Postgraduate Certificate
Healthcare Textiles

tec**h** technological university

Postgraduate Certificate
Healthcare Textiles

» Modality: **online**
» Duration: **6 weeks**
» Certificate: **TECH Technological University**
» Schedule: **at your own pace**
» Exams: **online**

Website: **www.techtitute.com/us/engineering/postgraduate-certificate/healthcare-textiles**

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Introduction

According to the WHO, the use of technical textiles in healthcare reduces the risk of healthcare-associated infections by 30%. Therefore, innovation in technical textiles is transforming many sectors, including the healthcare area. With the increasing demand for sustainable and efficient solutions, textile engineers must be able to design and manufacture advanced products that meet the needs of the sector. That is why this academic degree from TECH offers specialized education that allows the student to delve into the techniques of design and manufacture of technical textiles for application in the health field, with a global and integrated vision of the entire process. All in 100% online format and through the most effective Relearningmethod.

"
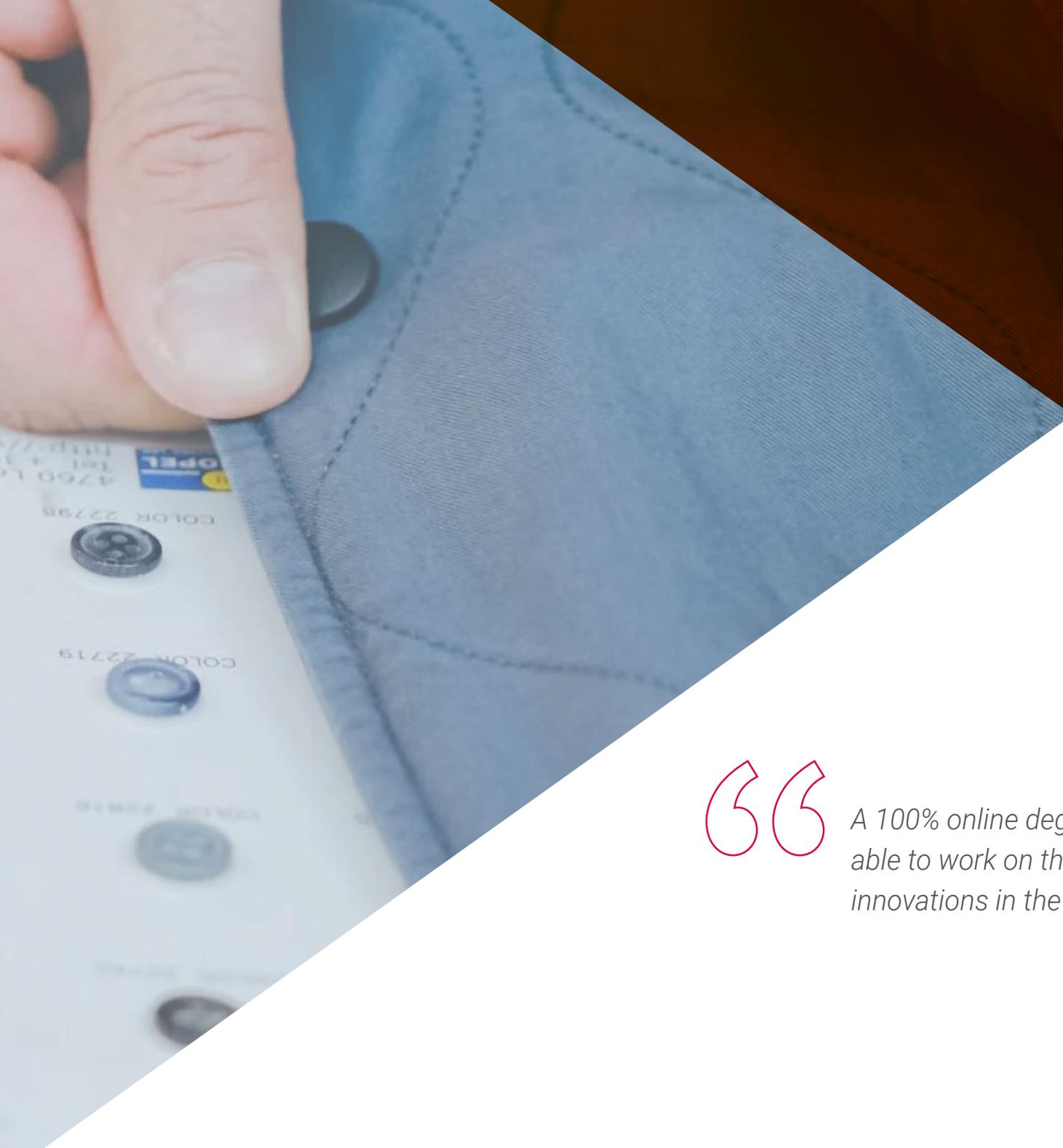
A 100% online degree with which you will be able to work on the latest concepts related to innovations in the use of new medicinal textiles"

Technical textiles are used in a wide range of healthcare applications, such as medical gowns and uniforms, sheets and bedding, bandages and dressings, adult diapers and sanitary pads, among others. The pandemic highlighted the importance of high quality personal protective equipment and materials to ensure the safety of both professionals and patients. In this regard, technical textiles have become a fundamental element for the healthcare sector. Therefore, engineers involved in the design and development of textile materials have a key role to play in improving the quality and efficiency of these materials, enabling them to adapt to the demands of today's market and improve healthcare.

Since textile engineering is a discipline in constant evolution, which requires highly qualified and up-to-date professionals, TECH has designed a program that responds to the current needs of the sector. So, this degree is designed to provide complete and up-to-date education in the design, manufacture and use of technical textiles for the healthcare sector, as well as in the management of quality and safety in the sector. Students who enroll will have the opportunity to learn from experts in the field and acquire practical skills that will enable them to meet the challenges of today's market.

In addition, the program is developed in a 100% online format and uses the Relearning method. This allows students to access the program from anywhere and at any time, providing them with greater flexibility and allowing them to adapt their learning to their personal and professional needs. The methodology is designed to facilitate continuous learning and the development of practical skills that allow engineers to improve their performance in the workplace.

This **Postgraduate Certificate Healthcare Textiles** 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 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

Stand out in a growing sector with great projection and you can be part of prestigious teams in Textile Engineering"

"You will deepen your knowledge of textile sensors for healthcare applications and the use of electronic textiles in the healthcare field with this TECH degree"

The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious 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, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

You will have access to the Virtual Campus 24 hours a day during the whole week and through any device with internet connection. Without limits or schedules.

Learn about the categorization of textile structures according to their uses in the hygienic and care field.
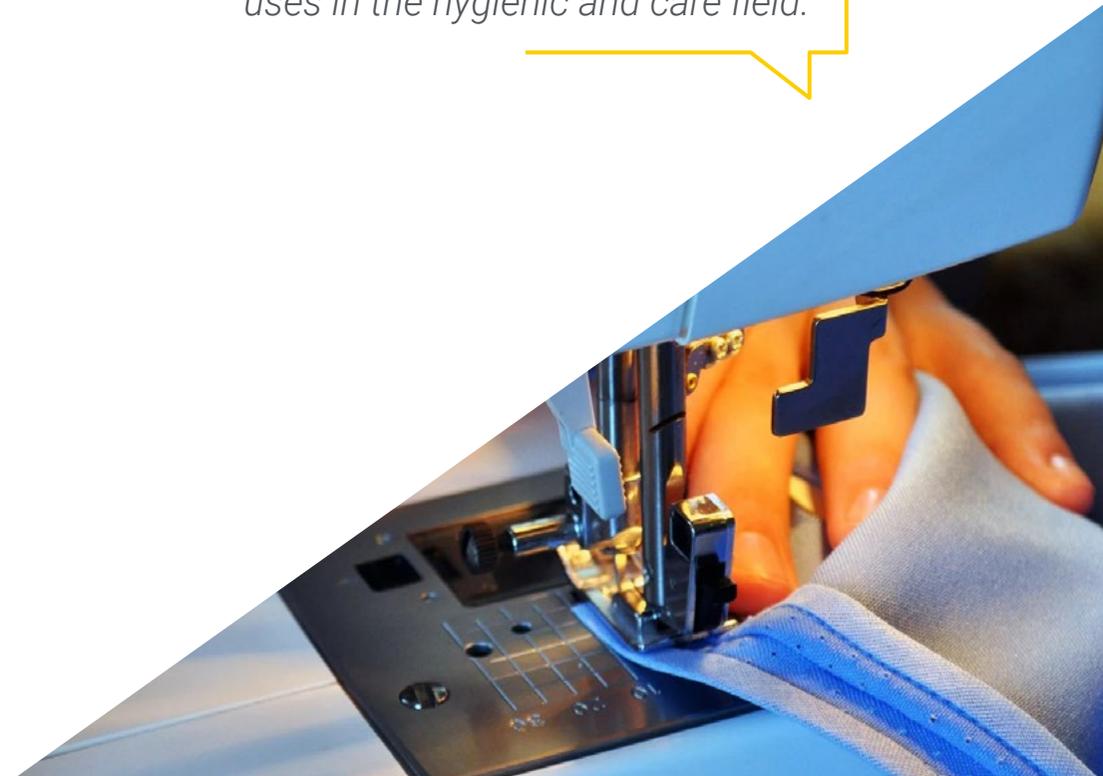
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Objectives

Engineers involved in the design and development of technical textile materials for the healthcare sector are in great need today, as their work can contribute to improving the quality and efficiency of the healthcare sector. Therefore, the objective of this program is focused on providing the engineer with the most comprehensive knowledge related to innovations in protective fabrics for the healthcare sector. Thus, TECH has designed a degree that allows the professional to implement the most advanced tools in biomaterials and regenerative medicine in just 6 weeks of 100% online learning.

"

TECH helps you reach and exceed your goals in an extensive and complete 6-week exclusive course"

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 methodology of the use of textiles for hygiene, care and medical purposes

◆ Detect the applications of intelligent electronic textiles

◆ Determine the use of protection textiles

◆ Establish the requirements and use of healthcare and medical textiles

A unique academic experience that will provide you with the keys to master the development of drug-eluting membranes using the most sophisticated and innovative techniques"

Course Management

The demand for technical textile materials in the healthcare sector has increased significantly in recent years. For this reason, TECH has created a degree that prepares engineers in materials and trends in medicine with the use of textiles. This has been possible thanks to the collaboration of a high quality teaching team with an excellent professional background. This way, the graduate will be introduced to the correct recycling of textile structures focused on care and hygiene by the most experienced experts in the Textile Engineering sector in a flexible and completely online program.

"
Through the study of smart fabrics, you will perfect your skills in smart textile solutions for human care"

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

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Structure and Content

The Postgraduate Certificate in Healthcare Textiles has been developed by renowned experts in Textile Engineering. They have poured years of experience and learning into this complete degree for the benefit of the student's learning. This way, they have included 150 hours of the best contents presented in different audiovisual formats so that the engineer integrates this knowledge in an efficient and effective way. In addition, everything is presented in a flexible, fully online format, allowing the student to acquire the most advanced tools from any device with an internet connection and with access to the virtual campus 24 hours a day.

A Posthraduate Certificate designed to enhance your professional qualities and elevate your talent in the handling of textile structures for surgical uses to the top of today's industrial sector"

Module 1. Development of textile applications for the health sector

1.1. Classification of textiles according to their use in the healthcare sector

 1.1.1. Textile structures for care and hygiene

 1.1.2. Textile structures intended for the protection of healthcare professionals

 1.1.3. Antibacterial, antimicrobial textile structures for main use in operating rooms and post-operative rooms

1.2. Traditional uses of textiles in the healthcare sector

 1.2.1. Presence of textiles in medicine

 1.2.2. Adaptations and innovations of textiles according to needs in the medical sector

 1.2.3. Textiles for medical use. Vision for the future

1.3. Textile structures for surgical uses

 1.3.1. Special yarns

 1.3.2. Special fibers

 1.3.3. Special coatings

1.4. Smart fabrics. Uses in the social and health care field

 1.4.1. Classification of vulnerable social and health groups

 1.4.2. Social and health centers. Uses, needs and concerns

 1.4.3. Smart textile solutions for caregiving

1.5. Textile sensors for healthcare applications

 1.5.1. Electronic smart textiles and their use in health care

 1.5.2. Limitations of electronic smart fabrics

 1.5.3. Use of e-textiles for healthcare

1.6. Medicine and textiles. Medical applications

 1.6.1. Textile applications as medicine. Uses and requirements

 1.6.2. Real examples of medicines in textile format

 1.6.3. Innovations in the use of new medicinal textiles

1.7. Technologies and development of textile structures and nonwoven fabrics for hygiene and care purposes

 1.7.1. Textile structures according to technology used

 1.7.2. Classification of textile structures according to their uses in the hygienic and care field

 1.7.3. Correct recycling of textile structures focused on care hygiene

The content on the program has been developed using the Relearning methodology, which will allow you to save hours of study without renouncing to high-level, extensive training"

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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%

20%

25%

4%

3%
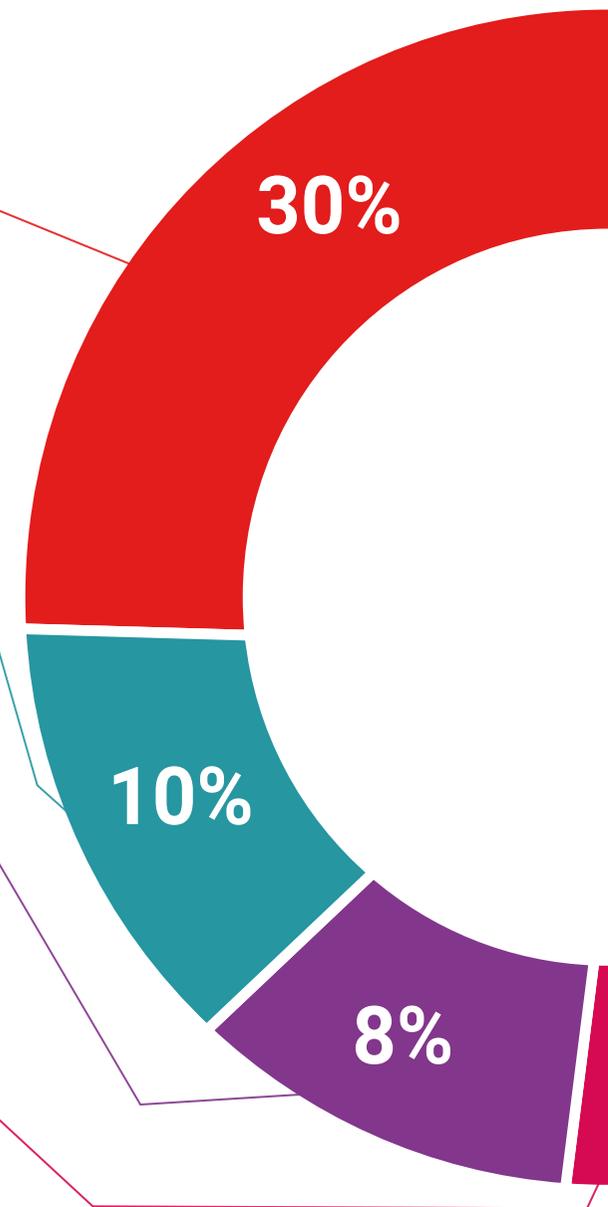
Case Studies

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.

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Certificate

The Postgraduate Certificate in Healthcare Textiles 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 Healthcare Textiles** contains the most complete and up-to-date program on the market.

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

The diploma 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 Healthcare Textiles**

Official Nº of Hours: **150 h.**

tech technological university

Awards the following

DIPLOMA

to

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

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Healthcare Textiles

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 diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

Tipo de Programa
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