

# Postgraduate Diploma Textile Printing



## Postgraduate Diploma Textile Printing

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

Website: [www.techtitute.com/us/design/postgraduate-diploma/postgraduate-diploma-textile-printing](http://www.techtitute.com/us/design/postgraduate-diploma/postgraduate-diploma-textile-printing)

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# 01

# Introduction

Of the different techniques that exist in textile design, printing is one of the most used in this industry. It is highly sought after by companies in the sector, which are looking for highly specialized professionals. But due to the large number of printing modes, it is difficult to master this procedure, so a specific learning process is needed to help designers learn this technique to perfection. This program offers its students all the knowledge required to successfully perform different types of printing, so that they can apply them in their work environments.







“

*Printing is the most common and sought after technique in textile design. Enroll now and discover how your career can progress immediately”*

The textile design industry comprises a series of economic and professional sectors, techniques and raw materials that, together, involve an enormous amount of material and human resources. Therefore, each method, each material and each job requires experts who are perfectly familiar with its specific characteristics.

One of the most important techniques in this industry is printing. Although it is often referred to as a single procedure, it actually brings together many types, each with its own details and differences. Therefore, in order to be able to adapt to what the industry and companies demand, it is necessary to know them all.

Because of this, this Postgraduate Diploma in Textile Printing offers its students specific knowledge to understand and manage all the pre-printing treatments that can be performed, what machinery is used, how color is applied for dyeing, what materials are used throughout the process and how to make different decorative designs.

This **Postgraduate Diploma in Textile Printing** contains the most complete and up-to-date program on the market. Its most notable features are:

- ◆ Practical cases presented by experts in fashion and printing
- ◆ Special emphasis on specific knowledge in textile printing and design in order to provide students with a comprehensive learning experience
- ◆ Practical exercises where self-assessment can be used to improve learning
- ◆ Use of innovative teaching 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



*Large textile companies  
are looking for printing  
specialists: you could  
be one of them”*

“

*Most of the garments you can find in the big fashion chains have undergone a printing process: it is one of the most important techniques and you could specialize in it”*

The program's teaching staff includes professionals from the sector who contribute the experience of their work to this program, in addition to recognized specialists from prestigious reference societies and 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 learning 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 throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Take a big step in your career in the textile industry with this program.*

*The textile industry demands professionals with extensive knowledge who are proficient in a wide range of techniques. Study this program and become an essential part of your company.*





# 02 Objectives

The main objective of this Postgraduate Diploma in Textile Printing is to provide students with the necessary skills to carry out all types of printing using different materials and applying them to different styles of fabrics. Therefore, students will be able to become specialists in one of the most recurrent and sought-after procedures in the fashion design industry. At the end of the program, therefore, they will have the indispensable knowledge to work in the industry performing this technique.







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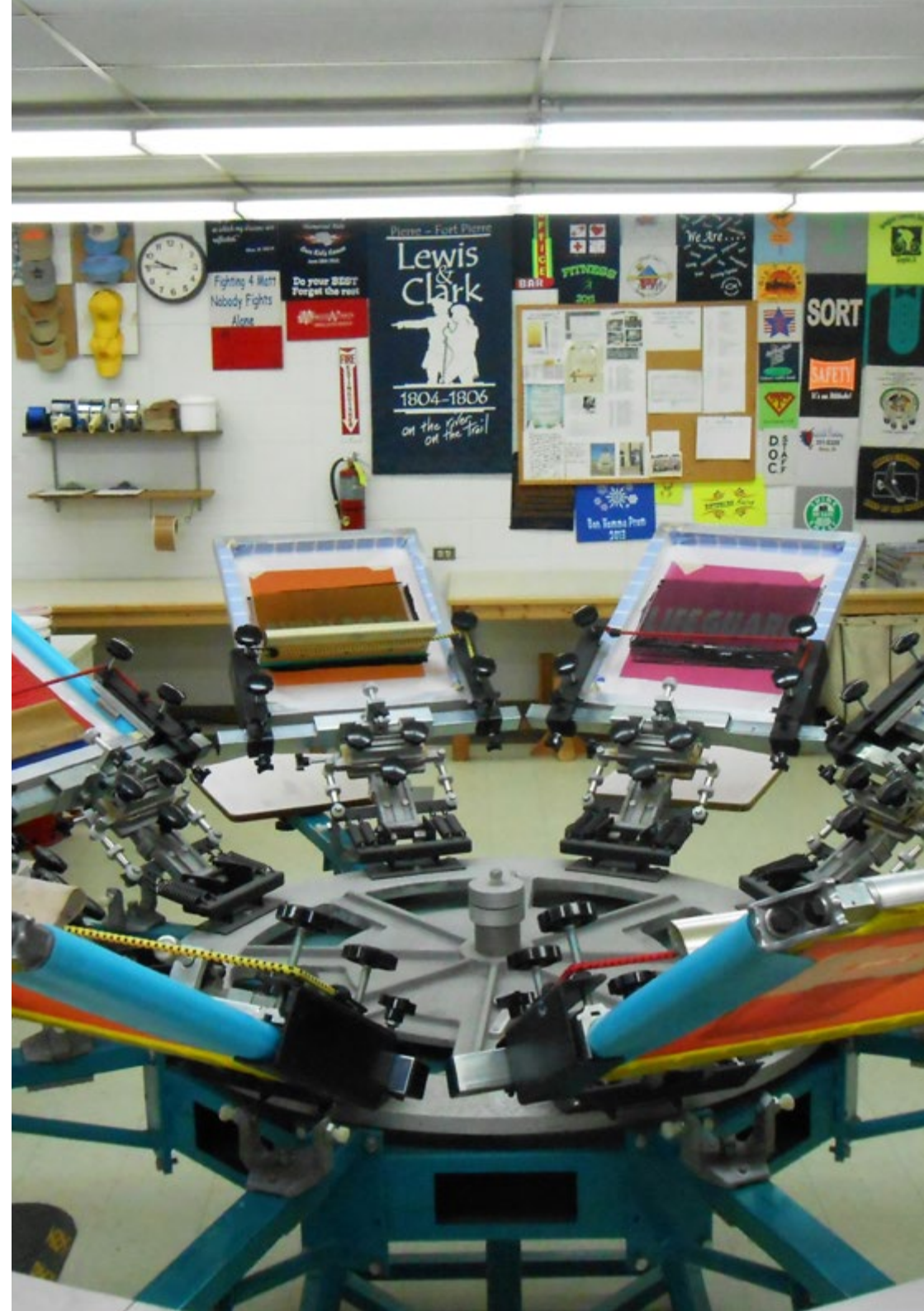
*Achieve all your goals thanks to this  
Postgraduate Diploma”*





## General Objectives

- ◆ Obtain detailed knowledge of the history of fashion, which will be relevant to the work of professionals who wish to develop their careers in this sector today
- ◆ Be able to design successful fashion projects
- ◆ Obtain in-depth knowledge of the different characteristics of colors, that will be of great use in applying the most appropriate ones to each garment
- ◆ Obtain detailed knowledge of the history of fashion, which will be relevant to the work of professionals who wish to develop their careers in this sector today
- ◆ Create attractive fashion designs
- ◆ Use digital tools for fashion design, from the creation of sketches to image retouching
- ◆ Obtain detailed knowledge of the history of fashion, which will be relevant to the work of professionals who wish to develop their careers in this sector today
- ◆ Be able to design successful fashion projects
- ◆ Know all the processes for textile printing, from the most traditional to the most innovative techniques





## Specific Objectives

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### Module 1. Colorimetry

- ◆ Gain theoretical and practical knowledge and understanding of the phenomenon of color in its different fields
- ◆ Know the different tools and updated resources for the use of color in design and to handle the different means of color application, both manual and digital, in the design process
- ◆ Understand how to apply color by taking advantage of chromatic resources and international standard dimensions to achieve specific objectives in design projects
- ◆ Analyze and differentiate the main laws of visual perception with the nomenclature and language of the specialty
- ◆ Understand the basic schemes of compositional arrangement in design

### Module 2. Digital Tools in Design

- ◆ Know the most important software in the current context of design
- ◆ Master the vocabulary, methodologies and theoretical and practical content of digital imaging and vector imaging
- ◆ Understand image retouching and manipulation software and develop the skills required for its use
- ◆ Manage vector drawing software and develop the skills required for its use
- ◆ Understand editorial design software and develop the skills to create final artwork of your own

### Module 3. Textile Printing Methods

- ◆ Know the most important textile printing techniques
- ◆ Differentiate between the ideal and specific media for each printing technique
- ◆ Analyze the possible technical problems that printing can cause on a certain design
- ◆ Search for practical, methodological and alternative solutions that allow for textile printing as a design resource
- ◆ Provide design sources and resources



*When you finish this`program,  
you will work with brands and  
designers that you admire”*

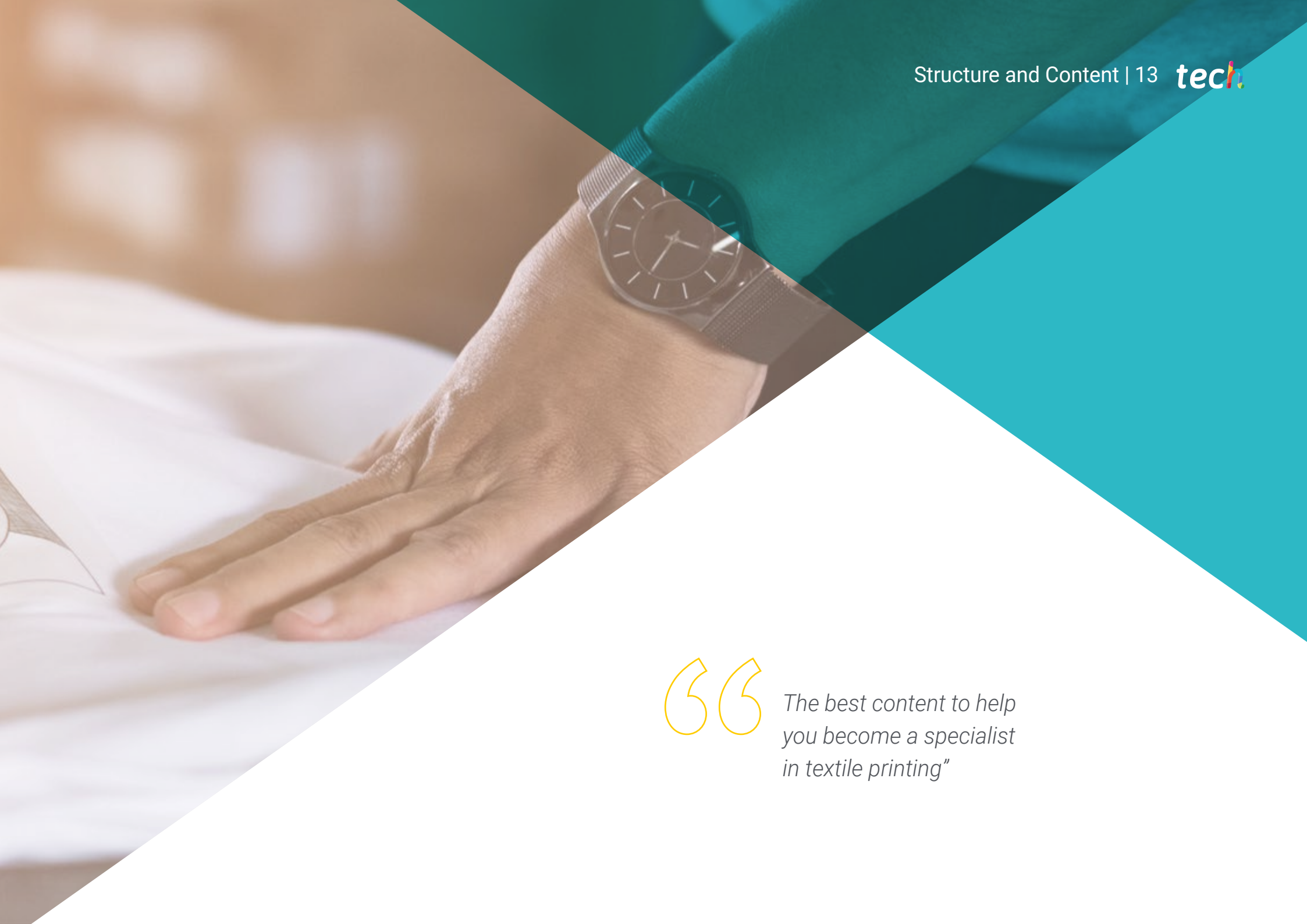


# 03

## Structure and Content

This program has been designed by leading experts in textile printing and consists of 3 modules, each divided into 10 topics, through which students will be able to learn issues such as color theory, so they can apply it to their creations, digital design tools with which to plan their creations and printing techniques themselves, as well as the materials to be used, machinery and the use of inks.



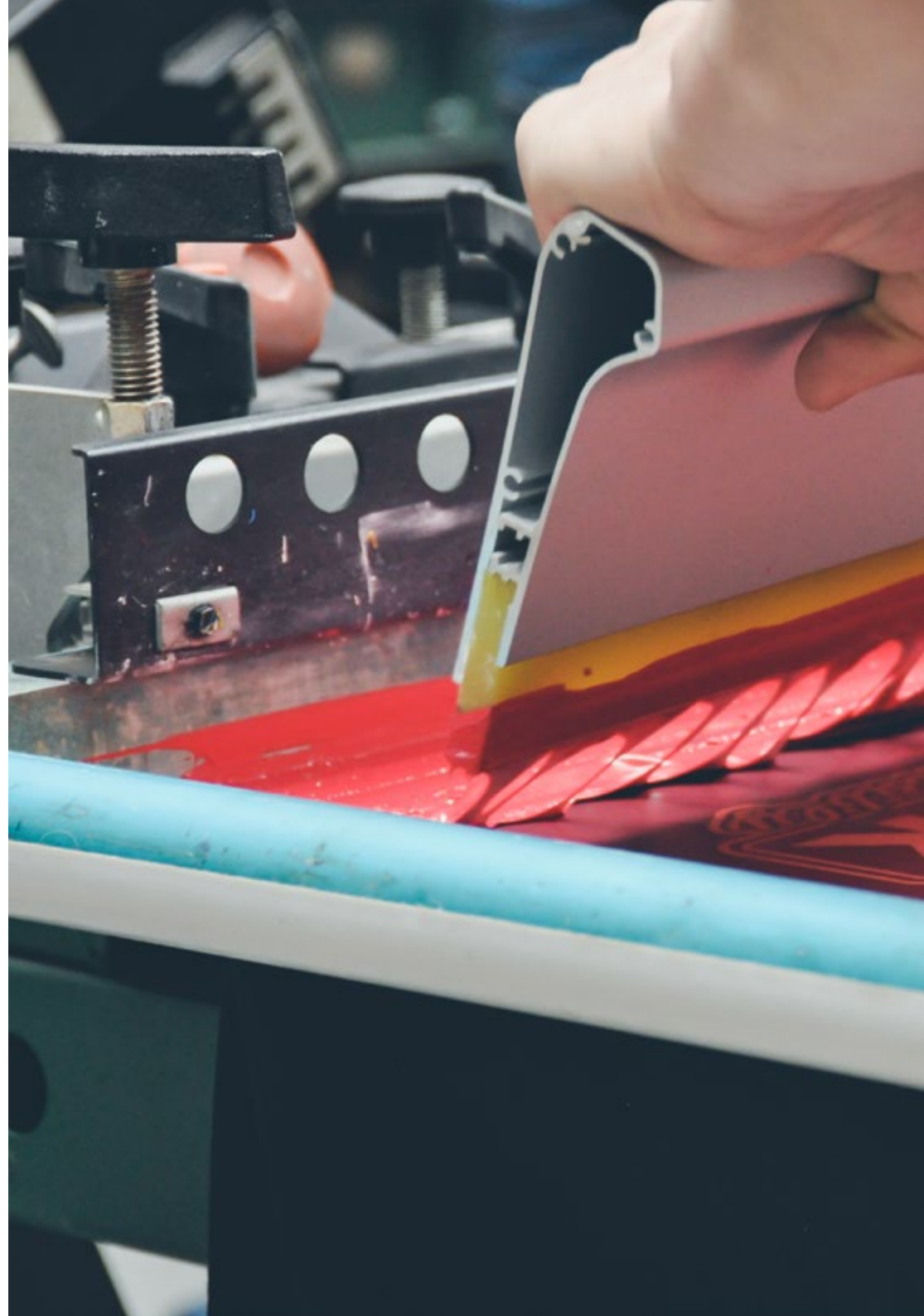


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*The best content to help  
you become a specialist  
in textile printing”*

## Module 1. Colorimetry

- 1.1. Color Theory
  - 1.1.1. Perception of Form and Space
  - 1.1.2. Color. Definition
  - 1.1.3. Color perception
  - 1.1.4. Color Properties or Dimensions
  - 1.1.5. Color Classification
- 1.2. Color Perception
  - 1.2.1. The Human Eye
  - 1.2.2. Color Vision
  - 1.2.3. Variables in Color Perception
  - 1.2.4. Non-Visual Color Perception
- 1.3. Color Modeling and Standardization
  - 1.3.1. History of Color
    - 1.3.1.1. First Theories
    - 1.3.1.2. Leonardo Da Vinci
    - 1.3.1.3. Isaac Newton
    - 1.3.1.4. Moses Harris
    - 1.3.1.5. Goethe
    - 1.3.1.6. Runge
    - 1.3.1.7. Chevreul
    - 1.3.1.8. Rood
    - 1.3.1.9. Munsell
    - 1.3.1.10. Ostwald







- 1.3.2. Visual Perception
  - 1.3.2.1. Absorption and Reflection
  - 1.3.2.2. Pigment Molecules
- 1.3.3. Color Attributes
  - 1.3.3.1. Tone
  - 1.3.3.2. Luminance
  - 1.3.3.3. Saturation
- 1.3.4. Warm and Cool Colors
- 1.3.5. Harmony in Colors
- 1.3.6. Contrast
- 1.3.7. Color Effects
  - 1.3.7.1. Size
  - 1.3.7.2. Transparency, Weight and Mass
- 1.4. Semiotics and Semantics of Color
  - 1.4.1. Semiotics of Color
  - 1.4.2. Color Description
  - 1.4.3. Colors: Material, Light, Perceptions, Sensations.
  - 1.4.4. Color and Material
  - 1.4.5. The Truth of a Color
  - 1.4.6. Color perception
  - 1.4.7. The Weight of a Color
  - 1.4.8. The Color Dictionary
- 1.5. Color in Design
  - 1.5.1. Chromatic Trends
  - 1.5.2. Graphic Design
  - 1.5.3. Interior Design
  - 1.5.4. Architecture
  - 1.5.5. Landscape Design
  - 1.5.6. Fashion Design

1.6. Composition

- 1.6.1. General Aspects
  - 1.6.1.1. Codes Used
  - 1.6.1.2. Originality and Banality
  - 1.6.1.3. Degree of Iconicity and Abstraction
- 1.6.2. Configurational Organization of the Image: Relation between Background and Figure
- 1.6.3. Configurational Organization of the Image: Gestalt Laws
- 1.6.4. Configurational Organization of the Image: Systems of Spatial Organization
  - 1.6.4.1. Balance: Static or Dynamic. Focal or Orthogonal System
  - 1.6.4.2. Proportion
  - 1.6.4.3. Symmetry
  - 1.6.4.4. Movement and Rhythm
- 1.6.5. Field Study

1.7. Image Functions

- 1.7.1. Representative
  - 1.7.1.1. Cartographic
  - 1.7.1.2. Scientist
  - 1.7.1.3. Architectural
  - 1.7.1.4. Projectual

1.7.2. Persuasive

1.7.3. Artistic

1.8. Color Psychology

- 1.8.1. Warm Colors and Cool Colors
- 1.8.2. Physiological Effects
- 1.8.3. Color Symbolism
- 1.8.4. Personal Color Preferences
- 1.8.5. Emotional Effects
- 1.8.6. Local Color and Expressive

1.9. The Meaning of Color

- 1.9.1. Blue
- 1.9.2. Red
- 1.9.3. Yellow
- 1.9.4. Green
- 1.9.5. Black
- 1.9.6. White
- 1.9.7. Orange
- 1.9.8. Violet
- 1.9.9. Pink
- 1.9.10. Gold
- 1.9.11. Silver
- 1.9.12. Brown
- 1.9.13. Gray

1.10. Color Use

- 1.10.1. Sources of Dyes and Pigments
- 1.10.2. Lighting
- 1.10.3. Mixture of Oils and Acrylics
- 1.10.4. Glazed Ceramics
- 1.10.5. Colored Glass
- 1.10.6. Color Printing
- 1.10.7. Color Photography

## Module 2. Digital Tools in Design

- 2.1. Introduction to Digital Imaging
  - 2.1.1. ICT
  - 2.1.2. Description of Technologies
  - 2.1.3. Commands
- 2.2. Vector image. Working with Objects
  - 2.2.1. Selection Tools
  - 2.2.2. Grouping
  - 2.2.3. Align and Distribute
  - 2.2.4. Intelligent Guides
  - 2.2.5. Symbolism
  - 2.2.6. Transform
  - 2.2.7. Distortion
  - 2.2.8. Enclosures
  - 2.2.9. Tracehunter
  - 2.2.10. Compound Forms
  - 2.2.11. Compound Plots
  - 2.2.12. Cutting, Splitting and Separating
- 2.3. Vector image. Color
  - 2.3.1. Color Modes
  - 2.3.2. Dropper Tool
  - 2.3.3. Samples
  - 2.3.4. Gradients
  - 2.3.5. Motif Filling
  - 2.3.6. Appearance Panel
  - 2.3.7. Attributes
- 2.4. Vector image. Advanced Editing
  - 2.4.1. Gradient Mesh
  - 2.4.2. Transparency Panel
  - 2.4.3. Fusion Modes
  - 2.4.4. Interactive Tracing
  - 2.4.5. Clipping Masks
  - 2.4.6. Text:
- 2.5. Image Bitmap. The Layers
  - 2.5.1. Creation
  - 2.5.2. Liaison
  - 2.5.3. Transformation
  - 2.5.4. Grouping
  - 2.5.5. Adjustment Layers
- 2.6. Image Bitmap. Selections, Masks and Channels
  - 2.6.1. Frame Selection Tool
  - 2.6.2. Lasso Selection Tool
  - 2.6.3. Magic Wand Tool
  - 2.6.4. Menu Selections. Color Range
  - 2.6.5. Channels
  - 2.6.6. Mask Retouching
  - 2.6.7. Clipping Masks
  - 2.6.8. Vector Masks
- 2.7. Image Bitmap. Blending Modes and Layer Styles
  - 2.7.1. Layer Styles
  - 2.7.2. Lens opacity
  - 2.7.3. Layer Style Options
  - 2.7.4. Fusion Modes
  - 2.7.5. Examples of Fusion Modes
- 2.8. The Editorial Project. Types and Forms
  - 2.8.1. The Editorial Project
  - 2.8.2. Typologies of the Editorial Project
  - 2.8.3. Document Creation and Configuration
- 2.9. Compositional Elements of the Editorial Project
  - 2.9.1. Master Pages
  - 2.9.2. Reticulation
  - 2.9.3. Text Integration and Composition
  - 2.9.4. Image Integration



- 2.10. Layout, Export and Printing
  - 2.10.1. Layout
    - 2.10.1.1. Photo Selection and Editing
    - 2.10.1.2. Preliminary Check
    - 2.10.1.3. Packaging.
  - 2.10.2. Export
    - 2.10.2.1. Export for Digital Media
    - 2.10.2.2. Export for Physical Media
  - 2.10.3. Print
    - 2.10.3.1. Traditional Printing
      - 2.10.3.1.1. Binding
    - 2.10.3.2. Digital Printing

### Module 3. Textile Printing Methods

- 3.1. History of Print
  - 3.1.1. History of Print
  - 3.1.2. Evolution of Prints
  - 3.1.3. Printing Systems
- 3.2. Previous Treatment
  - 3.2.1. Gassing
  - 3.2.2. Thermosetting
  - 3.2.3. Unglued
  - 3.2.4. Scouring
  - 3.2.5. Bleaching
  - 3.2.6. Mercerized
  - 3.2.7. Antipilling
  - 3.2.8. Carbonized
  - 3.2.9. Decorated
  - 3.2.10. Washing
  - 3.2.11. Hydro-Extraction
  - 3.2.12. Drying
  - 3.2.13. Opening of Tubular Knitted Fabrics



- 3.3. Dyeing
  - 3.3.1. Dyeing by Discontinuous System
  - 3.3.2. Dyeing by Continuous System
  - 3.3.3. Defects of Bad Dyeing
- 3.4. Machinery
  - 3.4.1. Discontinuous Processes
  - 3.4.2. Foulard Impregnated Dyeing
  - 3.4.3. Semi-Continuous Processes
- 3.5. Insumos
  - 3.5.1. Water
  - 3.5.2. Chemical Products
  - 3.5.3. Auxiliary Products
  - 3.5.4. Dyes
  - 3.5.5. Enzymes
  - 3.5.6. Optical Brighteners
- 3.6. Examples of Processes
  - 3.6.1. Cotton Processing
  - 3.6.2. Polyester Processing
  - 3.6.3. Wool Dyeing
  - 3.6.4. Acrylic Fiber Dyeing
  - 3.6.5. Optical Brightening
- 3.7. Color
  - 3.7.1. Color Study
  - 3.7.2. Modification of Attribute of Color
  - 3.7.3. Instruments for Measuring Color
- 3.8. Quality Control in Dyed Textiles
  - 3.8.1. Visual Assessment of Color
  - 3.8.2. Color Difference Assessment
  - 3.8.3. Spectrophotometry
  - 3.8.4. Dye Bath Control
  - 3.8.5. Solidity of Colors
- 3.9. Natural Dyes
  - 3.9.1. Historical Background of Natural Dyes
  - 3.9.2. Natural Dyes
  - 3.9.3. Techniques for the Application of Natural Dyes to Different Materials and Surfaces
  - 3.9.4. Reserve Techniques
  - 3.9.5. The HP (Hydrogen Potential)
  - 3.9.6. Materials and Tools for the Natural Dyes Workshop
  - 3.9.7. Pigment Extraction Techniques
  - 3.9.8. Dye Conservation
  - 3.9.9. Bleaches
  - 3.9.10. Fixatives or Mordants
  - 3.9.11. Intonators
  - 3.9.12. Dye Plants
- 3.10. Print
  - 3.10.1. Printing Techniques
  - 3.10.2. Materials to Print
  - 3.10.3. Styles of Print
  - 3.10.4. Embroidery and Manipulation of the Fabric
  - 3.10.5. Embroidery Techniques
  - 3.10.6. Decoration



*When you finish this program, you will be a highly-demanded professional in the industry and you will excel in your career quickly”*

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

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.



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.

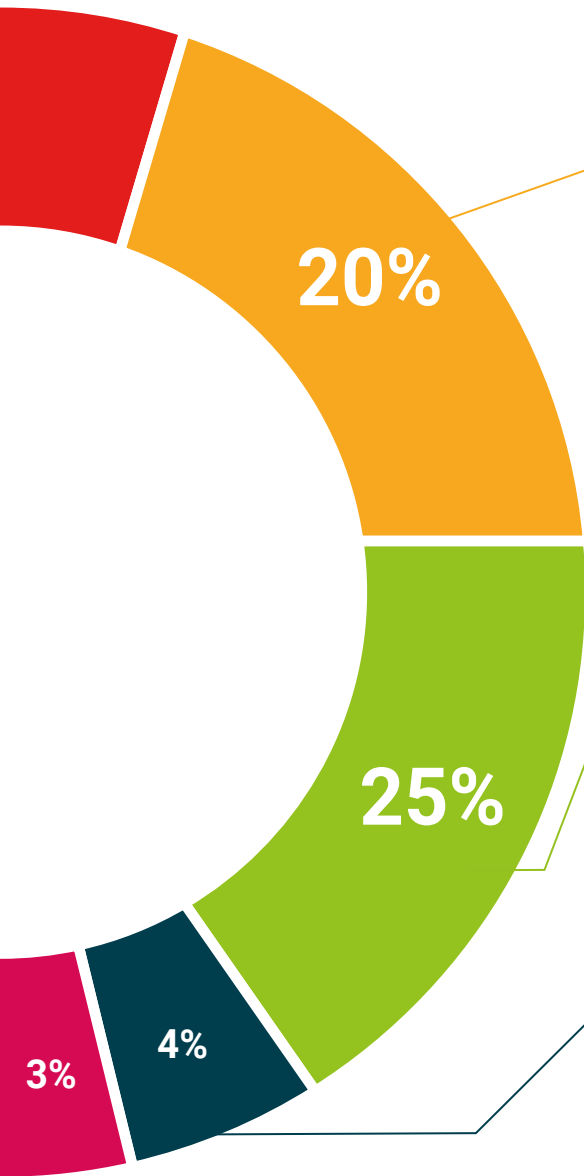


### Additional Reading

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.







#### 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 Diploma in Textile Creation guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.



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



This **Postgraduate Diploma in Textile Printing** 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 Diploma** issued by **TECH Technological University** via tracked delivery\*.

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

Title: **Postgraduate Diploma in Textile Printing**

Official N° of Hours: **450 h.**



\*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.

future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
development language  
virtual classroom



## Postgraduate Diploma Textile Printing

- » Modality: **online**
- » Duration: **6 months**
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