



# Postgraduate Diploma Creating Sustainable Fashion Collections

» 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-creating-sustainable-fashion-collections

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# tech 06 | Introduction

Around 5 billion garments are manufactured in the world each year. Doing all this work requires about 7,500 liters of water. These shocking figures have raised the alarm, inviting designers to implement some measures to combat the effect they have on the environment. From this, Sustainable Fashion was born, going from being a mere trend to an undeniable necessity.

In light of the above, this Postgraduate Diploma has been created to provide new designers with a current perspective on the fashion world. In this sense, students will learn to rethink fashion design, learning about a new supply chain that allows the creation of clothing pieces with a longer useable life. This way, Fast Fashion industry consumerism will be combated. They will also learn the difference between different textile materials, taking their origin into account.

On the other hand, this program will visualize the brand philosophy of great Sustainable Fashion designers such as Stella McCartney, who encourages reflection in each piece, using materials such as organic cotton, recycled polyester and cashmere, raffia, among others, to achieve fashion 100% conscious of the planet's needs.

At the end of this program, students will not only have a theoretical knowledge of the different fabrics and new production models, but will also be able to take on the challenge of creating a completely sustainable collection that guarantees the survival of the garments throughout the seasons.

This **Postgraduate Diploma in Creating Sustainable Fashion Collections** contains the most complete and up-to-date program on the market. The most important features include:

- The development of case studies presented by experts in Creating Sustainable Fashion Collections
- The graphic, schematic and practical contents with which they are created, gather theoretical and practical information on those disciplines that are essential for professional practice
- Practical exercises where the self-assessment process can be carried out to improve learning
- Special emphasis is placed on innovative methodologies in Creating Sustainable Fashion Collections
- 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



Opt for environmentally friendly materials and processing technology that reduces the industry's impact on the environment"



Sustainable Fashion seeks to be environmentally friendly, recycling old fabrics to make new garments"

The program's teaching staff includes professionals from the sector who contribute their work experience to this program, as well as renowned specialists from leading societies and prestigious 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 education programmed to learn 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 during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

As far as Stella McCartney is concerned, society must be responsible for its actions, taking the necessary measures to reduce fashion's impact on the environment.

Plan and create a collection that helps convey a clear message: we need to take action to conserve our planet.





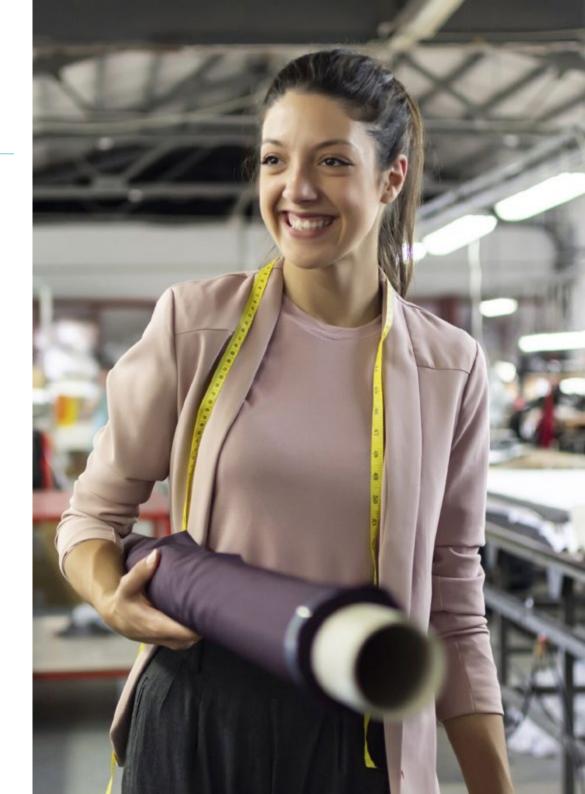


# tech 10 | Objectives



# **General Objectives**

- Obtain a detailed knowledge of fashion design and its evolution, which will be relevant to the work of professionals who wish to develop in this sector
- Create designs on paper and digital techniques that reflect that design
- Use pattern making techniques when creating garments and accessories
- Obtain a detailed knowledge of fashion design, which will be relevant to the work of professionals who wish to develop in this current field
- Design successful fashion projects
- Learn about fashion photography in order to make the best possible use of the collections created





#### **Specific Objectives**

#### Module 1. Textile Technology

- Identify different types of textile fibers
- Select a textile material for a specific design based on its properties
- Understand staining techniques
- Master fabric ties
- Know the properties of the different materials and the techniques for their manipulation and elaboration
- Know the main textile printing techniques

#### Module 2. Fashion Design

- Understand the different working methodologies applied to fashion design
- Develop creative procedures that assist in fashion design work
- Introduce students to the necessary technical procedures to create a fashion project
- Know the different means of diffusion and communication of fashion products
- Understand the process of fashion projects in all its phases
- Acquire resources for visual presentation and communication of fashion projects

#### Module 3. Fashion Sustainability

- Understand that the current human lifestyle makes us unsustainable consumers
- Acquire and incorporate environmental and sustainability criteria in the design conception and development phase
- Learn about preventive and appropriate measures to reduce environmental impact
- Use sustainability as a requirement in the design methodology
- Provide students with natural and environmentally friendly sources of inspiration



Be part of a global movement that strives to produce and consume fashion in a sustainable way"

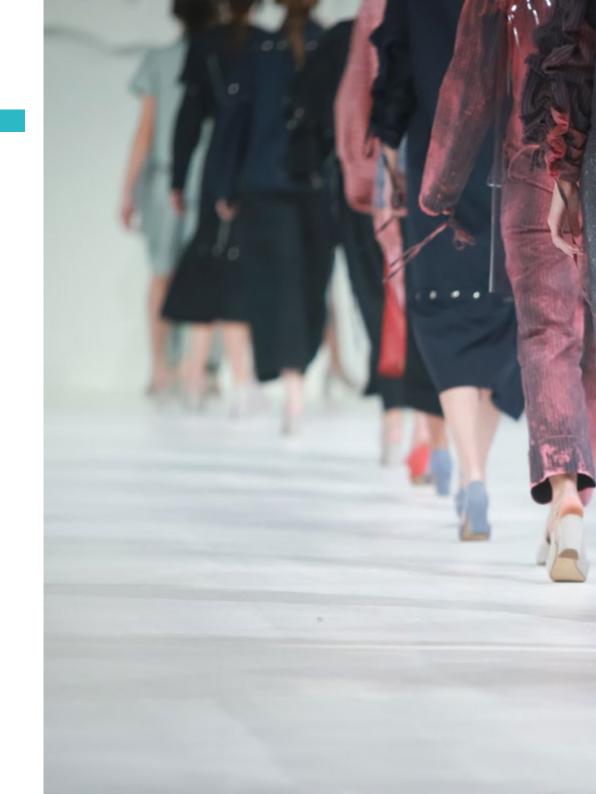




# tech 14 | Structure and Content

#### Module 1. Textile Technology

- 1.1. Introduction to Textiles
  - 1.1.1. History of Textiles
  - 1.1.2. Textiles Over Time
  - 1.1.3. Traditional Textile Machinery
  - 1.1.4. Importance of Fashion Textiles
  - 1.1.5. Symbology Used in Textile Materials
  - 1.1.6. Fabric Technical Data Sheet
- 1.2. Textile Materials
  - 1.2.1. Classification of Textile Fibers
    - 1.2.1.1. Natural Fibers
    - 1.2.1.2. Artificial Fibers
    - 1.2.1.3. Synthetic Fibers
  - 1.2.2. Properties of Fibers
  - 1.2.3. Textile Fibers Recognition
- 1.3. Threads
  - 1.3.1. Basic Ties
  - 1.3.2. General Characteristics of Thread
  - 1.3.3. Thread Classification
  - 1.3.4. Spinning Phases
  - 1.3.5. Machinery
  - 1.3.6. Thread Numbering Systems
- 1.4. Lace Textiles
  - 1.4.1. Lace Fabrics
  - 1.4.2. Phased Ties
  - 1.4.3. Ties in Lace Fabric
  - 1.4.4. Tie Classification
  - 1.4.5. Types of Ties
  - 1.4.6. Types of Lace Fabric
  - 1.4.7. Weaving Lace
  - 1.4.8. Special Weaving Machines





# Structure and Content | 15 tech

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- 1.5.1. History of Knitting
- 1.5.2. Classification
- 1.5.3. Typology
- 1.5.4. Comparison between Flat and Knitted Fabrics
- 1.5.5. Characteristics and Behavior according to its Design
- 1.5.6. Technology and Machinery for its Production

#### 1.6. Textile Finishes

- 1.6.1. Physical Finishes
- 1.6.2. Chemical Finishes
- 1.6.3. Fabric Resistance
- 1.6.4. Pilling
- 1.6.5. Dimensional Changes of Fabrics

#### 1.7. Dyeing

- 1.7.1. Pre-treatments
- 1.7.2. Dyeing
- 1.7.3. Machinery
- 1.7.4. Materials
- 1.7.5. Optical Bleaching
- 1.7.6. Color

#### 1.8. Printing

- 1.8.1. Direct Printing
  - 1.8.1.1. Block Printing
  - 1.8.1.2. Roller Printing
  - 1.8.1.3. Heat Transfer Printing
  - 1.8.1.4. Screen Printing
  - 1.8.1.5. Warp Printing
  - 1.8.1.6. Corrosion Printing

#### 1.8.2. Reserve Printing

- 1.8.2.1. Batik
- 1.8.2.2. Tie-Dyeing
- 1.8.3. Other Types of Printing
  - 1.8.3.1. Differential Printing
  - 1.8.3.2. Electrostatic Printing

### tech 16 | Structure and Content

- 1.9. Technical and Intelligent Fabrics
  - 1.9.1. Definition and Analysis
  - 1.9.2. Textiles Applications
  - 1.9.3. New Materials and Technologies
- 1.10. Fur, Leather and Others
  - 1.10.1. Fur and Leather
  - 1.10.2. Leather Classification
  - 1.10.3. Tanning Process
  - 1.10.4. Post-Tanning Treatment
  - 1.10.5. Technological Process of Tannery
  - 1.10.6. Preservation Methods
  - 1.10.7. Synthetic Leather
  - 1.10.8. Debate: Natural or Faux Fur

#### Module 2. Fashion Design

- 2.1. Fashion Design Methodology
  - 2.1.1. Concept Fashion Projects
  - 2.1.2. Design Methodology Applied to Fashion
  - 2.1.3. Research Methods in Fashion Design
  - 2.1.4. Briefing
  - 2.1.5. Documentation
  - 2.1.6. Current Fashion Analysis
  - 2.1.7. Idea Formation
- 2.2. Creative Procedures Applied to Fashion Design
  - 2.2.1. Field Notebooks
  - 2.2.2. Moodboard
  - 2.2.3. Graphic Research
  - 2.2.4. Creative Techniques
- 2.3. Referrals
  - 2.3.1. Fashion Retail
  - 2.3.2. Creative Fashion
  - 2.3.3. Performing Arts Fashion
  - 2.3.4. Corporate Fashion

- 2.4. Collection Concept
  - 2.4.1. Garment Wearability
  - 2.4.2. Garment as a message
  - 2.4.3. Ergonomic Concepts
- 2.5. Stylistic Codes
  - 2.5.1. Permanent Stylistic Codes
  - 2.5.2. Stationary Stylistic Codes
  - 2.5.3. Search for Personal Seal
- 2.6. Collection Development
  - 2.6.1. Theoretical Framework
  - 2.6.2. Context
  - 2.6.3. Research
  - 2.6.4. Referrals
  - 2.6.5. Conclusions
  - 2.6.6. Collection Representation
- 2.7. Technical Studies
  - 2.7.1. Textile Chart
  - 2.7.2. Color Chart
  - 2.7.3. Toile
  - 2.7.4. Technical Data Sheets
  - 2.7.5. Prototypes
  - 2.7.6. Pricing
- 2.8. Interdisciplinary Projects
  - 2.8.1. Drawing
  - 2.8.2. Pattern-Making
  - 2.8.3. Sewing
- 2.9. Collection Production
  - 2.9.1. From Sketches to Technical Drawings
  - 2.9.2. Craft Workshops
  - 2.9.3. New Technologies
- 2.10. Communication and Presentation Strategy
  - 2.10.1. Fashion Photography: Lookbook, Editorial and Campaign
  - 2.10.2. Portfolios
  - 2.10.3. Catwalks
  - 2.10.4. Other Ways to Present a Collection

#### Module 3. Fashion Sustainability

- 3.1. Rethinking Fashion Design
  - 3.1.1. Supply Chains
  - 3.1.2. Main Aspects
  - 3.1.3. Development of Sustainable Fashion
  - 3.1.4. The Future of Fashion
- 3.2. The Life Cycle of Garments
  - 3.2.1. Thinking About the Life Cycle
  - 3.2.2. Activities and Impact
  - 3.2.3. Assessment Tools and Models
  - 3.2.4. Sustainable Design Strategies
- 3.3. Quality and Safety Standards in the Textile Industry
  - 3.3.1. Quality
  - 3.3.2. Labelling
  - 3.3.3. Garment Security
  - 3.3.4. Consumer Inspections
- 3.4. Planned Obsolescence
  - 3.4.1. Planned Obsolescence and Waste of Electrical and Electronic Devices
  - 3.4.2. Resource Extraction
  - 3.4.3. Waste Generation
  - 3.4.4. Recycling and Reuse of Electronic Waste
  - 3.4.5. Responsible Consumption
- 3.5. Sustainable Design
  - 3.5.1. Garment Design
  - 3.5.2. Designing with Empathy
  - 3.5.3. Fabric, Material and Technique Selection
  - 3.5.4. Use of Monomaterials
- 3.6. Sustainable Production
  - 3.6.1. Pattern-Making and Modeling
  - 3.6.2. Zero-Waste Techniques
  - 3.6.3. Construction
  - 3.6.4. Made to Last

- 3.7. Sustainable Distribution
  - 3.7.1. Suppliers and Manufacturers
  - 3.7.2. Commitment to Local Communities
  - 3.7.3. Sales
  - 3.7.4. Design According to Needs
  - 3.7.5. Inclusive Fashion Design
- 3.8. Sustainable Garment Use
  - 3.8.1. Patterns of Use
  - 3.8.2. How to Reduce Washing
  - 3.8.3. Repairs and Maintenance
  - 3.8.4. Design for Repairs
  - 3.8.5. Modular Garment Design
- 3.9. Recycling
  - 3.9.1. Reuse and Remanufacturing
  - 3.9.2. Revaluation
  - 3.9.3. Material Recycling
  - 3.9.4. Closed-Cycle Productions
- 3.10. Sustainable Fashion Designers
  - 3.10.1. Katharine Hamnett
  - 3.10.2. Stella McCartney
  - 3.10.3. Annika Matilda Wendelboe
  - 3.10.4. Susan Dimasi
  - 3.10.5. Isabell de Hillerin





# tech 20 | 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 | 23 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 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.





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%





# tech 28 | Certificate

This **Postgraduate Diploma in Creating Sustainable Fashion Collections** 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 Creating Sustainable Fashion Collections
Official N° of Hours: 450 h.



<sup>\*</sup>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.

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