Need for the Circular Economy
  - 4.1.4. Circular Economy as a Strategy
- 4.2. Characteristics of the Circular Economy
  - 4.2.1. Principle 1. Preserve and Improve
  - 4.2.2. Principle 2. Optimize
  - 4.2.3. Principle 3. Promote
  - 4.2.4. Key Characteristics
- 4.3. Benefits of the Circular Economy
  - 4.3.1. Economic Advantages
  - 4.3.2. Social Advantages
  - 4.3.3. Business Advantages
  - 4.3.4. Environmental Advantages

- 4.4. Circular Economy Legislation
  - 4.4.1. Regulations
  - 4.4.2. European Directives
  - 4.4.3. Legislation in Spain
  - 4.4.4. Autonomous Community Legislation
- 4.5. Life Cycle Analysis
  - 4.5.1. Scope of Life Cycle Assessment (LCA)
  - 4.5.2. Stages
  - 4.5.3. Reference Standards
  - 4.5.4. Methodology
  - 4.5.5. Tools
- 4.6. Green Public Procurement
  - 4.6.1. Legislation
  - 4.6.2. Green Procurement Manual
  - 4.6.3. Guidance on Public Procurement
  - 4.6.4. Public Procurement Plan 2018-2025
- 4.7. Carbon Footprint Calculation
  - 4.7.1. Carbon Footprint
  - 4.7.2. Types of Scope
  - 4.7.3. Methodology
  - 4.7.4. Tools
  - 4.7.5. Carbon Footprint Calculation
- 4.8. CO2 Emission Reduction Plans
  - 4.8.1. Improvement Plan. Supplies
  - 4.8.2. Improvement Plan. Demand
  - 4.8.3. Improvement Plan. Installations
  - 4.8.4. Improvement Plan. Equipment
  - 4.8.5. Emissions Offsets
- 4.9. Carbon Footprint Registry
  - 4.9.1. Carbon Footprint Registry
  - 4.9.2. Pre-registration Requirements
  - 4.9.3. Documentation
  - 4.9.4. Application for Registration

- 4.10. Good Circular Practices
  - 4.10.1. Methodology BIM
  - 4.10.2. Selection of Materials and Equipment
  - 4.10.3. Maintenance
  - 4.10.4. Waste Management
  - 4.10.5. Reuse of Materials

## Module 5. Renewable Energies and Their Current Environment

- 5.1. Renewable Energies
  - 5.1.1. Fundamental Principles
  - 5.1.2. Conventional Vs. Renewable Energy
  - 5.1.3. Advantages and Disadvantages of Renewable Energies
- 5.2. International Context of Renewable Energies
  - 5.2.1. Fundamentals of Climate Change and Energy Sustainability. Renewable Energies Vs. Non-Renewable Energies
  - 5.2.2. Decarbonization of the World Economy. From the Kyoto Protocol to the Paris Agreement in 2015 and the 2019 Madrid Climate Summit
  - 5.2.3. Renewable Energies in the Global Energy Context
- 5.3. Energy and Sustainable Development International
  - 5.3.1. Carbon Markets
  - 5.3.2. Clean Energy Certificates
  - 5.3.3. Energy Vs. Sustainability
- 5.4. General Regulatory Framework
  - 5.4.1. International Energy Regulation and Directives
  - 5.4.2. Legal, Legislative and Regulatory Framework of the Energy Sector and Energy Efficiency at National (Spain) and European level
  - 5.4.3. Auctions in the Renewable Electricity Sector
- 5.5. Electricity Markets
  - 5.5.1. System Operation with Renewable Energies
  - 5.5.2. Regulation of Renewable Energies
  - 5.5.3. Participation of Renewable Energies in Electricity Markets
  - 5.5.4. Electricity Market Operators

- 5.6. Structure of the Electric System
  - 5.6.1. Power System Generation
  - 5.6.2. Power System Transmission
  - 5.6.3. Distribution and Operation of the Market
  - 5.6.4. Marketing
- 5.7. Distributed Generation
  - 5.7.1. Concentrated Generation Vs. Distributed Generation
  - 5.7.2. Self-Consumption
  - 5.7.3. Generation Contracts
- 5.8. Emitters
  - 5.8.1. Measuring Energy
  - 5.8.2. Greenhouse Gases in Energy Generation and Use
  - 5.8.3. Emissions Assessment by Type of Power Generation
- 5.9. Energy Storage
  - 5.9.1. Types of Cells
  - 5.9.2. Advantages and Disadvantages of Cells
  - 5.9.3. Other Energy Storage Technologies
- 5.10. Main Technologies
  - 5.10.1. Energies of the Future
  - 5.10.2. New Uses
  - 5.10.3. Future Energy Contexts and Models

## Module 6. Technical modeling in Rhino

- 6.1. Rhino Modeling
  - 6.1.1. The Rhino Interface
  - 6.1.2. Types of Objects
  - 6.1.3. Navigating the Model
- 6.2. Fundamental Notions
  - 6.2.1. Editing with Gumball
  - 6.2.2. Viewports
  - 6.2.3. Modeling Assistants
- 6.3. Precision Modeling
  - 6.3.1. Input by Coordinates
  - 6.3.2. Distance and Angle Restriction Input
  - 6.3.3. Restriction to Objects
- 6.4. Command Analysis
  - 6.4.1. Additional Modeling Assistants
  - 6.4.2. SmartTrack
  - 6.4.3. Construction Drawings
- 6.5. Lines and Polylines
  - 6.5.1. Circles
  - 6.5.2. Free-form Lines
  - 6.5.3. Helix and Spiral
- 6.6. Geometry Editing
  - 6.6.1. Fillet and Chamfer
  - 6.6.2. Mixing Curves
  - 6.6.3. Loft
- 6.7. Transformations I
  - 6.7.1. Move-Rotate-Scale
  - 6.7.2. Join-Modify-Extend
  - 6.7.3. Separate-Offset-Formations
- 6.8. Creating Forms
  - 6.8.1. Deformable Shapes
  - 6.8.2. Modeling with Solids
  - 6.8.3. Solid Transformation
- 6.9. Creating Surfaces
  - 6.9.1. Simple Surfaces
  - 6.9.2. Extrusion, Lofting and Surface Revolution
  - 6.9.3. Surface Sweeping
- 6.10. Organisation
  - 6.10.1. Layers
  - 6.10.2. Groups
  - 6.10.3. Blocks



## Module 7. Entrepreneurship in the Creative Industries

- 7.1. The Entrepreneurial Project
  - 7.1.1. Entrepreneurship, Types and Life Cycle
  - 7.1.2. Entrepreneur Profile
  - 7.1.3. Topics of Interest for Entrepreneurship
- 7.2. Personal Leadership
  - 7.2.1. Self-Knowledge
  - 7.2.2. Entrepreneurial Skills
  - 7.2.3. Development of Entrepreneurial Leadership Skills and Abilities
- 7.3. Identification of Opportunities for Innovation and Entrepreneurship
  - 7.3.1. Megatrends and Competitive Forces Analysis
  - 7.3.2. Consumer Behavior and Demand Estimation
  - 7.3.3. Evaluation of Business Opportunities
- 7.4. Business Idea Generation in the Creative Industry
  - 7.4.1. Tools for Idea Generation: Brainstorming, Mental Maps Drawstorming,etc
  - 7.4.2. Value Proposition Design: Canvas, 5W
  - 7.4.3. Value Proposition Development
- 7.5. Prototyping and Validation
  - 7.5.1. Prototype Development
  - 7.5.2. Validation
  - 7.5.3. Prototyping Settings
- 7.6. Business Model Design
  - 7.6.1. The Business Model
  - 7.6.2. Methodologies for the Creation of Business Models
  - 7.6.3. Business Model Design for Proposed Idea
- 7.7. Team Leadership
  - 7.7.1. Team Profiles According to Temperaments and Personality
  - 7.7.2. Team Leader Skills
  - 7.7.3. Teamwork Methods
- 7.8. Cultural Markets
  - 7.8.1. Nature of Cultural Markets
  - 7.8.2. Types of Cultural Markets
  - 7.8.3. Identification of Cultural Proximity Markets

- 7.9. Marketing plan and Personal Branding
  - 7.9.1. Projection of the Personal and Entrepreneurship Project
  - 7.9.2. Short and Medium-term Strategic Plan
  - 7.9.3. Variables for Measuring Success
- 7.10. Sales Pitch
  - 7.10.1. Project Presentation to Investors
  - 7.10.2. Development of Attractive Presentations
  - 7.10.3. Development of Effective Communication Skills

## Module 8. Sustainable Design

- 8.1. Environmental Status
  - 8.1.1. Environmental Context
  - 8.1.2. Environmental Perception
  - 8.1.3. Consumption and Consumerism
- 8.2. Sustainable Production
  - 8.2.1. Ecological Footprint
  - 8.2.2. Biocapacity
  - 8.2.3. Ecological Deficit
- 8.3. Sustainability and Innovation
  - 8.3.1. Production Processes
  - 8.3.2. Process Management
  - 8.3.3. Production Start-up
  - 8.3.4. Productivity by Design
- 8.4. Introduction. Eco-Design
  - 8.4.1. Sustainable Development
  - 8.4.2. Industrial Ecology
  - 8.4.3. Eco-efficiency
  - 8.4.4. Introduction to the Concept of Eco-Design
- 8.5. Eco-Design Methodologies
  - 8.5.1. Methodological Proposals for the Implementation of Eco-design
  - 8.5.2. Project Preparation ( Driving Forces, Legislation)
  - 8.5.3. Environmental Aspects

- 8.6. Life Cycle Assessment (LCA)
  - 8.6.1. Functional Unit
  - 8.6.2. Inventory
  - 8.6.3. Impact Ratio
  - 8.6.4. Generation of Conclusions and Strategy
- 8.7. Improvement Ideas (Eco-Design Strategies)
  - 8.7.1. Reduce Impact
  - 8.7.2. Increase Functional Unit
  - 8.7.3. Positive Impact
- 8.8. Circular Economy
  - 8.8.1. Definition
  - 8.8.2. Evolution
  - 8.8.3. Success Stories
- 8.9. Cradle to Cradle
  - 8.9.1. Definition
  - 8.9.2. Evolution
  - 8.9.3. Success Stories
- 8.10. Environmental Regulations
  - 8.10.1. Why Do We Need a Regulation?
  - 8.10.2. Who Makes the Regulations?
  - 8.10.3. European Union Environmental Framework
  - 8.10.4. Regulations in the Development Process

## Module 9. Materials for Design

- 9.1. Material as Inspiration
  - 9.1.1. Search for Materials
  - 9.1.2. Classification
  - 9.1.3. The Material and its Context
- 9.2. Materials for Design
  - 9.2.1. Common Uses
  - 9.2.2. Contraindications
  - 9.2.3. Combination of Materials

- 9.3. Art + Innovation
  - 9.3.1. Materials in Art
  - 9.3.2. New Materials
  - 9.3.3. Composite Materials
- 9.4. Physical
  - 9.4.1. Basic Concepts
  - 9.4.2. Composition of Materials
  - 9.4.3. Mechanical Testing
- 9.5. Technology
  - 9.5.1. Intelligent Materials
  - 9.5.2. Dynamic Materials
  - 9.5.3. The Future in Materials
- 9.6. Sustainability
  - 9.6.1. Obtaining
  - 9.6.2. Use
  - 9.6.3. Final Management
- 9.7. Biomimicry
  - 9.7.1. Reflection
  - 9.7.2. Transparency
  - 9.7.3. Other Techniques
- 9.8. Innovation
  - 9.8.1. Success Stories
  - 9.8.2. Materials Research
  - 9.8.3. Sources of Research
- 9.9. Risk Prevention
  - 9.9.1. Safety Factor
  - 9.9.2. Fire
  - 9.9.3. Breakage
  - 9.9.4. Other Risks
- 9.10. Regulations and Legislation
  - 9.10.1. Regulations According to Application
  - 9.10.2. Regulations by Sector
  - 9.10.3. Regulations According to Location

## Module 10. Ethics and Business

- 10.1. Methodology
  - 10.1.1. Documentary Sources and Search for Resources
  - 10.1.2. Bibliographic Citations and Research Ethics
  - 10.1.3. Methodological Strategies and Academic Writing
- 10.2. The Field of Morality: Ethics and Morals
  - 10.2.1. Ethics and morals
  - 10.2.2. Material and Formal Ethics
  - 10.2.3. Rationality and Morality
  - 10.2.4. Virtue, Goodness and Justice
- 10.3. Applied Ethics
  - 10.3.1. The Public Dimension of Applied Ethics
  - 10.3.2. Ethical Codes and Responsibilities
  - 10.3.3. Autonomy and Self-Regulation
- 10.4. Deontological Ethics Applied to Design
  - 10.4.1. Requirements and Ethical Principles related to the Practice of Design
  - 10.4.2. Ethical Decision Making
  - 10.4.3. Relationships and Ethical Professional Skills
- 10.5. Corporate Social Responsibility
  - 10.5.1. Ethical Sense of the Company
  - 10.5.2. Code of Conduct
  - 10.5.3. Globalization and Multiculturalism
  - 10.5.4. Non-discrimination
  - 10.5.5. Sustainability and Environment
- 10.6. Introduction to Commercial Law
  - 10.6.1. Concept of Commercial Law
  - 10.6.2. Economic Activity and Commercial Law
  - 10.6.3. Significance of the Theory of the Sources of Commercial Law
- 10.7. The Company
  - 10.7.1. Economic Concept of the Company and the Entrepreneur
  - 10.7.2. Legal Regime of the Company
- 10.8. The Entrepreneur
  - 10.8.1. Concept and Characteristics of the Entrepreneur
  - 10.8.2. Partnerships and Corporations (Corporations and Limited Liability Companies)
  - 10.8.3. Acquisition of Entrepreneurial Status
  - 10.8.4. Corporate Responsibility
- 10.9. Regulation of Competition
  - 10.9.1. Antitrust
  - 10.9.2. Unlawful or Unfair Competition
  - 10.9.3. Competitive Strategy
- 10.10. Intellectual and Industrial Property Law
  - 10.10.1. Intellectual Property
  - 10.10.2. Industrial Property
  - 10.10.3. Modalities of Protection for Creations and Inventions



*This is the most outstanding program to deepen in Sustainable Design, as it has the best syllabus and the most innovative and flexible teaching methodology"*

# 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 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.

## 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.

With this methodology we have trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, markets, and financial instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

*Relearning will allow you to learn with less effort and better performance, involving you more in your 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.



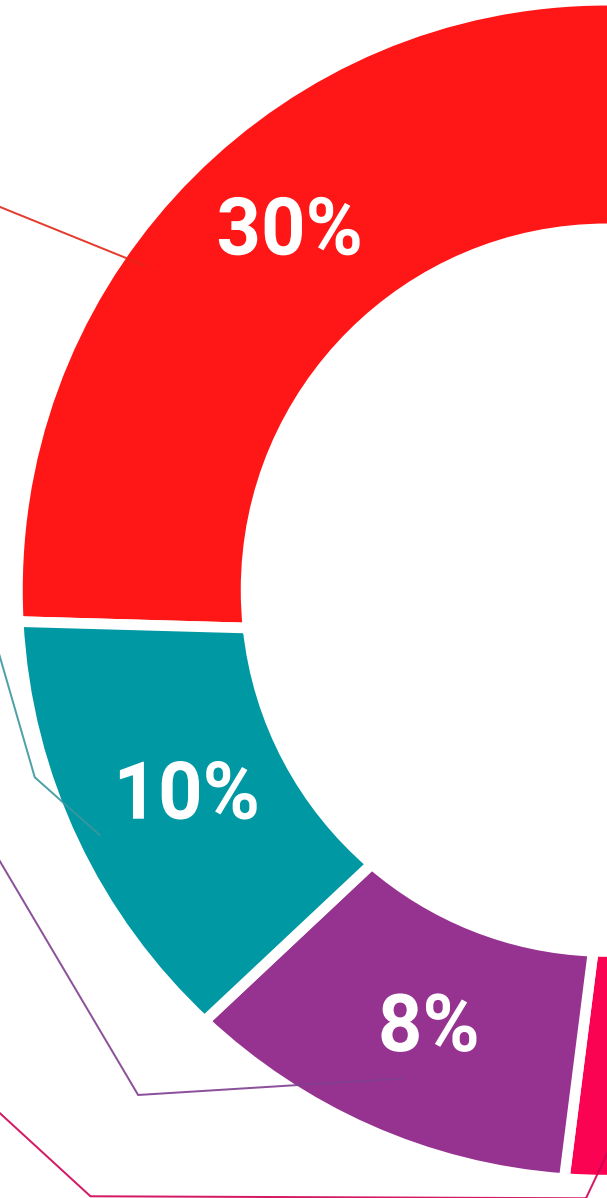
### Practising Skills and Abilities

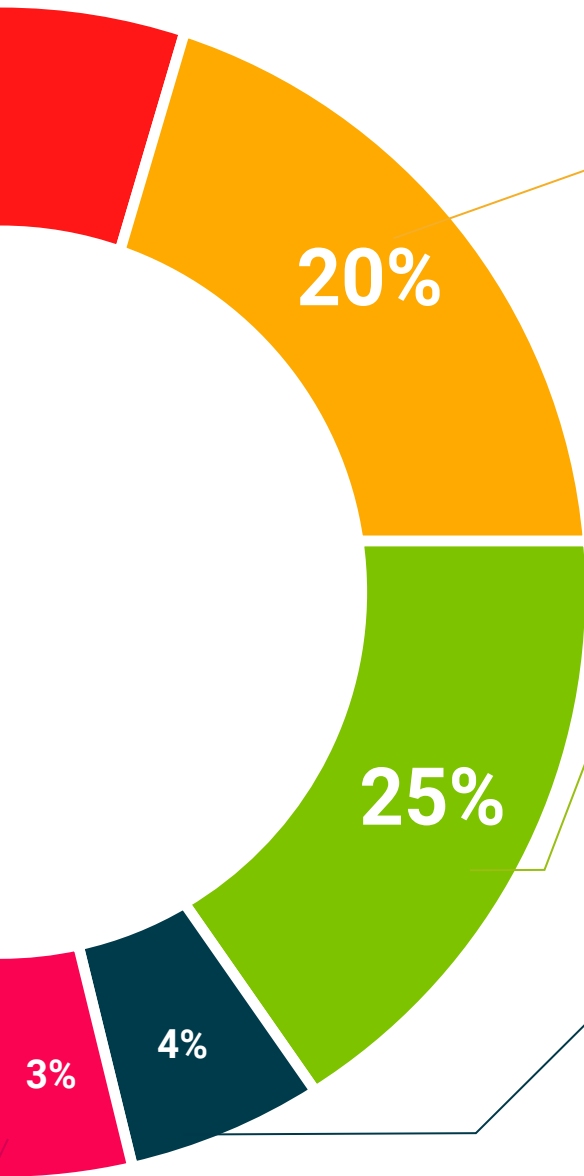
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



### 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 Professional Master's Degree in Sustainable Product Design guarantees, in addition to the most rigorous and updated training, access to a Professional Master's Degree issued by TECH Technological University.



“

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

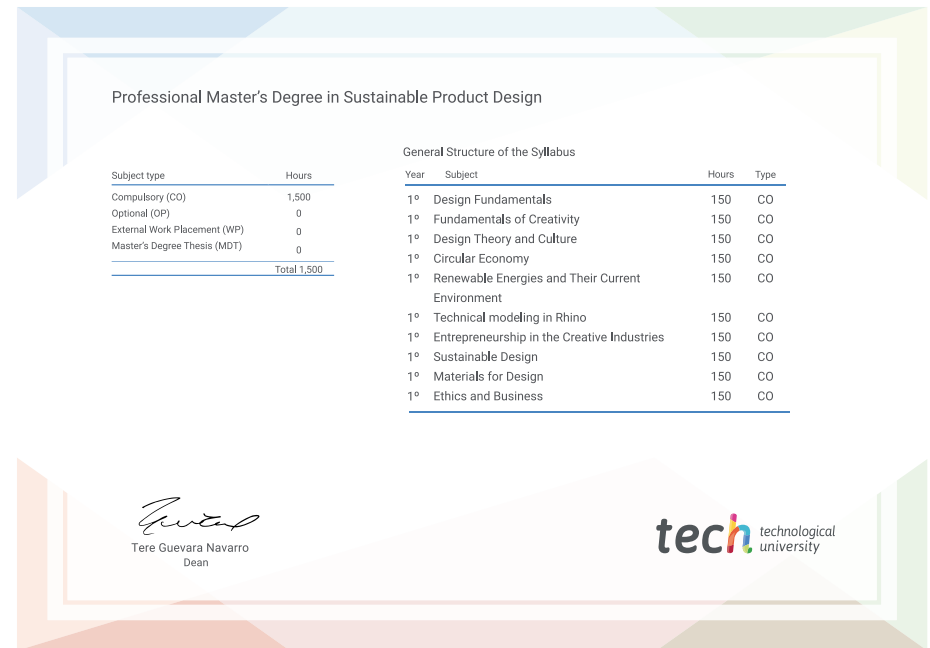
This **Professional Master's Degree in Sustainable Product Design** contains the most complete and update program on the market.

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

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

Title: **Professional Master's Degree in Sustainable Product Design**

Official N° of hours: **1,500 h.**



\*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.

health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
development language  
virtual classroom



Professional Master's  
Degree  
Sustainable  
Product Design

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

# Professional Master's Degree Sustainable Product Design