Postgraduate Diploma
Textile Product Design

tech global university

Postgraduate Diploma
Textile Product Design

» Modality: **online**
» Duration: **6 months**
» Certificate: **TECH Global University**
» Credits: **18 ECTS**
» Schedule: **at your own pace**
» Exams: **online**

Website: **www.techtitute.com/us/engineering/postgraduate-diploma/postgraduate-diploma-textile-product-design**

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01
Introduction

Along with the development of the fashion industry, Textile Product Design has experienced a notorious growth over the last decade. As a result, the materials and pattern-making methods used to produce high quality garments have reached an outstanding level of perfection. This fact has meant that the textile engineer must know how to handle it perfectly in order to be successful in this sector, which is why TECH has designed this program. Throughout this course, the student will adopt the best technical approaches oriented to fashion design and will learn the most up-to-date techniques for the elaboration of patterns on mannequins. In addition, this learning will be obtained in a 100% online way and without depending on pre-established schedules.

This will enable students to learn the latest techniques for the elaboration of patterns on mannequins that allow them to create first class textile designs"

The fashion industry has reached an important relevance nowadays, due to the increase of interest in aesthetics and personal appearance. As a result, Textile Product Design has acquired a wide magnitude, as it is the discipline focused on the choice of materials and structures that will determine the comfort and durability of the garments. For this reason, specializing in this branch of Textile Engineering is a safe bet for those professionals who wish to be part of a sector that is in constant growth.

Faced with this situation, TECH has promoted the creation of this degree, with which the engineer will acquire the most relevant and advanced knowledge regarding Textile Product Design, especially focused on the field of fashion. Throughout the main parameters to design nonwoven fabrics and identify the most sophisticated materials to create different types of textile products based on the characteristics of a specific collection. Likewise, the student will delve into the handling of transformation and industrialization techniques of men's patterns for the creation of different types of garments.

Thanks to a 100% online modality through which this program is developed, the student will be able to achieve an excellent learning experience without the need of having to travel to a study center. In addition, this program is taught by specialists who are actively practicing in the field of Textile Product Design. Therefore, all the knowledge that the engineer will assimilate will be fully up-to-date and applicable in their professional life.

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

◆ Case studies presented by experts in Textile Engineering and Textile Finishes

◆ 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

Through the didactic contents available in a wide range of textual and multimedia materials, you will acquire an excellent learning experience adapted to your study preferences"

"*Learn, with this degree, to identify which are the most appropriate and sophisticated materials to design a textile product based on the characteristics of the collection to which it belongs"*

Through this degree, you will detect the techniques of transformation and industrialization of male patterns used to create different types of garments.

The advanced Relearning system of this degree will enable you to learn at your own pace from anywhere.

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 immersive 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.

02
Objectives

This program has been designed with the intention of providing the engineer with the most advanced and up-to-date knowledge regarding Textile Product Design in only 450 hours. Throughout this academic experience, you will be able to identify the latest materials used for the creation of goods in the fashion industry and analyze the methods of obtaining mesh or knitted textile structures. This learning will be maintained by following these general and specific objectives.

" *Take this program and, in only 6 months, multiply your job prospects in the world of Textile Engineering"*

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 products in the fashion industry
- Identify and apply the sources of inspiration and the most innovative trends
- Generate a transversal vision of textile structures with a multi-sectorial vision of their applications

TECH provides you with the best tools to achieve professional success in the area of Textile Product Design"

Specific Objectives

Module 1. Textile structures of openwork, mesh and non-woven fabrics
- Calculate and design textile structures related to the requirements of the textile industry
- Identify, apply and design processes according to the characteristics of the different textile structures
- Be able to develop research and innovation in the field of textile structures
- Integrate knowledge to face the complexity of the different textile structures. Distinguish, apply and design processes according to the characteristics of the different textile structures
- Identify and analyze textile structures from a technical approach

Module 2. Fashion textile product design
- Analyze and elaborate a complete fashion collection with a technical aspect
- Implement textile product specifications
- Identify and apply sources of inspiration and trends
- Apply the principles of integral design of a textile fashion item
- Elaborate sequences for the creation of a fashion textile sample book
- Design fashion textile products from an integral point of view and with specific functions

Module 3. Pattern Making Techniques in the Fashion Industry
- Analyze and develop patterns for a complete fashion collection
- Develop the scaling according to the size chart
- Determine the tools used for pattern making and cutting tools
- Examine trends and innovations in pattern making technology and methodology

03

Course Management

Thanks to TECH's relentless commitment to raising the educational level of its degrees, this program has a teaching team made up of the best specialists active in the field of Textile Product Design for the field of fashion or sports activities. These professionals are in charge of developing the didactic materials to which the student will have access throughout this program. Therefore, all the contents they will provide will be in tune with the latest developments in this area.

In order to offer you the knowledge with the greatest applicability in your professional experiences, TECH has selected the best experts in Textile Product Design to be responsible for teaching this degree"

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. Galí Pérez, Susan

- Expert in Industrial Pattern Making and Fashion
- Responsible of management and production of fashion and luxury garments collections at Yolancris
- Responsible for the management and production of fashion, accessories and children's clothing collections at Mandragora
- Designer and dressmaker of lingerie and corsetry
- Handcrafted and tailor-made dressmaker
- Designer and producer of stage costumes for theater companies
- Lecturer in courses related to Fashion
- Superior Technician in Industrial and Fashion Pattern Making
- Postgraduate in Advanced and Creative Patternmaking

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

Structure and Content

The syllabus of this program consists of 3 modules through which the student will significantly increase their knowledge of Textile Product Design, focusing especially on those destined for the fashion industry. The didactic resources that will be available throughout this program are present in a wide range of multimedia and textual materials that are highly different from each other. As a result, the engineer will enjoy a 100% online, entertaining and completely individualized teaching.
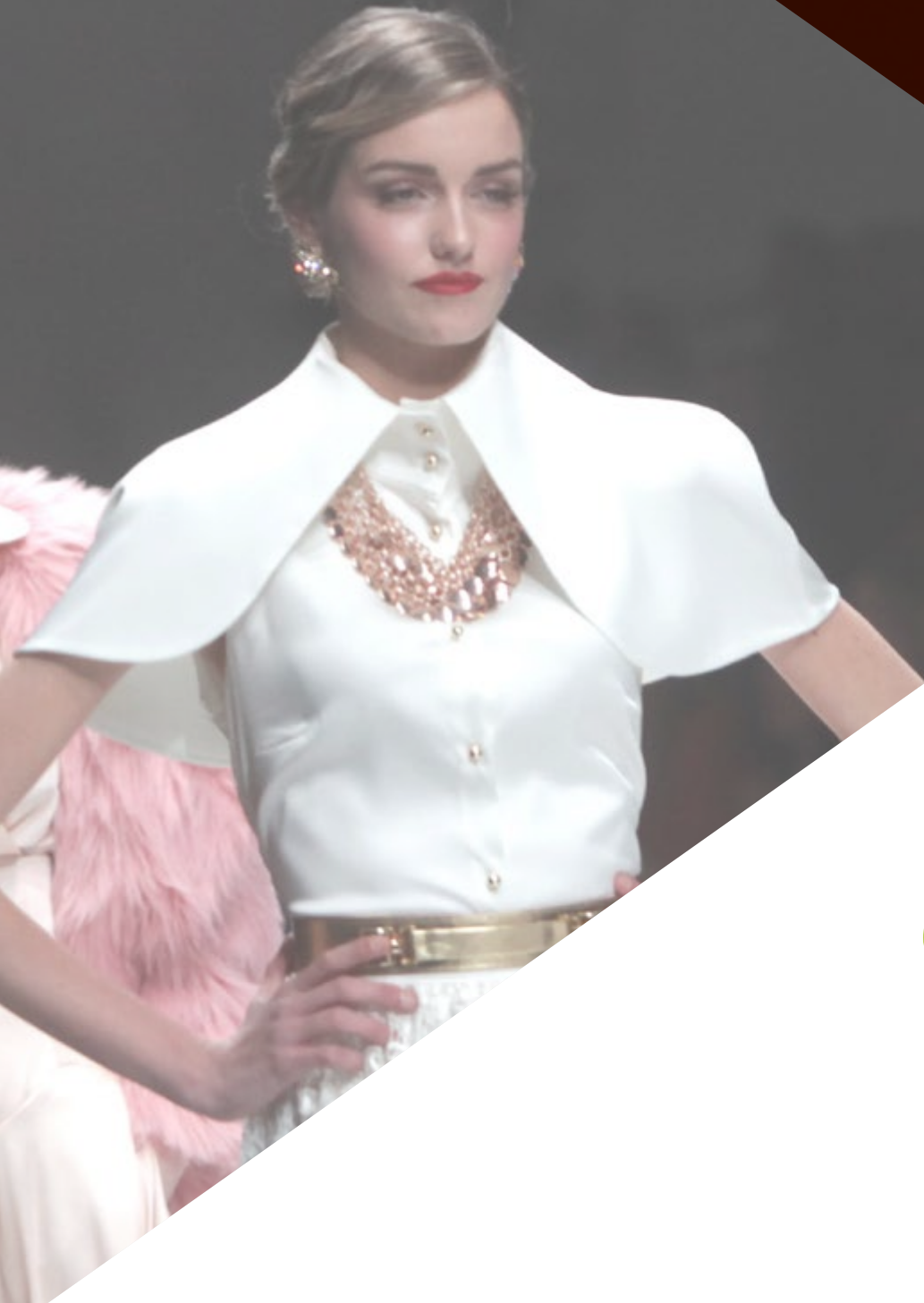
The 100% online method that characterizes this program will enable you to learn without leaving your home"

Module 1. Textile structures of openwork, mesh and non-woven fabrics

1.1. Textile structures
- 1.1.1. Basic characteristics. Technologies and methods
- 1.1.2. Mechanical characteristics. Methods and results
- 1.1.3. Chemical characteristics. Methods and results

1.2. Methods of obtaining openwork textile structures. Analysis
- 1.2.1. Looms and their design
- 1.2.2. Textile structures of openwork. Analysis and Design
- 1.2.3. Fabrics and Jacquard technology. Identification and analysis

1.3. Methods used to obtain mesh or knitted textile structures. Analysis
- 1.3.1. Processes and weaving looms. Identification and classification
- 1.3.2. Mesh fabrics. Characteristics and structural parameters
- 1.3.3. Mesh structures and range of technical applications according to the technology used. Identification

1.4. Methods used to obtain nonwoven fabrics. Analysis
- 1.4.1. Nonwoven fabrics. Key Features
- 1.4.2. Nonwoven fabric forming and processing technologies
- 1.4.3. Technical application ranges for nonwoven fabrics

1.5. Innovations in the industrial sector of weaving technologies
- 1.5.1. New machinery developments in the last decades for the design of openwork fabrics
- 1.5.2. Openwork fabrics. Multi-sectoral approach within the industry
- 1.5.3. Sustainability. Producers of openwork textiles, utilization of pre-consumer remnants

1.6. Innovations in the industrial sector of netting technologies
- 1.6.1. Changes and innovations in netting machinery
- 1.6.2. Hightech applications of mesh structures in highly complex industrial sectors
- 1.6.3. Adaptation of the weaving industries to environmental requirements

1.7. Development and technological innovation in the field of nonwovens
- 1.7.1. Development of highly specific machinery for the utilization of leftovers
- 1.7.2. The nonwovens sector as a solution to the adaptation and transformation of the textile industry
- 1.7.3. Hightech applications of nonwovens in complex and advanced technology sectors

1.8. Design of openwork textile structures
- 1.8.1. Parameter settings for designing openwork fabrics
- 1.8.2. Determination of applications for specific designs of openwork
- 1.8.3. Recirculating design of openwork textile structures
  - 1.8.3.1. Key aspects for reintroducing textiles back into the value chain

1.9. Design of textile mesh structures
- 1.9.1. Setting the parameters for designing mesh fabrics
- 1.9.2. Determination of applications for specific mesh designs
- 1.9.3. Recirculating design of textile mesh structures
  - 1.9.3.1. Key aspects for reintroducing textiles back into the value chain

1.10. Design of nonwoven fabrics
- 1.10.1. Parameter settings for designing nonwoven fabrics
- 1.10.2. Determination of applications for specific nonwoven fabrics designs
- 1.10.3. Recircular design of nonwoven fabrics
  - 1.10.3.1. Key aspects for reintroducing textiles back into the value chain
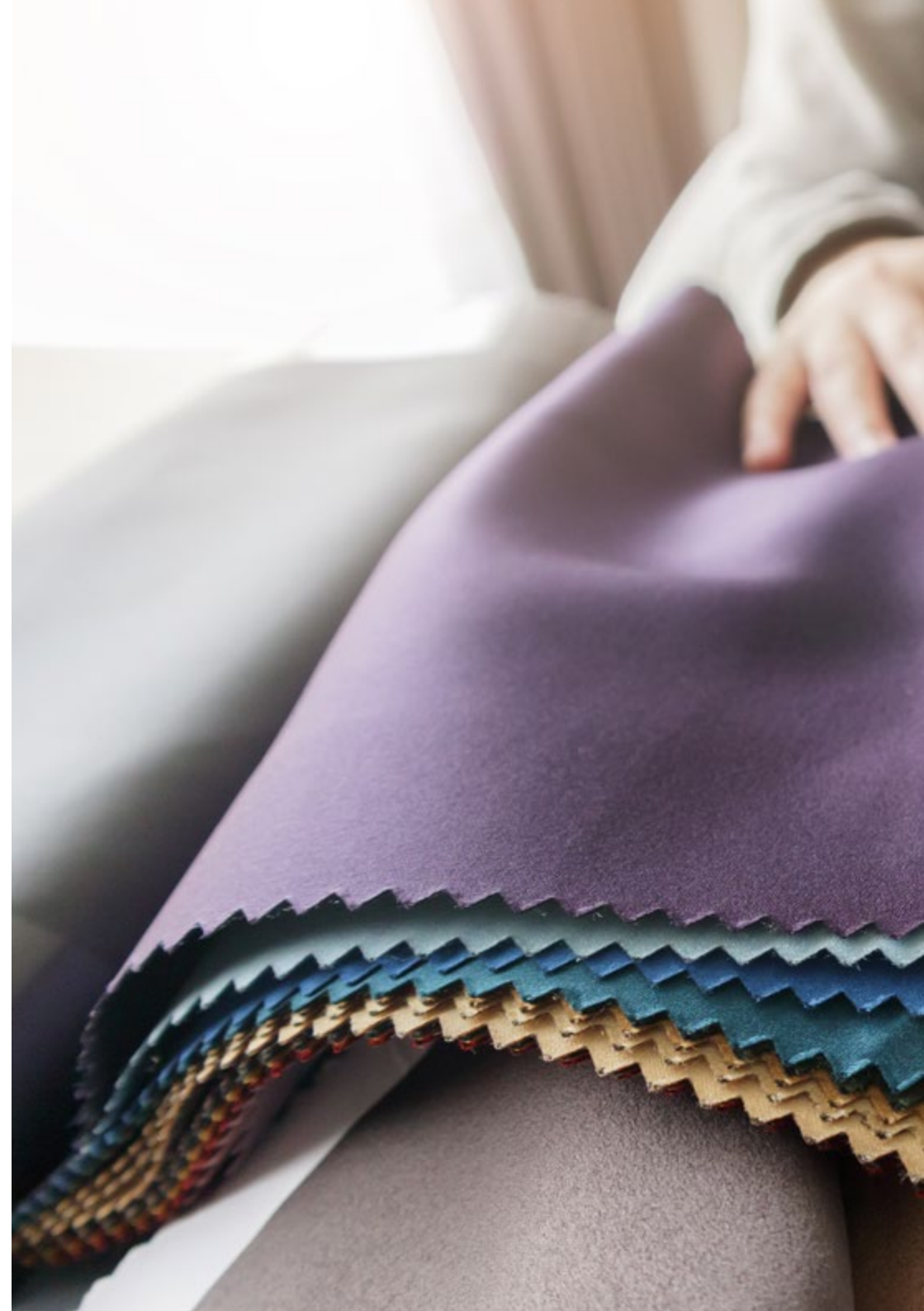
Module 2. Fashion textile product design

2.1. Textile sector change. Fashion trends
- 2.1.1. 19th Century The golden century of textiles in the West
- 2.1.2. 20th Century The decline and the influence of the world wars on fashion and the textile industry
- 2.1.3. 21St Century Globalization and the evolution of the textile sector. Limitations and new adjacent challenges

2.2. Fashion Advanced methods
- 2.2.1. Western vision of fashion
- 2.2.2. Breaking stereotypes and transgression. Openness to new methods and fashion concepts
- 2.2.3. 21st century societies and the adaptability of fashion to new customs and uses

2.3. Sociology of fashion
- 2.3.1. The role of fashion in society
- 2.3.2. Contributions of fashion to human behavior
- 2.3.3. The role of fashion as an agent of social stratification

Module 3. Pattern Making Techniques in the Fashion Industry

3.1. Pattern-making methods

   3.1.1. Pattern making on mannequins. Tailor-made pattern making

   3.1.2. Industrial pattern making. Pattern making techniques according to different academies

   3.1.3. Specific pattern making. Corsetry, tailoring, lingerie and knitwear

3.2. Pattern making techniques on mannequins

   3.2.1. Elaboration of patterns according to the Moulage technique

   3.2.2. Pattern making according to Deppari's technique

   3.2.3. Pattern making according to the Eometric Technique

3.3. Men's industrial pattern making

   3.3.1. Determination of measurements and distribution of sizes according to size charts

   3.3.2. Elaboration of basic patterns: body, sleeves, pants and outerwear

   3.3.3. Transformation and industrialization techniques of male patterns

3.4. Industrial pattern making for women

   3.4.1. Determination of measurements and distribution of sizes according to size charts

   3.4.2. Elaboration of basic patterns: body, sleeves, skirt, pants and outerwear

   3.4.3. Techniques of transformation and industrialization of female patterns

3.5. Industrial pattern making for children

   3.5.1. Determination of measurements and distribution of sizes according to size charts

   3.5.2. Elaboration of basic patterns for babies and children from 0 to 12 years old

   3.5.3. Techniques for the transformation and industrialization of children's patterns

3.6. Digitalization and scaling of patterns

   3.6.1. Automatic pattern digitizing systems

   3.6.2. Manual and industrial systems for pattern scaling

   3.6.3. Calculation and distribution of measurements in the standard scaling process

3.7. Sizing theory

   3.7.1. Sizing according to type of fabrics

   3.7.2. Manual and automatic methodologies for sizing

   3.7.3. Sizing calculation according to fabric performance parameters

Get an enjoyable and effective learning experience through didactic formats such as an explanatory video or an interactive summary"

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%

Certificate

The Postgraduate Diploma in Textile Product Design guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This program will allow you to obtain your **Postgraduate Diploma in Textile Product Design** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Textile Product Design**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**

tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Diploma in Textile Product Design

This is a program of 450 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

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 Global University will make the necessary arrangements to obtain it, at an additional cost.

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