Postgraduate Certificate
Design with Sustainable Materials

tech technological university

Postgraduate Certificate
Design with Sustainable Materials

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

Website: **www.techtitute.com/pk/design/postgraduate-certificate/design-sustainable-materials**

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01
Introduction

This program will allow the professional to deepen in the design of products through the use of sustainable materials. Thus, this qualification responds to the current demand for designers focused on this area, a demand accentuated by the growing social awareness of issues such as recycling and reuse of all kinds of objects, tools or fabrics. Therefore, completing this program can boost a student's career by providing all the essential knowledge in this field. All this, based on a 100% online methodology that will be adapted to your personal circumstances, and through the use of numerous multimedia materials.

Specialize in Design With Sustainable Materials thanks to this program, which has the most advanced contents in this important field that is currently booming"

Of the many areas that make up the discipline of design, the one that has experienced the greatest growth in recent years is that which is developed using sustainable materials. Thus, companies of all types, from those specializing in industrial design to companies that wish to incorporate the reuse of materials or the use of sustainable materials into their processes, will want to have a professional who is an expert in this field.

In this way, this Postgraduate Certificate is a response to the current situation and offers the student the most innovative and advanced contents, since it will go deeper into issues such as the combination of materials, the regulations applicable to the use of different materials, sustainable production or ecodesign methodologies.

The program is also developed through an online learning system specially designed so that working professionals can study without interruptions, since it does not subject them to schedules or travel. In addition, it offers you cutting-edge educational technology that makes specialization easy, providing you with the most innovative multimedia resources, accessible 24 hours a day.

This **Postgraduate Certificate in Design With Sustainable Materials** contains the most complete and up-to-date educational program on the market. Its most notable features are:

- The development of case studies presented by experts in Sustainable Design
- 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
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Access to content from any fixed or portable device with an Internet connection.

This program will allow you to deepen your knowledge of the main ecodesign methodologies and other relevant issues such as sustainable production"

"TECH's online methodology will allow you to study without interrupting your professional work, since it will be completely adapted to all your personal circumstances"

Thanks to this program, you will analyze in depth the life cycle of products, learning about their utilization and reuse processes"

The best multimedia resources will be at your disposal: videos, exercises, readings, master classes, etc"

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.

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.

02
Objectives

This Postgraduate Certificate in Design with Sustainable Materials has as main objective to improve the professional perspectives of the designer deepening in one of the most requested fields in this work area. Thus, to achieve this goal, this program provides a cutting-edge learning methodology, which makes teaching an effective process, and new content that will make you know the current reality of the sector.

Achieve all your goals thanks to this program, with which you will know the main methods of Design with Sustainable Materials"

General Objectives

- Master and apply the techniques and requirements for the design and calculation of lighting systems, seeking to meet healthy, visual and energy criteria

- Know how to synthesize one's own interests, through observation and critical thinking, translating them into artistic creations

- Recognize the sustainability environment and the environmental context

Sustainable design is the present and the future. Enroll and become a reference in your profession"

Specific Objectives

- Work with the most suitable materials in each case, in the field of product design
- Explain and describe the main families of materials: their manufacture, typologies, properties, etc
- Learn about the main environmental impact analysis tools
- Recognize the importance of sustainability in design
- Know the relevant environmental regulations when designing

03
Structure and Content

This Postgraduate Certificate in Design with Sustainable Materials is structured in 2 specialized modules through which the student will know the applications of the main sustainable materials. Thus, along this educational path, it will delve into aspects such as contraindications in the use of certain materials for design, research in materials, applicable regulations or environmental aspects of production.

The most complete agenda in Design with Sustainable Materials is here. You're just one step away from experiencing a career breakthrough"

Module 1 Materials for the Design

1.1. The Material as Inspiration
    1.1.1. Search for Materials
    1.1.2. Classification
    1.1.3. The Material and its Context

1.2. Materials for the Design
    1.2.1. Common Uses
    1.2.2. Contraindications
    1.2.3. Combination of Materials

1.3. Art + Innovation
    1.3.1. Materials in Art
    1.3.2. New Materials
    1.3.3. Composite Materials

1.4. Physical
    1.4.1. Basic Concepts
    1.4.2. Material Composition
    1.4.3. Mechanical Tests

1.5. Technology
    1.5.1. Intelligent Materials
    1.5.2. Dynamic Materials
    1.5.3. The Future in Materials

1.6. Sustainability
    1.6.1. Procurement
    1.6.2. Use
    1.6.3. Final Management

1.7. Biomimicry
    1.7.1. Reflection
    1.7.2. Transparency
    1.7.3. Other techniques

1.8. Innovation
    1.8.1. Success Stories
    1.8.2. Materials Research
    1.8.3. Research Sources

1.9. Hazard Prevention
    1.9.1. Safety Factor
    1.9.2. Fire
    1.9.3. Breakage
    1.9.4. Other Risks

1.10. Regulations and Legislation
    1.10.1. Regulations According to Application
    1.10.2. Regulations by Sector
    1.10.3. Regulations by Location

Module 2 Sustainable Design

2.1. Environmental Status
    2.1.1. Environmental Context
    2.1.2. Environmental Perception
    2.1.3. Consumption and Consumerism

2.2. Sustainable Production
    2.2.1. Ecological Footprint
    2.2.2. Biocapacity
    2.2.3. Ecological Deficit

2.3. Sustainability and Innovation
    2.3.1. Production Processes
    2.3.2. Process Management
    2.3.3. Implementation of the Production
    2.3.4. Productivity Through Design

2.4. Introduction Eco-Design
    2.4.1. Sustainable Development
    2.4.2. Industrial Ecology
    2.4.3. Eco-Efficiency
    2.4.4. Introduction to the Concept of Eco-Design

2.5. Methodologies of Eco-Design
    2.5.1. Methodological proposals for the implementation of Eco-Design
    2.5.2. Project Preparation (Driving Forces, Legislation)
    2.5.3. Environmental Aspects

With this content you will prepare to face the challenges of the future in the field of sustainable design, knowing all the particularities that affect production using this type of materials"

04

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.

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.

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

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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

**08** competencies testing (retesting)

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

Relearning will allow you to learn with less effort and better performance, involving you more in your 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.
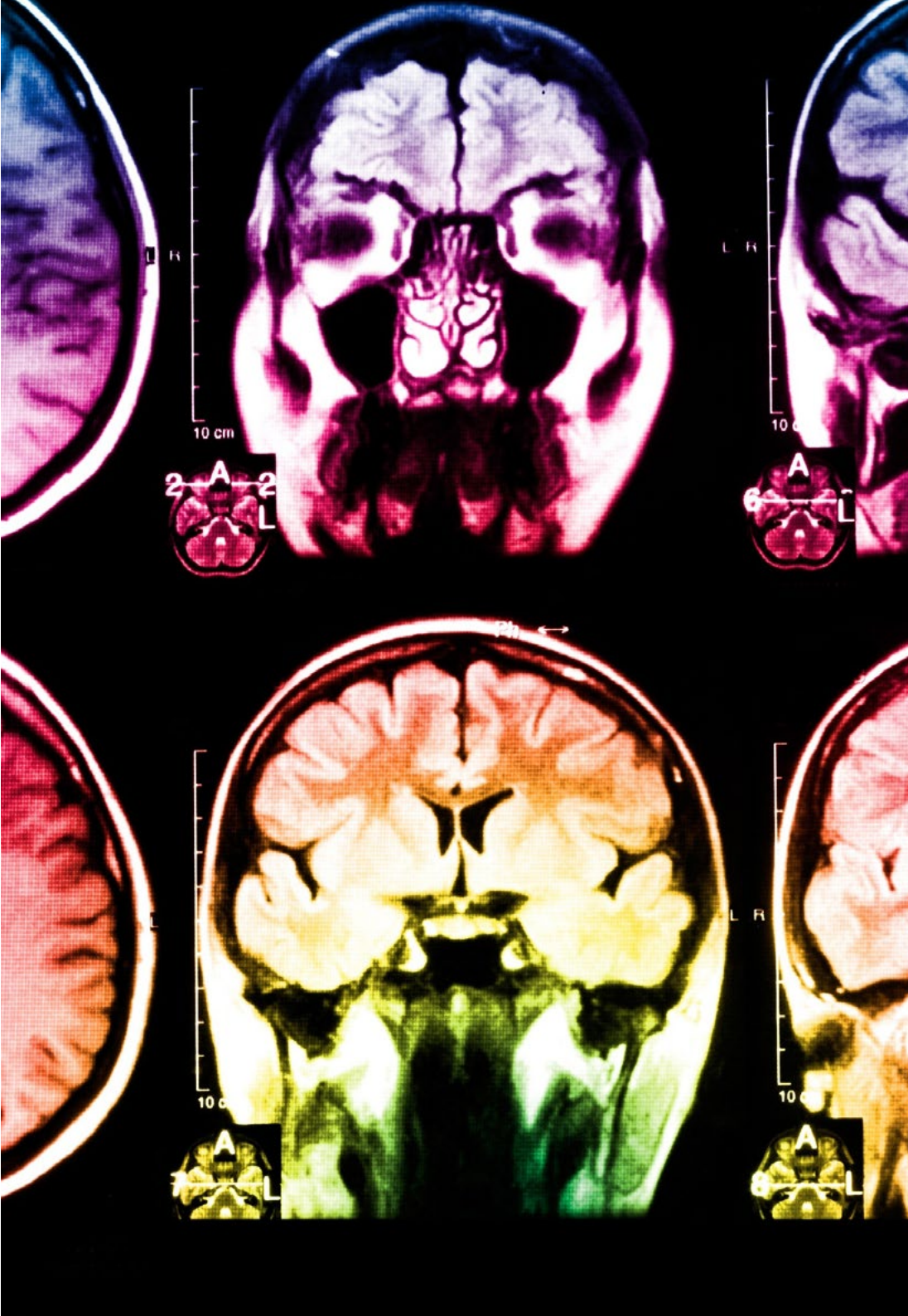
This program offers the best educational material, prepared with professionals in mind:

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.

30%

10%

8%

20%

25%

4%

3%
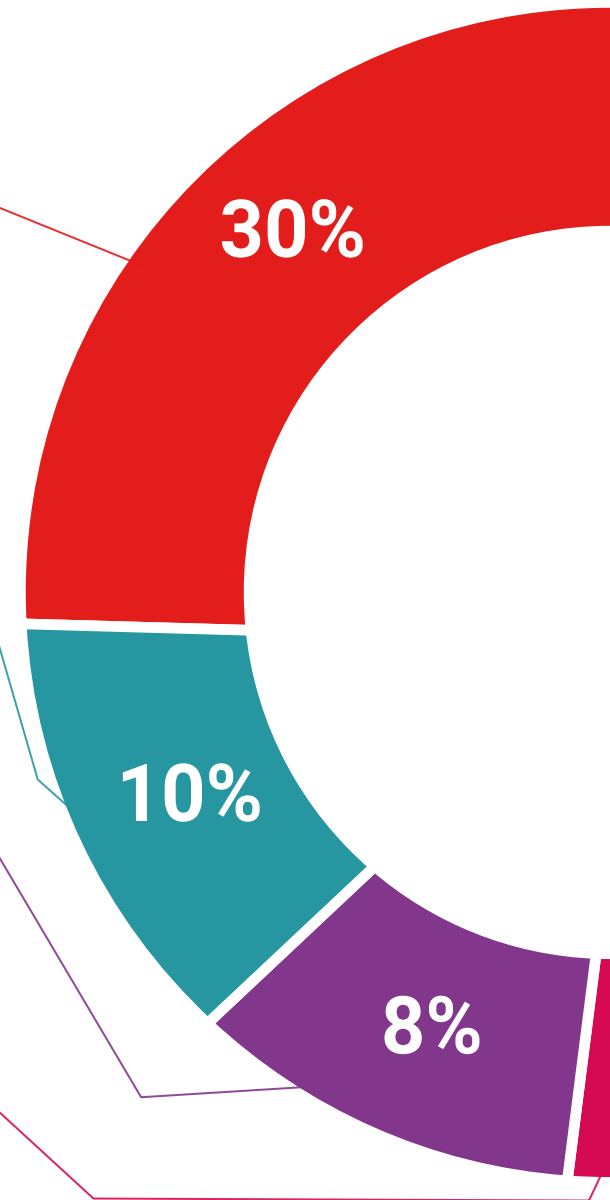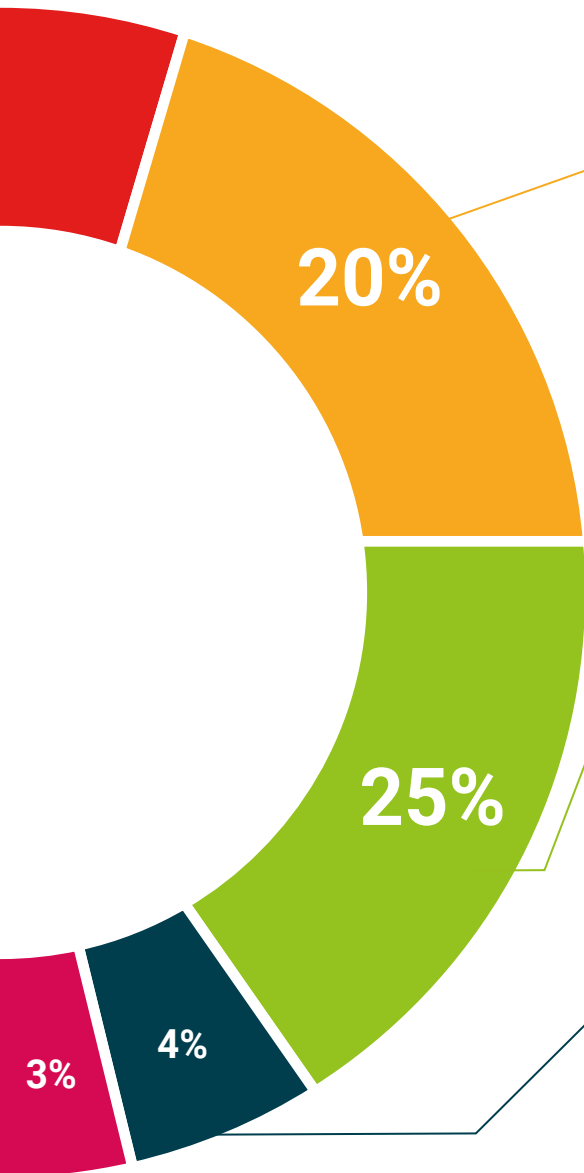
Case Studies

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.

05
Certificate

The Postgraduate Certificate in Design With Sustainable Materials guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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 Certificate in Design With Sustainable Materials** 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 diploma** issued by **TECH Technological University** via tracked delivery*.

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

Title: **Postgraduate Certificate in Design With Sustainable Materials**

Official Nº of Hours: **300 h.**

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Awards the following

CERTIFICATE
to

Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE CERTIFICATE
in
Design With Sustainable Materials

This is a qualification awarded by this University, with 6 ECTS credits and equivalent to 300 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 will make the necessary arrangements to obtain it, at an additional cost.

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