



# Postgraduate Certificate Textile Printing Methods

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

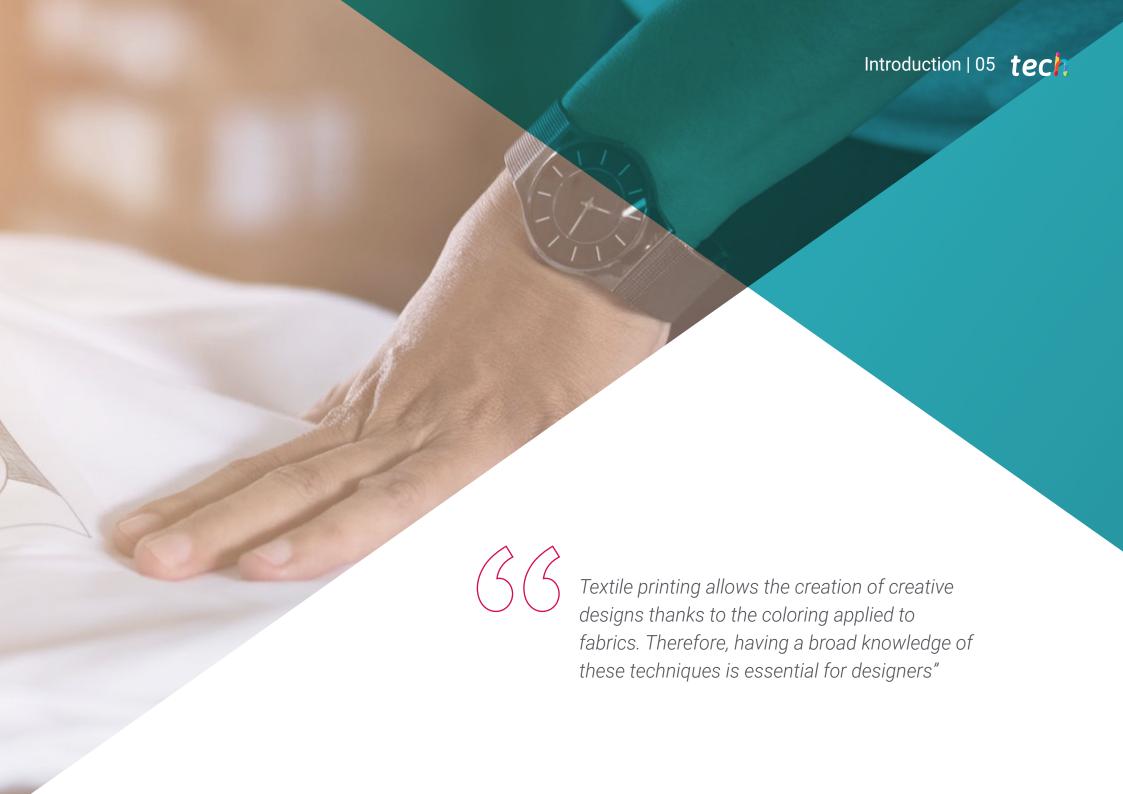
Website: www.techtitute.com/us/design/postgraduate-certificate/postgraduate-certificate-textile-printing-methods

# Index

01	02			
Introduction	Objectives			
p.	4	p. 8		
03	04		05	
Structure and Content	Methodology		Certificate	
p. 1	2	p. 16		p. 2

# 01 Introduction

The new textile printing methods have favored the appearance of fabrics of higher quality and durability, which will allow the new designs to remain as new for much longer, maintaining those colors that seem original. Therefore, it is of great value for the designer to know which are the main techniques in this field, with the aim of being able to select the most appropriate for their creations, offering the public innovative designs and elaborated with the most avant-garde methods. Undoubtedly, with this TECH program, students will be up to date in this field, reaching the excellence that professionals in this industry should seek.



# tech 06 | Introduction

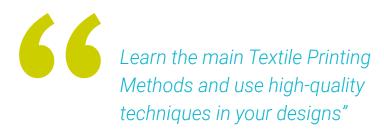
Delving into Textile Printing Methods is of great interest to fashion designers, both for those who are entering this field for the first time, as well as for those who have extensive experience in the industry, but wish to update their knowledge. This is due to the appearance of new methods that favor the dyeing of fabrics, giving them greater quality and durability. Undoubtedly, a designer who has a great knowledge in this field will have an extra value to bring to their work and, therefore, will be better able to develop professionally successfully, making their designs known and acquired by the public.

To improve the knowledge of these professionals in this field, TECH has created a program of high academic level, which includes the latest information on the subject. Specifically, the syllabus ranges from the history of printing, dyeing, pretreatments, machinery, color and natural dyes to quality controls in dyed textiles, among other topics of great interest and relevance in this field.

In short, TECH aims to meet the high specialization objective demanded by fashion designers, who are looking for high quality programs to improve their skills and offer users garments that will become indispensable for their closet. And, to achieve this goal, it offers students a cutting-edge program adapted to the latest developments in the industry, with an absolutely current curriculum developed by experienced professionals willing to put all their knowledge at the disposal of their students. It should be noted that, being a 100% online Postgraduate Certificate, students will not be conditioned by fixed schedules or the need to move to another physical location, but will be able to access all the contents at any time of the day, balancing their work and personal life with their academic one.

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

- Practical cases presented by experts in fashion
- 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 self-assessment can be used to improve learning
- Special emphasis on innovative methodologies in Textile Printing Methods
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable electronic device with an Internet connection





The program's teaching staff includes professionals from the fashion industry, who contribute with their work experience, as well as renowned specialists from leading companies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will allow professionals to learn in a contextual and situated learning environment, i.e., a simulated environment that will provide immersive specialization for real situations.

The design of this program focuses on Problem-Based Learning, by means of which professionals must try to solve the different professional practice situations that are presented to them throughout the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

TECH provides you with a multitude of didactics resources that will be indispensable to improve your knowledge in this field.

Study with a comprehensive theoretical and practical content, which will allow you to specialize in a short period of time.







# tech 10 | Objectives



# **General Objectives**

- Obtain a detailed knowledge of fashion design that will be relevant to the work of professionals who wish to develop in this current field
- Be able to design successful fashion projects
- Know all the processes for textile printing, from the most traditional to the most innovative techniques



Achieve your academic objectives thanks to this very complete TECH program"





# **Specific Objectives**

- Know the most important textile printing techniques
- Differentiate the suitable and specific medium for each printing technique
- Analyze the possible technical problems that may arise when printing on a given design
- Look for practical, methodological and alternative solutions that allow textile printing as a design resource
- Promote design resources and sources



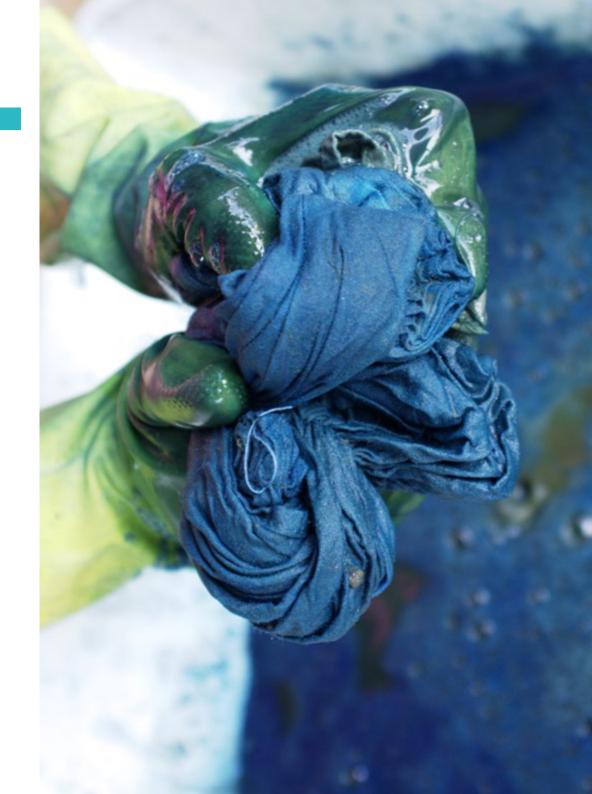




# tech 14 | Structure and Content

## **Module 1.** Textile Printing Methods

- 1.1. History of Printing
  - 1.1.1. History of Printing
  - 1.1.2. Evolution of Printings
  - 1.1.3. Printing Systems
- 1.2. Previous Treatment
  - 1.2.1. Gassing
  - 1.2.2. Thermosetting
  - 1.2.3. De-gumming
  - 1.2.4. Scouring
  - 1.2.5. Bleaching
  - 1.2.6. Mercerizing
  - 1.2.7. Antipilling
  - 1.2.8. Carbonizing
  - 1.2.9. Decorticated
  - 1.2.10. Washing
  - 1.2.11. Hydroextraction
  - 1.2.12. Drying
  - 1.2.13. Opening of Tubular Knitwear
- 1.3. Dye
  - 1.3.1. Discontinuous Dyeing
  - 1.3.2. Continuous Dyeing
  - 1.3.3. Defects of a Bad Dyeing
- 1.4. Machinery
  - 1.4.1. Discontinuous Processes
  - 1.4.2. Dyeing with Impregnation in Foulard (PAD)
  - 1.4.3. Semi-Continuous Processes
- 1.5. Inputs
  - 1.5.1. Water
  - 1.5.2. Chemicals
  - 1.5.3. Auxiliary Products
  - 1.5.4. Dyes
  - 1.5.5. Enzymes
  - 1.5.6. Optical Brighteners



#### 1.6. Examples of Processes

- 1.6.1. Cotton Processing
- 1.6.2. Polyester Processing
- 1.6.3. Wool Dyeing
- 1.6.4. Dyeing of Acrylic Fibers
- 1.6.5. Optical Brightening

#### 1.7. Color

- 1.7.1. Study of Color
- 1.7.2. Modification of Color Attributes
- 1.7.3. Instruments to Measure Color

#### 1.8. Quality Control in Dyed Textiles

- 1.8.1. Visual Evaluation of Color
- 1.8.2. Evaluation of Color Difference
- 1.8.3. Spectrophotometry
- 1.8.4. Dye Bath Control
- 1.8.5. Color Fastness

#### 1.9. Natural Dyes

- 1.9.1. Historical Background of Natural Dyes
- 1.9.2. Natural Dyes
- 1.9.3. Techniques for the Application of Natural Dyes on Different Materials and Surfaces
- 1.9.4. Reserve Techniques
- 1.9.5. The P.H (Potential Hydrogen)
- 1.9.6. Materials and Tools for the Natural Dyeing Workshop
- 1.9.7. Techniques for Extracting Pigmentation
- 1.9.8. Preservation of Dyes
- 1.9.9. Bleaches
- 1.9.10. Fixatives or Mordants
- 1.9.11. Toners
- 1.9.12. Dyeing Plants

#### 1.10. Printing

- 1.10.1. Stamping Techniques
- 1.10.2. Stamping Materials
- 1.10.3. Stamping Styles
- 1.10.4. Embroidery and Fabric manipulation
- 1.10.5. Embroidery Techniques
- 1.10.6. Ornaments





# tech 18 | Methodology

# 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

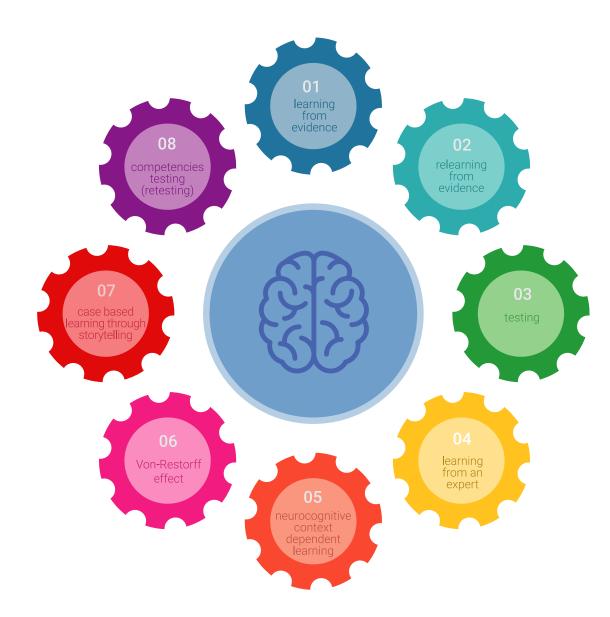
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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.



# Methodology | 21 tech

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.



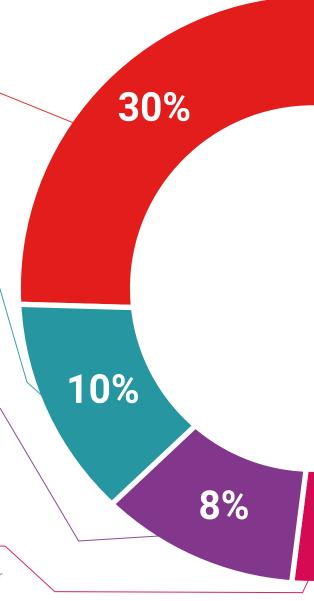
## **Practising Skills and Abilities**

They will carry out activities to develop specific competencies and skills in each thematic 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.

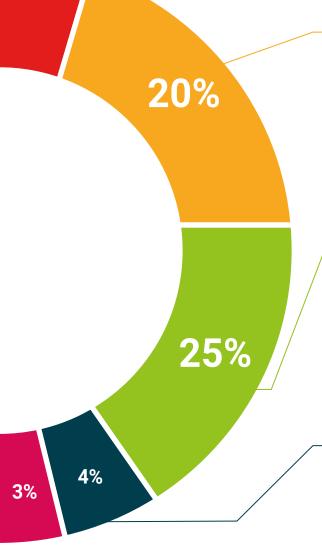


This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

### **Testing & Retesting**

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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.







# tech 26 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Textile Printing Methods** 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 Certificate in Textile Printing Methods

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



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

#### Postgraduate Certificate in Textile Printing Methods

This is a program of 180 hours of duration equivalent to 6 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



<sup>\*</sup>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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health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment



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