

Postgraduate Certificate

Hair, Clothing and Accessories Modeling



Postgraduate Certificate Hair, Clothing and Accessories Modeling

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/videogames/postgraduate-certificate/hair-clothing-accessories-modeling

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01

Introduction

As in any artistic work, details play an important role. Just as in a painting the colors and textures bring out the artist's concept, in video games the breadth of detail such as the modeling of hair, clothing and accessories give dynamism and realism to the scene. These are elements that give each character a special character and provide recognition. With the evolution of this sector, it is necessary to create models with greater realism, so it demands professionals trained with the most modern techniques and tools for its proper development. This 100% online methodology program provides the student with the necessary knowledge to perform efficiently in the area, thanks to the guidance of experts in only 6 weeks.





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Manage the techniques of Hair, Clothing and Accessory Modeling to perfect the design of characters with character”

With the dynamism of today's industry and technological progress, it is possible to create to perfection whatever the imagination devises. In stories as in real life, it is the hair, clothes and accessories that define an individual's personality. In every video game scene, every feature and every gesture of the creatures must stand out.

In this course the student will be able to understand the techniques to be used depending on the medium to be modeled. In the case of Hair, you will learn from the classic format through the use of modeling brushes for 3D printing, to the use of opacity textures for low poly formats in the field of video games such as Cards or physical simulations such as Fibermesh, combined with Hair and fur or Xgen ideal for high budget 3D animations.

In the case of Apparel, you will master working from opacity map formats, as well as modeling to suit projects in realtime or physical simulations, creating sculpts based on automatic formats in Marvelous Designer software. You will also learn how to use the ideal CGI program to create custom outfits in a matter of minutes. And finally, it will achieve the rendering of these elements through global illumination engines, which allow the generation of highly accurate images in the simulation of hair and fabric, by means of its materials and PBR texture systems.

All this and more, will be available from the first day to achieve the degree in 6 weeks, through an innovative methodology of study totally online, which allows the professional a continuous and efficient training through the use of devices of your choice with internet connection and with the possibility of downloading the different formats in which the agenda is presented. The accompaniment of an expert teaching team at all times is the key to advance with security and quality in the learning process.

This **Postgraduate Certificate in Hair, Clothes and Accessories Modeling** is the most comprehensive and up-to-date educational program on the market. The most important features include:

- ◆ The development of case studies presented by experts in 3D Modeling and Digital Sculpture
- ◆ The graphic, schematic, and eminently 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.
- ◆ 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



Generates highly accurate images in hair and fabric simulation through its materials and PBR texture systems"

“

With this program you will be able to model, texture, light and render Clothes, Hair and Accessories in Arnold. Start your training today”

Learn how to create modeled hair through low poly, high poly, Fibermesh and Xgen in 3ds Max, ZBrush and Maya.

Interact with other professionals in the subject of study, in a secure online environment.

The programs teaching staff includes professionals from the sector who contribute their work experience to this training 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 training programmed to train in real situations.

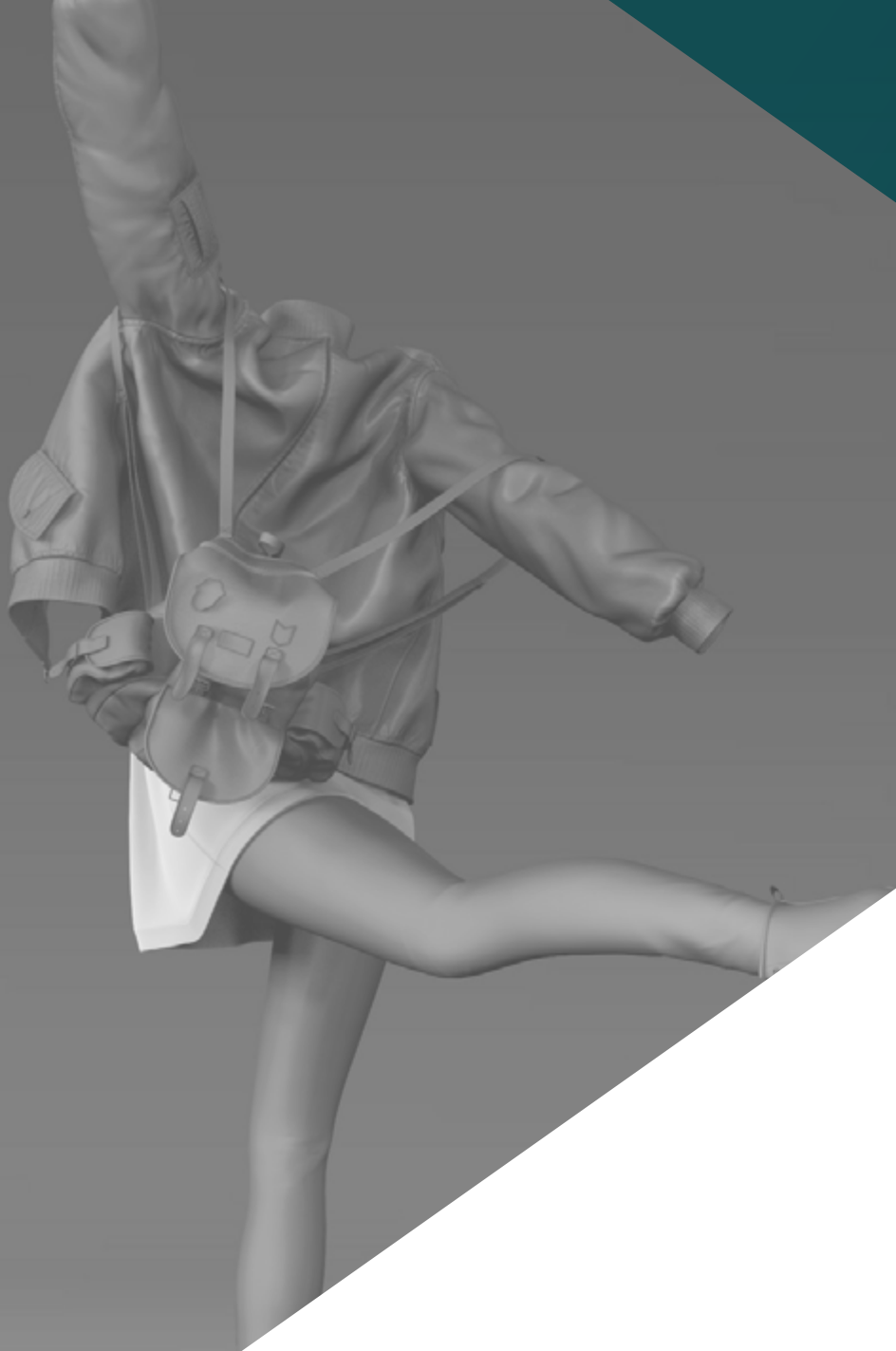
This program is designed around Problem Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.



02 Objectives

This Postgraduate Certificate aims to open the doors of professionalization to the student, by knowing in depth everything about Hair, Clothes and Accessories Modeling. Fundamental aspects to generate a visual impact and remain in the memory of users; giving personality and character to the characters by mastering the techniques and tools required, which will make you grow and stand out in your new projects within the video game industry, both as a team and individually, updating your portfolio with quality and innovative content.





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Take your career in the video game industry to the next level”



General Objectives

- ◆ Understand the need for a good topology at all levels of development and production
- ◆ Knowledge of human and animal anatomy to apply it to modeling, texturing, lighting and rendering processes in an accurate way
- ◆ Meet the demands in hair and clothing creation for video games, film, 3d printing, augmented and virtual reality
- ◆ Handle modeling, texturing and lighting systems in virtual reality systems
- ◆ Understand current systems in the film and video game industry to deliver great results





Specific Objectives

- ◆ Create modeled hair, low poly, high poly, , Fibermesh and Xgen in 3ds Max, ZBrush and Maya, for 3D printing, film and video games
- ◆ Modeling and simulating cloth physics in 3ds Max and ZBrush
- ◆ Deepening the Workflow between ZBrush and Marvelous
- ◆ Using clothes and creating patterns in Marvelous Designer
- ◆ Handle physical simulations and exports and imports in Marvelous Designer
- ◆ Modeling, texturing, lighting and rendering of clothes, hair and accessories in Arnold

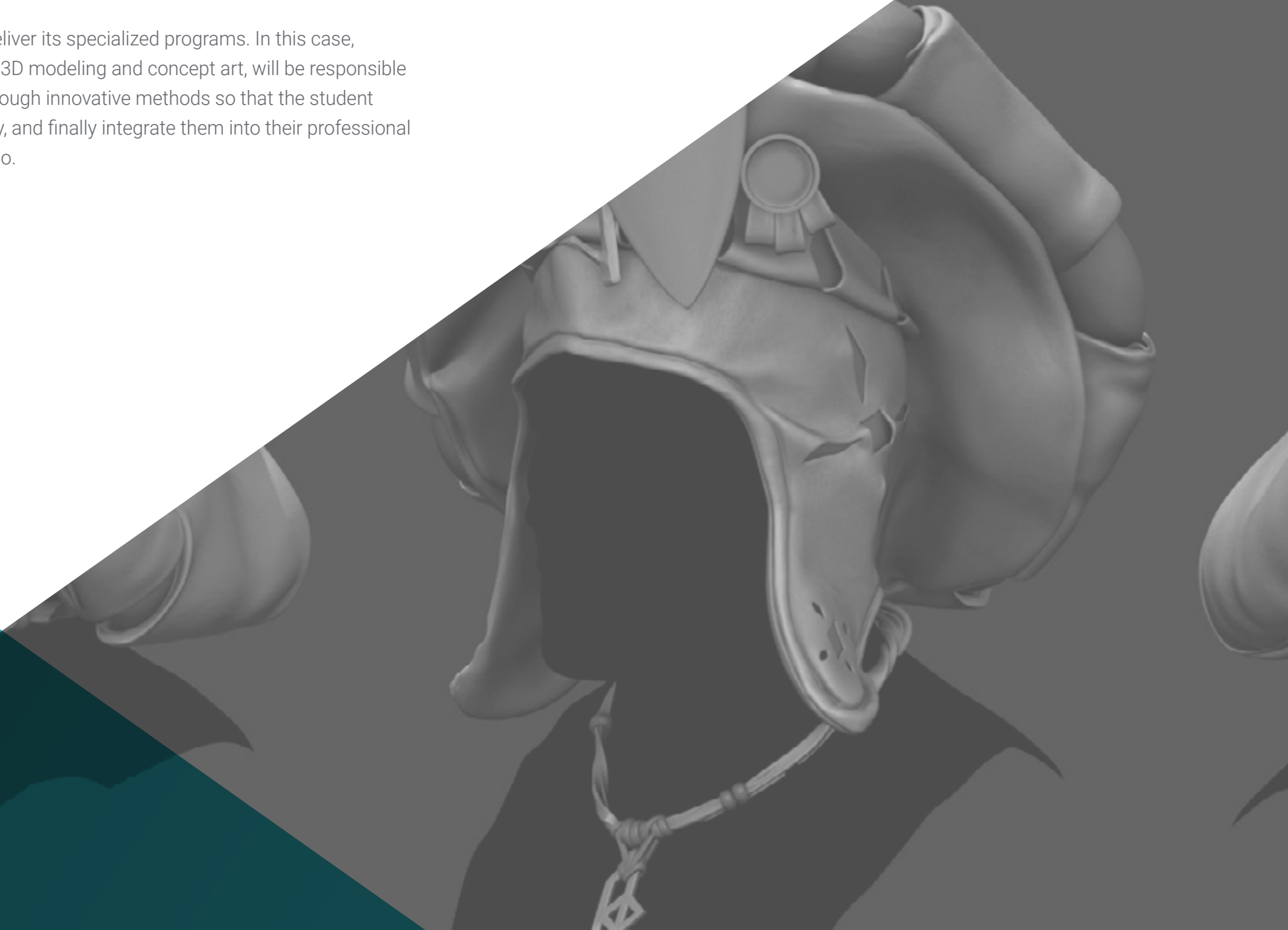
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Experience the satisfaction of advancing your career, gaining new knowledge and enhancing your talent"

03

Course Management

TECH selects the best experts to deliver its specialized programs. In this case, leading professionals in the area of 3D modeling and concept art, will be responsible for transmitting their knowledge through innovative methods so that the student learns effectively the topics of study, and finally integrate them into their professional performance, updating their portfolio.



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*Professional 3D modeling and
concept art experts with decades of
experience will accompany you on
the road to professionalization"*

Management



Mr. Sequeros Rodríguez, Salvador

- ◆ Freelance 2D/3D modeler and generalist
- ◆ Concept art and 3D modeling for Slicecore Chicago
- ◆ Videomapping and modeling Rodrigo Tamariz Valladolid
- ◆ Professor of Higher Level Training Cycle 3D Animation Superior School of Image and Sound ESISV Valladolid
- ◆ Professor of Higher Level Training Cycle GFGS 3D Animation European Institute of Design IED Madrid
- ◆ 3D modeling for the falleros Vicente Martínez and Loren Fandos Castellón
- ◆ Master in Computer Graphics, Games and Virtual Reality URJC University. Madrid
- ◆ Bachelor of Fine Arts at the University of Salamanca (specializing in Design and Sculpture)



04

Structure and Content

A program designed for today's professional who must combine their busy daily schedule with training in order to continue evolving in the labor market. With a rigorously selected content by experts to teach everything related to Hair, Clothes and Accessories Modeling, through theoretical and practical content, available in a dynamic and secure environment fully online deployed in a variety of multimedia resources, from day one for learning in 6 weeks.



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Be part of the community of professionals who work and study at the same time, thanks to the methodology that is revolutionizing the current university environment"

Module 1. Hair, Clothes and Accessories

- 1.1. Creating Hair
 - 1.1.1. Modeled Hair
 - 1.1.2. Low PolyHair and Cards
 - 1.1.3. High Poly Hair, Fibermesh Hair and Fur and Xgen
- 1.2. Cartoon Clothes
 - 1.2.1. Mesh Extractions
 - 1.2.2. False Geometry
 - 1.2.3. Shell
- 1.3. Sculpting Fabrics
 - 1.3.1. Physical Simulations
 - 1.3.2. Strength Calculations
 - 1.3.3. Curving Brushes on Clothing
- 1.4. Realistic Clothes
 - 1.4.1. Importing to Marvelous Designer
 - 1.4.2. Software Philosophy
 - 1.4.3. Pattern Creation
- 1.5. Standard Patterns
 - 1.5.1. T-shirts
 - 1.5.2. Trousers
 - 1.5.3. Coats and Footwear
- 1.6. Unions and Physics
 - 1.6.1. Realistic Simulations
 - 1.6.2. Zips
 - 1.6.3. Seams





- 1.7. Clothes
 - 1.7.1. Complex Patterns
 - 1.7.2. Fabric Complexity
 - 1.7.3. Shading
- 1.8. Advanced Clothes
 - 1.8.1. Baked from Clothes
 - 1.8.2. Adaptation
 - 1.8.3. Exporting
- 1.9. Accessories
 - 1.9.1. Jewellery
 - 1.9.2. Backpacks and Bags
 - 1.9.3. Tools
- 1.10. Rendering on Fabrics and Hair
 - 1.10.1. Illumination and Shading
 - 1.10.2. Hair Shader
 - 1.10.3. Realistic Rendering in Arnold



Acquire the latest knowledge and increase your professional value. Enroll in this exclusive TECH Diploma. Stand out with new capabilities"

05 Methodology

This training program offers 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.





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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"

At TECH we use the Case Method

Our program offers a revolutionary method of skills and knowledge development. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

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At TECH, you will experience a way of learning that is shaking the foundations of traditional universities around the world”



We are the first online university to combine Harvard Business School case studies with a 100% online learning system based on repetition.



A learning method that is different and innovative

This intensive Video Game Design program at TECH Global University prepares you to face all the challenges in this field, both nationally and internationally. We are committed to promoting your personal and professional growth, the best way to strive for success, that is why, at TECH Global University, you will use Harvard case studies, with which we have a strategic agreement that allows us, to offer you material from the best university in the world.

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Our program prepares you to face new challenges in uncertain environments and achieve success in your career”

The student will learn, through collaborative activities and real cases, how to solve complex situations in real business environments.

The case method has been the most widely used learning system among the world's leading business schools for as long as they have existed. 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. Over the course of 4 years, you will be presented with multiple practical case studies.

You will have to combine all your knowledge, and research, argue, and defend your ideas and decisions.

Relearning Methodology

Our university is the first in the world to combine Harvard University case studies with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

We enhance Harvard case studies 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 university 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.

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 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 we live in.



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

They will complete a selection of the best case studies in the field used at Harvard. Cases that are presented, analyzed, and supervised by the best senior management 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 multimedia content presentation training Exclusive system 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 your goals.



06

Certificate

The Postgraduate Certificate in Hair, Clothes and Accessories Modeling, guarantees, in addition to the most rigorous and update training, access to a Postgraduate Certificate issued by TECH Global University



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Successfully complete this training and receive your university degree without travel or laborious paperwork”

This program will allow you to obtain your **Postgraduate Certificate in Hair, Clothing and Accessories Modeling** 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 Hair, Clothing and Accessories Modeling**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

tech global
university

personalized service innovation

knowledge present

Postgraduate Certificate

Hair, Clothing and
Accessories Modeling

online training

development languages

classroom

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Postgraduate Certificate

Hair, Clothing and Accessories Modeling