Postgraduate Certificate
Textile Sustainability

tech technological university

Postgraduate Certificate
Textile Sustainability

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

Website: **www.techtitute.com/in/engineering/postgraduate-certificate/textile-sustainability**

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01
Introduction

The textile industry is one of the most polluting industries in the world. According to the UN, fashion is responsible for 10% of global greenhouse gas emissions and 20% of water pollution. Fortunately, more and more consumers are demanding sustainable and ethical textile products. Therefore, the demand for professionals specialized in Textile Sustainability is constantly increasing. For all these reasons, TECH has designed an educational program that allows the engineer to learn the most efficient techniques and technologies to reduce the environmental impact of the industry, as well as to take advantage of this growing trend and develop products with greater added value. The student will have access to all this knowledge through a 100% online course and the most effective methodology on the market, the Relearning method.

You will dominate, thanks to this Postgraduate Certificate, the sustainable applications from the use of new fibers such as polylactic acid"

The textile industry is one of the main causes of pollution in the world, which translates into an urgent need to rethink textile processes and products. Fortunately, the growing demand for sustainable and ethical products is prompting a change in the industry, which translates into a growing need for professionals specialized in Textile Sustainability. According to a Nielsen study, 73% of consumers worldwide would be willing to pay more for sustainable products.

That is why TECH has designed a Postgraduate Certificate that allows the engineer to learn the most efficient techniques and technologies to reduce the environmental impact of the industry, as well as to take advantage of this growing market and develop products with greater added value.

Thanks to TECH's exclusive *Relearning,* method, the student will be able to access all this knowledge in an efficient and natural way, deepening in the energy consumption of textiles in a progressive way. The program is taught in 100% online mode, which means that students can access the material at any time and from anywhere, without having to worry about pre-established schedules or inconvenient travel. In addition, students will have access to a wide range of supplementary resources and tools, including detailed videos, case study analyses, interactive summaries and other interesting supplementary material.

This **Postgraduate Certificate in Textile Sustainability** contains the most complete and up-to-date program on the market. The most important features include:

- Development of case studies presented by experts in Textile Engineering
- The graphic, schematic, and practical contents with which they are created, provide 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

After completing this program, you will be able to identify critical services, barriers and risks for the economic transition from linear to circular"

" With this degree, delve deeper into the environmental footprint of polyester and learn how to become part of the change for more environmental sustainability"

Making your learning compatible with your professional and personal life is possible thanks to the study facilities offered by TECH.

Learn from anywhere in the world and at any time you want thanks to the 100% online modality of this degree.

The program includes in its teaching staff professionals from the sector who bring to this course the experience of their work, as well as renowned specialists from prestigious societies and universities.

Its multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersion education programmed to learn in real situations.

The design of this program focuses on Problem Based Learning, through which the students will try to solve the different situations of professional practice that will be presented to them throughout the academic course. For this purpose, students will be assisted by an innovative interactive video system developed by renowned experts.

02
Objectives

Sustainability is a source of innovation and improved business competitiveness. As a result, companies that adopt sustainable practices obtain better financial results and a competitive advantage in the market. For this reason, the demand for professionals specialized in Textile Sustainability is constantly increasing. By studying Textile Sustainability, students have the opportunity to develop skills and knowledge that allow them to innovate and improve their competitiveness in the Textile Industry, and therefore, the opportunity to access well-paid jobs with a high growth potential.

Grow professionally in the world of Textile Engineering by obtaining the most up-to-date knowledge in Textile Sustainability"

General Objectives

- Classify the different types of fibers according to their nature
- Determine the main physical characteristics of textiles
- Acquire technical skills to recognize the quality of textiles
- Establish scientific and technical criteria for the selection of suitable materials for the development of textile articles in the fashion sector
- Identify and apply the sources of inspiration and the most innovative trends in the textile area
- Generate a transversal vision of textile structures with a multisectorial vision of its applications

Specific Objectives

◆ Analyze the nature of textiles and their polluting nature

◆ Investigate the most polluting practices in the sector

◆ Examine textile sector legislation linked to environmental needs

◆ Determine the requirements and limitations of new, more environmentally friendly textiles

◆ Evaluate new developments and trends in sustainability in the textile industry

Increase your opportunities to work as a textile engineer in different sectors through this Postgraduate Certificate"

03

Course Management

TECH has carried out a careful selection of teachers for this Postgraduate Certificate, taking into account several relevant aspects. Their academic background, work experience in the field of Textile Engineering and the quality of the projects in which they have participated have been decisive factors in their selection. As a result, a highly qualified teaching team has been formed, which has developed an innovative and advanced syllabus, designed for the student to specialize in Textile Sustainability during the 6 weeks of the course.

> " *Under the guidance of prestigious textile engineers of renown, you will obtain the knowledge that is most in tune with the advances produced in this sector"*

Management
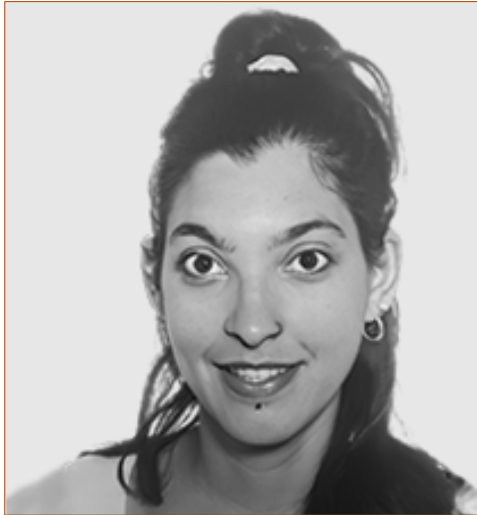
Dr. González López, Laura

- Expert in Textile and Paper Engineering
- Textile Innovation Production Manager at Waste Prevention SL
- Pattern and garment maker oriented to the automotive sector
- Researcher in the Tectex group
- Lecturer in undergraduate and postgraduate university studies
- D. in Textile and Paper Engineering from the Polytechnic University of Catalonia
- Graduate in Political Science and Administration from the Autonomous University of Barcelona
- PROFESSIONAL MASTER'S DEGREE in Textile and Paper Engineering

Professors

Ms. Ruiz Caballero, Ainhoa

- Specialist in the sports textile industry
- Commercial team leader of technical textile products for extreme sports at McTrek Retail GmbH Aachen
- Technician specialized in textile products Hightech for high mountain at McTrek Outdoor Sports GmbH Aachen
- Degree in Political Science and Law from the Polytechnic University of Catalonia
- Master's Degree in European Union by the European Institute of Bilbao

Mr. Martínez Estrada, Marc

- Engineer specialized in textile processes and technologies
- Product Engineer at Firstvision Technologies SL
- Researcher at RFEMC group
- Lecturer in undergraduate and postgraduate university studies related to Engineering
- Graduate in Industrial Technologies Engineering from the Polytechnic University of Catalonia
- Master's Degree in Industrial Engineering

04
Structure and Content

This program has been designed by experts in the field to provide students with 150 hours of theoretical, practical and complementary content in multiple audiovisual formats. With TECH's innovative methodology, Relearning, students will naturally and progressively deepen their understanding of the energetic consumption of textiles. In addition, the completely online format offers flexibility so that students can access the material anytime, anywhere, from any device with an internet connection. Engineers will be able to access the virtual campus 24 hours a day to consult and download the most up-to-date and complete content on Textile Sustainability.

"

The Relearning methodology of this Postgraduate Certificate will allow you to learn at your own pace from anywhere in the world"

Module 1. Sustainability in the textile industry

1.1. Sustainability in the textile industry. Consumption and recycling

    1.1.1. The energy consumption of textiles

    1.1.2. Water consumption in the development of textiles

    1.1.3. Properties, durability and recycling issues

1.2. Environmental impact of textiles

    1.2.1. Environmental impact during the production process

    1.2.2. Environmental impact during the use of textiles

    1.2.3. Environmental impact during the post-consumer phase

1.3. Environmental impact of the fashion industry

    1.3.1. Excess production and high stocks. Problems

    1.3.2. Compulsive consumption of clothing in society and the problem of recycling

    1.3.3. Lack of legislation and selective collection of post-consumer textiles

1.4. Application of new criteria in consumption and post-consumption of textiles

    1.4.1. The textile problem

    1.4.2. International regulations

    1.4.3. New trends and challenges post 2025. Forecast

1.5. Sustainable development and circular economy

    1.5.1. Implementation of circular economy

    1.5.2. Critical services, barriers and risks for the transition from linear to circular

    1.5.3. Sustainable development goals

1.6. Environmental footprints of different textile compositions

    1.6.1. The environmental footprint of polyester

    1.6.2. Organic cotton as a solution to environmental problems

    1.6.3. Coarse fibers as new, resistant and biodegradable materials

Enroll in this program and get access to the most up-to-date didactic contents of the educational panorama in Textile Sustainability"

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.

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.

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. 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.

30%

10%

8%

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.

20%

25%

4%

3%

06
Certificate

The Postgraduate Certificate in Textile Sustainability 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 Textile Sustainability** 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 demanded by labor exchanges, competitive examinations, and professional career evaluation committees

Title: **Postgraduate Certificate in Textile Sustainability**

Official No. of Hours: **150 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

Textile Sustainability

This is a qualification awarded by this University, equivalent to 150 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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