

Postgraduate Certificate Hair, Clothes and Accessories Modeling





Postgraduate Certificate Hair, Clothes 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/information-technology/postgraduate-certificate/hair-clothes-accessories-modeling

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01

Introduction

The realistic representation of hair, clothes and accessories, achieves a detailed finish, as it will usually be part of other staging: characters, creatures or humanoids. Achieving an appearance as close to reality as possible is one of the factors that give productions a plus of quality. In the animation industry, video games and design in general, elaborated finishes that bring the consumer as close to a realistic experience as possible are valued. This program, offered in a completely online format, aims to prepare students to model realistic hair, clothes and accessories and thereby achieve a better finish in their productions. In just 6 weeks, you will learn in depth the most advanced techniques and applications in the field.



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Learn the most avant-garde techniques and applications in Hair, Clothes and Accessories Modeling. Achieve detailed and high-quality finishes”

The evolution of digital modeling, design and sculpting in detail and realism has been remarkable in recent decades. The consumer's eye has adapted to having a greater degree of detail and reality in computer-generated productions, demanding more and more of these great finishes. To achieve these complex elaborations in hair, clothes and accessories, this Postgraduate Certificate designed by TECH will delve into the essential theoretical and practical issues and will enable students to make major changes in the finishes of their modeling.

The syllabus focuses on the creation of hair with different techniques, as well as cartoon clothing. It will also delve into the sculpting of fabrics, realistic clothes and standard patterns, delving into the operation and application of physical joints, advanced clothes, accessories and the elaboration of rendering in fabrics and hair.

For all this, the use of the appropriate tools such as 3ds Max, Maya or ZBrush will be explored, as well as the mastery of physical simulations and exports and imports in Marvelous Designer or the work of modeling, texturing, lighting and rendering of clothing, hair and accessories in Arnold. The objective of this training is that students are able to apply everything they have learned in their creativity.

This Postgraduate Certificate in Hair, Clothes and Accessories Modeling has been designed by TECH in a completely online format to facilitate the reconciliation of learning with other personal and professional areas of the students. In the same way, it makes available all the educational and pedagogical material so that students can delve into the content at their own speed and pace.

This **Postgraduate Certificate in Hair, Clothes and Accessories Modeling** contains the most complete and up-to-date program the market. Its most notable features are:

- ◆ The development of practical cases presented by experts in 3D modeling and digital sculpture
- ◆ 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
- ◆ 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



Learn the best techniques in modeling, texturing, lighting and rendering of clothes, hair and accessories with this Postgraduate Certificate"

“

Thanks to this qualification you will investigate the use of the right tools such as 3ds Max, Maya or ZBrush, for the three-dimensional modeling of hair, clothes and accessories”

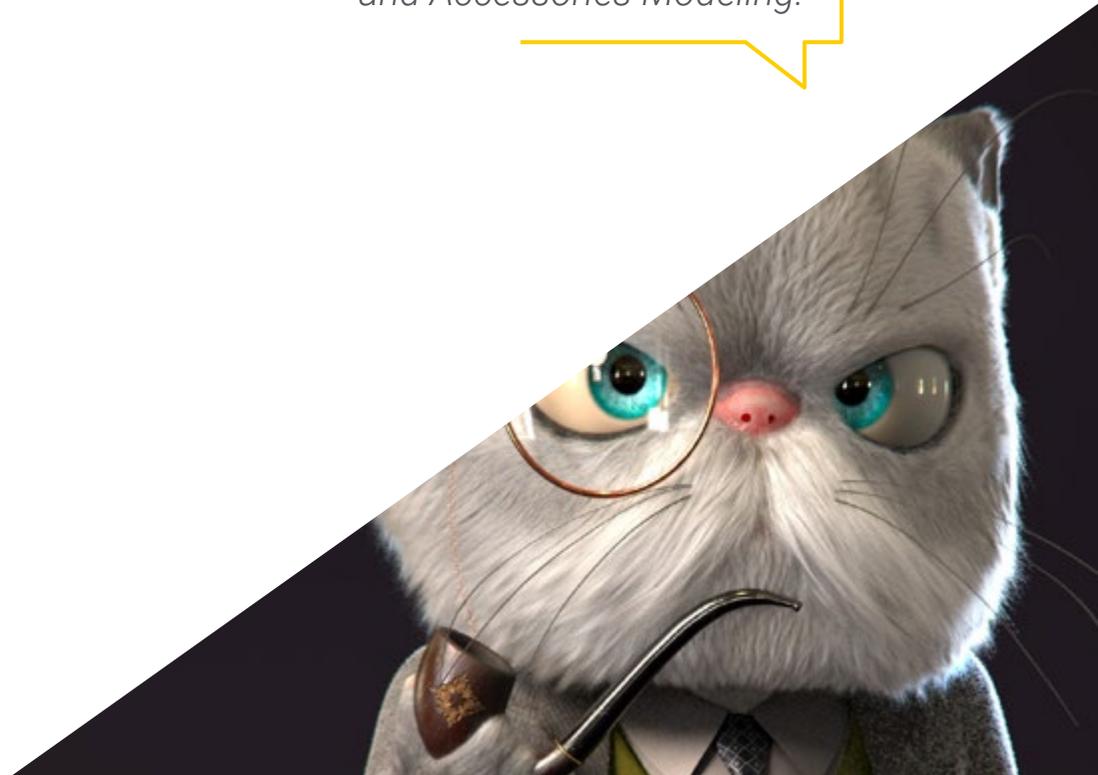
The program’s teaching staff includes professionals from sector who contribute their work experience to this program, as well as renowned specialists from leading societies and prestigious universities.

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 professionals 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.

A completely online study plan designed to be balanced with other professional or personal activities.

An in-depth tour of the utilities and tools for Hair, Clothes and Accessories Modeling.

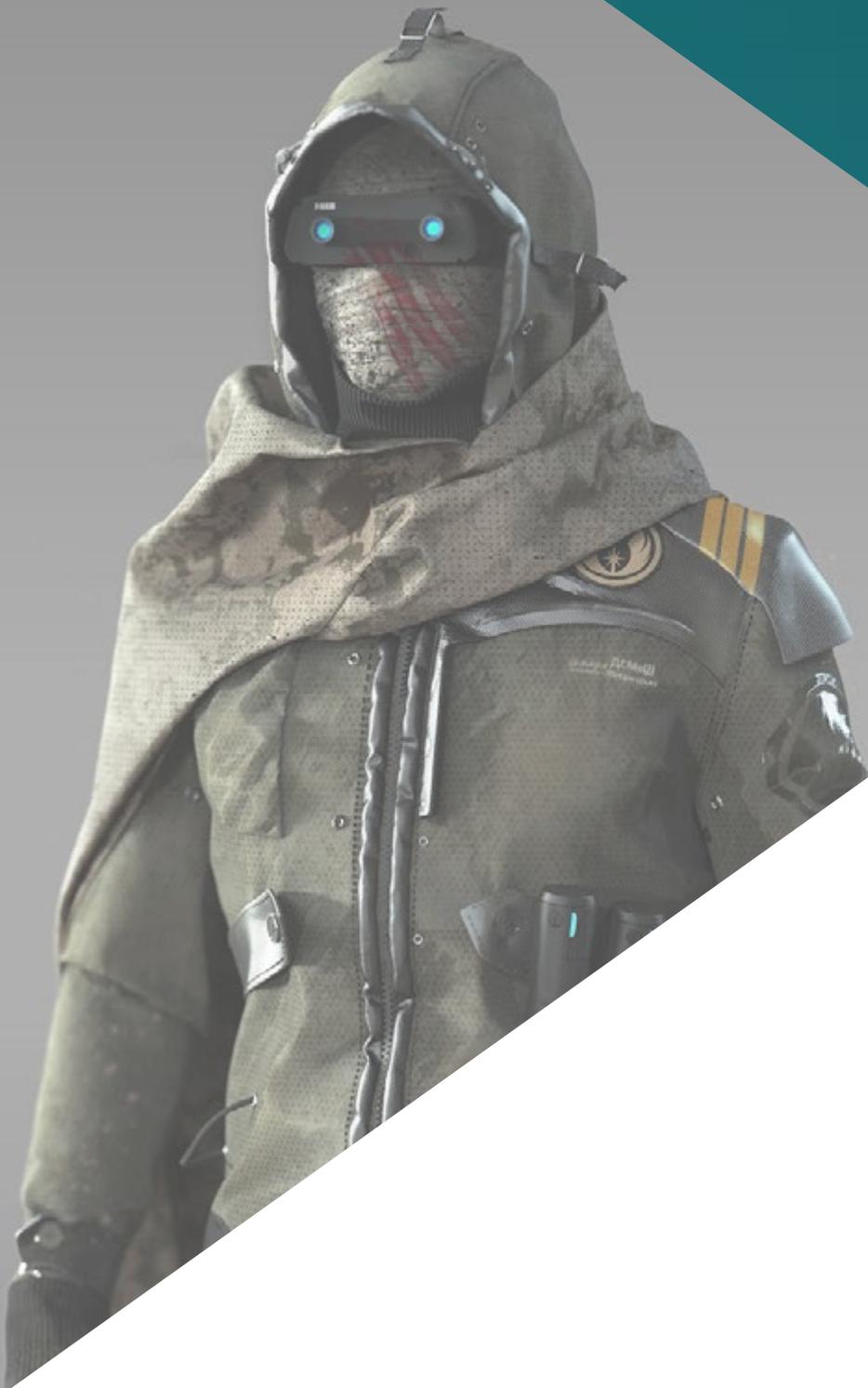


02

Objectives

Achieving the most detailed and realistic elaborations of hair, clothes and accessories is the consequence of a detailed and complete study plan, which favors the student's autonomous and progressive learning. This program focuses on meeting the demands of creating hair and clothes for video games, cinema, 3D printing, augmented and virtual reality. In this way, graduates will be able to apply the best tools and cutting-edge techniques in their modeling.





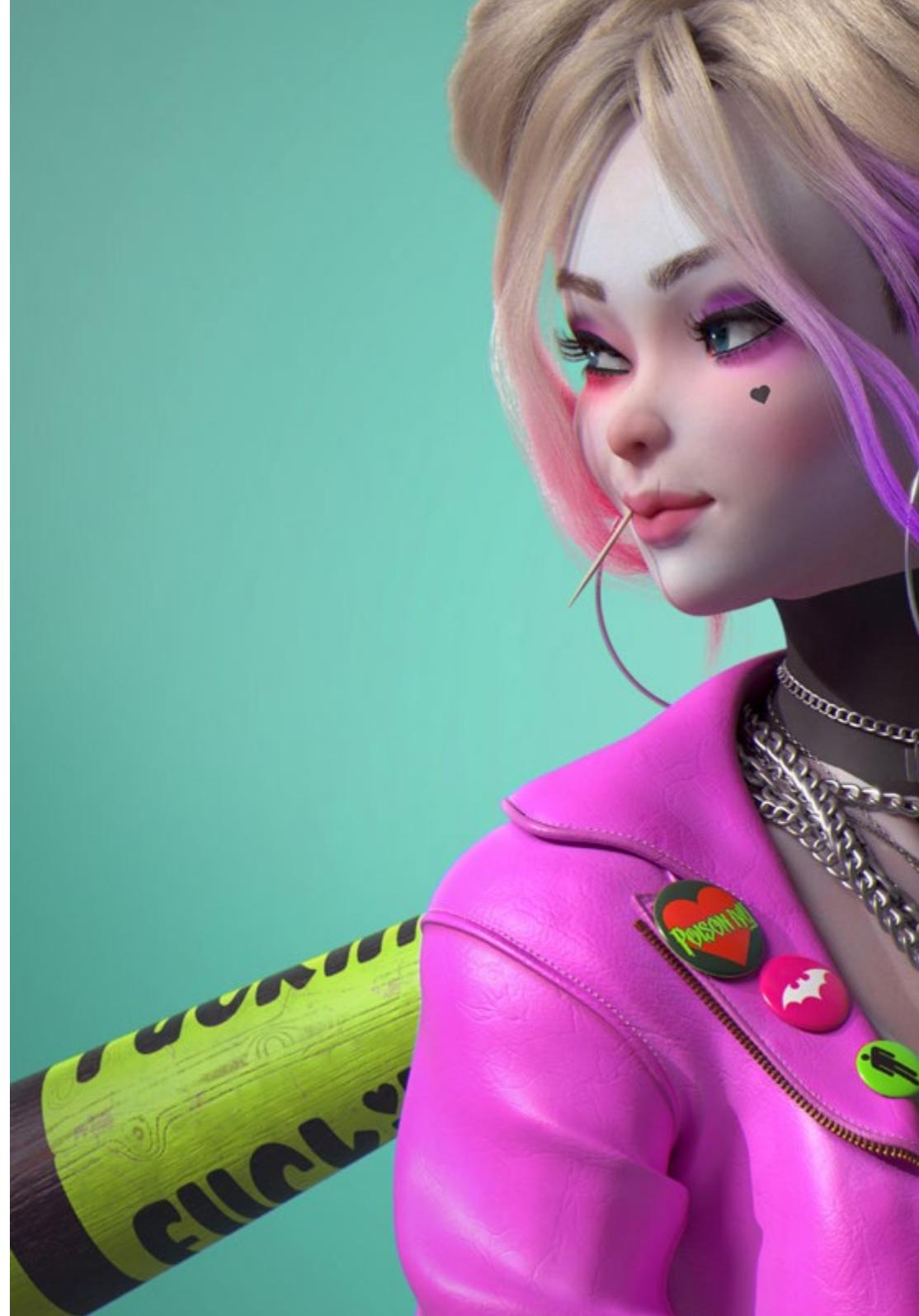
“

Become a true expert in hair, clothes and accessories modeling”



General Objectives

- ◆ Understand the need for good topology at all levels of development and production
- ◆ Know human and animal anatomy to apply it to modeling, texturing, lighting and rendering processes in an accurate way
- ◆ Meet the demands in hair and clothes creation for video games, cinema, 3D printing, augmented and virtual reality
- ◆ Manage modeling, texturing and lighting systems in virtual reality systems
- ◆ Understand current film and video game industry systems 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
- ◆ Model and simulate cloth physics in 3ds Max and Zbrush
- ◆ Delve into the Workflow between Zbrush and Marvelous
- ◆ Use clothes and create patterns in Marvelous Designer
- ◆ Manage physical simulations and exports and imports in Marvelous Designer
- ◆ Perform modeling, texturing, lighting and rendering clothes, hair and accessories in Arnold

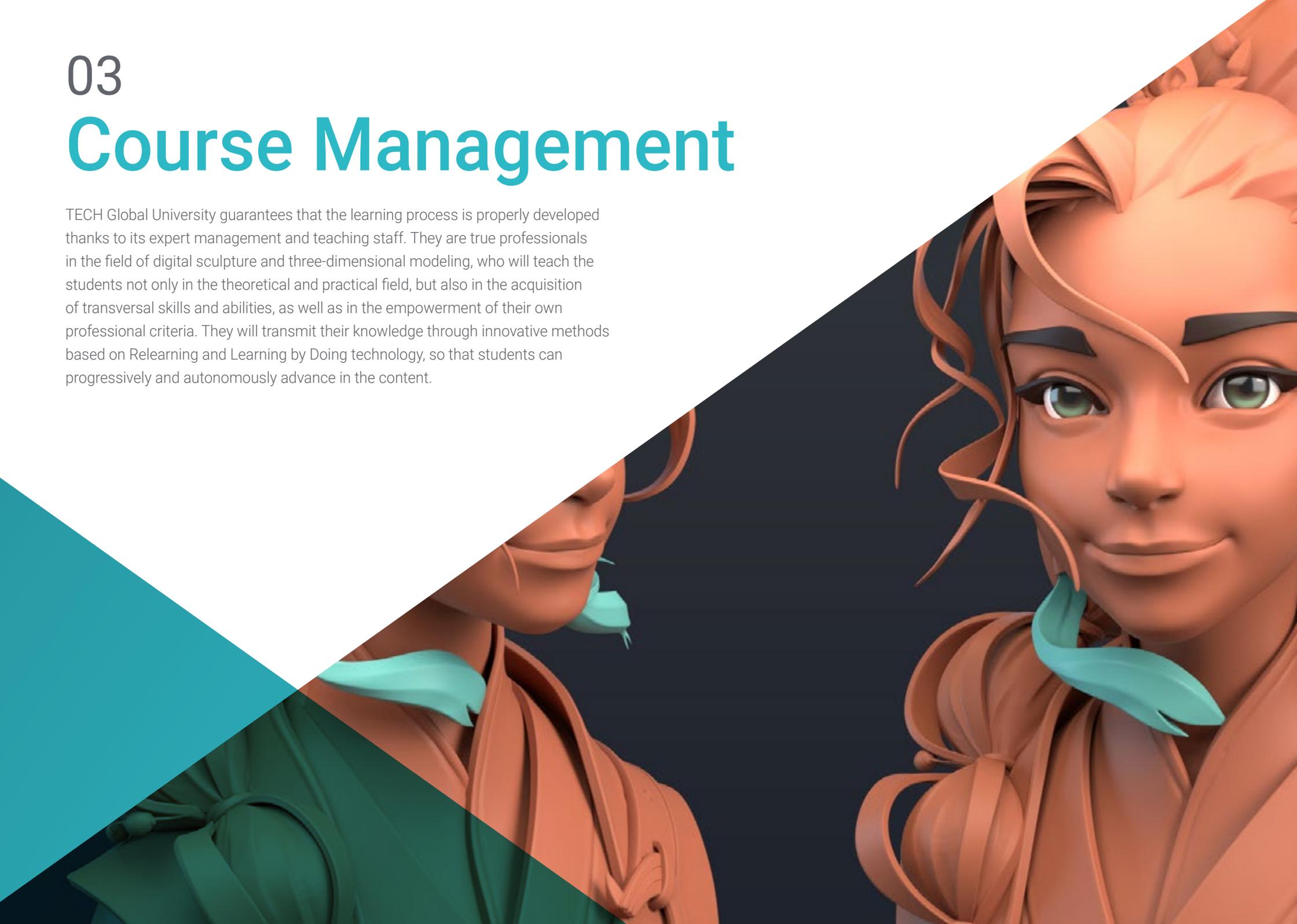
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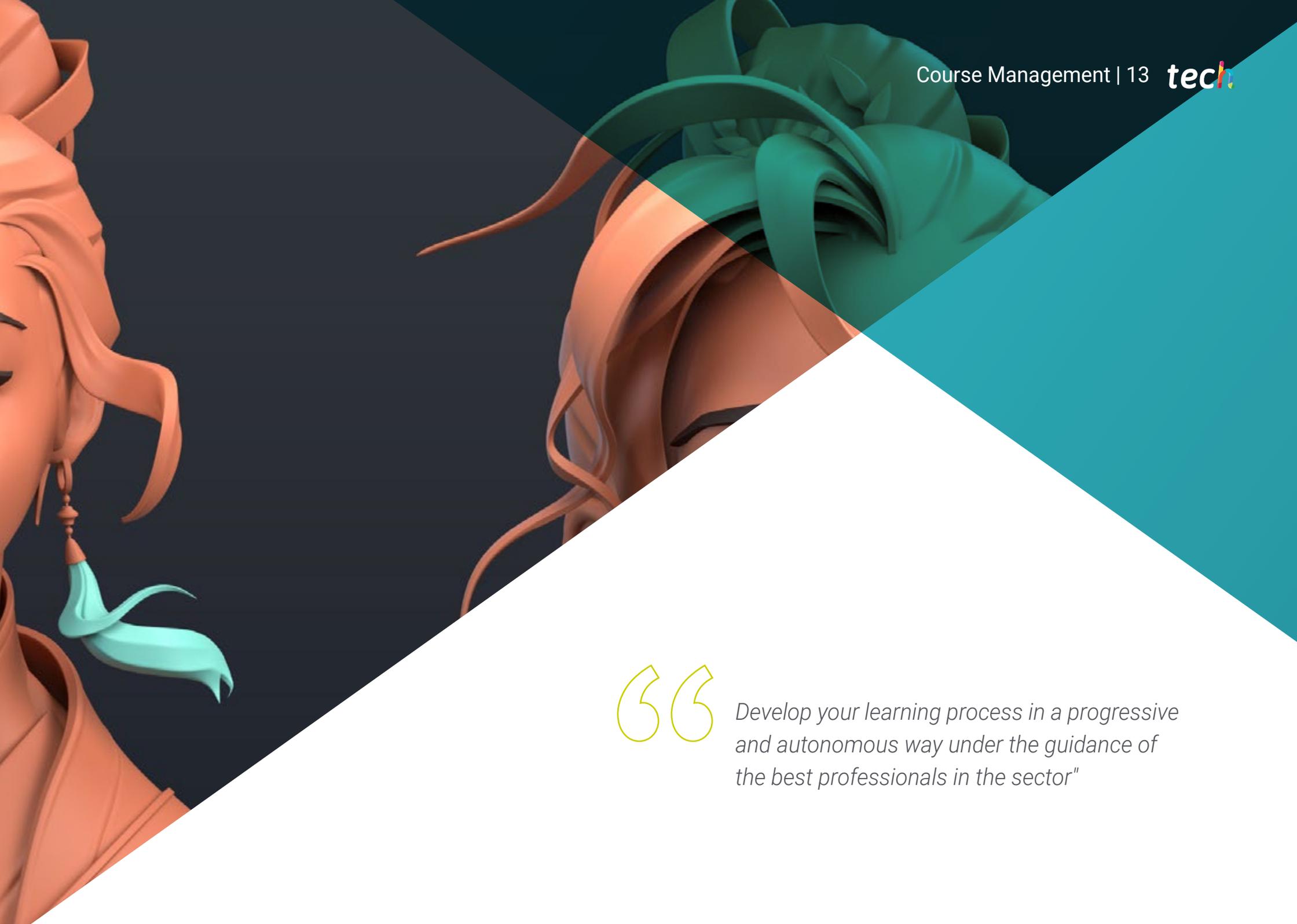
This program is based on meeting the demands in creating hair, clothes and accessories for various fields such as animation, 3D printing or augmented reality”

03

Course Management

TECH Global University guarantees that the learning process is properly developed thanks to its expert management and teaching staff. They are true professionals in the field of digital sculpture and three-dimensional modeling, who will teach the students not only in the theoretical and practical field, but also in the acquisition of transversal skills and abilities, as well as in the empowerment of their own professional criteria. They will transmit their knowledge through innovative methods based on Relearning and Learning by Doing technology, so that students can progressively and autonomously advance in the content.



A 3D rendered character with long, flowing orange hair and a large, green, flower-like headpiece. The character is shown from the chest up, looking slightly to the right. The background is a dark teal color with a white diagonal line separating it from a lighter teal area below.

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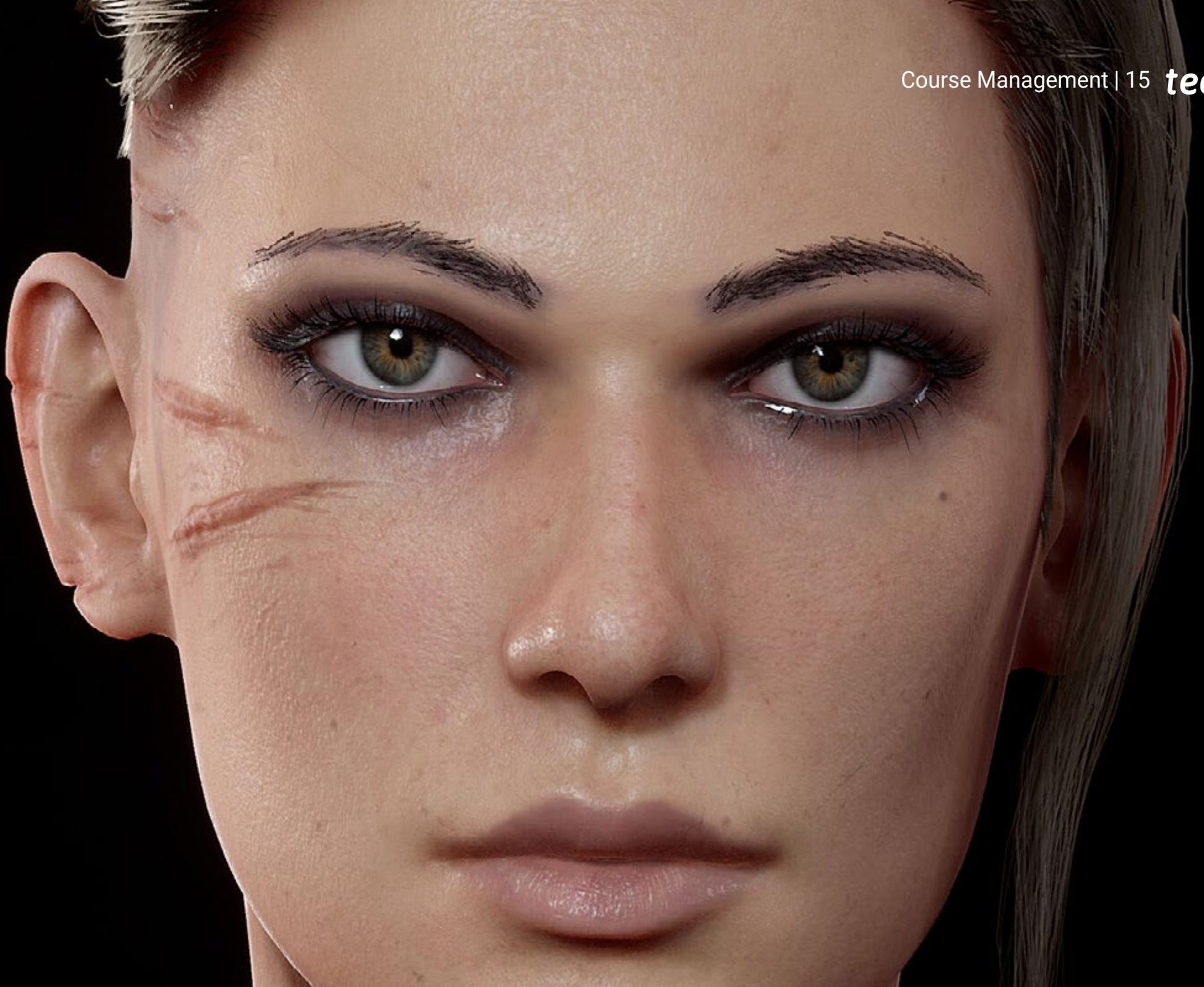
Develop your learning process in a progressive and autonomous way under the guidance of the best professionals in the sector”

Management



Mr. Sequeros Rodríguez, Salvador

- Specialist in Digital Sculpture
- *Concept Art* and 3D Models for Slicecore (Chicago)
- *Videomapping* and modeling for Rodrigo Tamariz (Valladolid)
- Restorer at Geocisa
- Professor of Higher-Level Training Cycle in 3D Animation. Higher Education School of Image and Sound ESISV. Valladolid
- Professor of Higher-Level Training Cycle GFGS in 3D Animation. European Institute of Design IED Madrid
- Degree in Fine Arts from the University of Salamanca, specializing in Design and Sculpture
- Master's Degree in Computer Graphics, Games and Virtual Reality from the URJC University of Madrid



04

Structure and Content

This complete study plan makes an organized and structured tour from the most basic and introductory issues to the most advanced ones. Starting from the creation of hair with different modeling techniques such as Low Poly and High Poly, cartoon clothing, accessories and sculpting of realistic clothes and fabrics, to the most advanced issues of joints and physics and renderings in fabrics and hair. In addition, specialized theoretical and practical content is available in a dynamic and secure online environment. Thanks to the interactive contents, you will be able to master the techniques and tools taught in an effective way, making the experience much more agile.





“

Learn how to create hair with different modeling techniques such as Low Poly and High Poly, cartoon clothing, accessories and sculpting of realistic clothes and fabrics"

Module 1. Hair, Clothes and Accessories

- 1.1. Hair Creation
 - 1.1.1. Modeled Hair
 - 1.1.2. Low Poly Hair and Cards
 - 1.1.3. High Poly Hair, Fibermesh, Hair and Fur and Xgen
- 1.2. Cartoon Clothing
 - 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. Calculation of Forces
 - 1.3.3. Curving Brushes on Clothing
- 1.4. Realistic Clothing
 - 1.4.1. Import 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. Pants
 - 1.5.3. Coats and Footwear
- 1.6. Unions and Physics
 - 1.6.1. Realistic Simulations
 - 1.6.2. Zippers
 - 1.6.3. Stitches
- 1.7. Clothes
 - 1.7.1. Complex Patterns
 - 1.7.2. Fabric Complexity
 - 1.7.3. *Shading*





- 1.8. Advanced Clothing
 - 1.8.1. Baked of Clothes
 - 1.8.2. Adaptation
 - 1.8.3. Export
- 1.9. Accessories
 - 1.9.1. Jewelry
 - 1.9.2. Backpacks and Bags
 - 1.9.3. Utilities
- 1.10. Rendering on Fabrics and Hair
 - 1.10.1. Lighting and Shading
 - 1.10.2. *Hair Shader*
 - 1.10.3. Realistic Rendering in Arnold

“

Thanks to the interactive contents, you will be able to master the techniques and tools taught in an effective way, making the experience much more agile”



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

The case method has been the most widely used learning system among the world's leading Information Technology 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. Throughout the course, students 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 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.



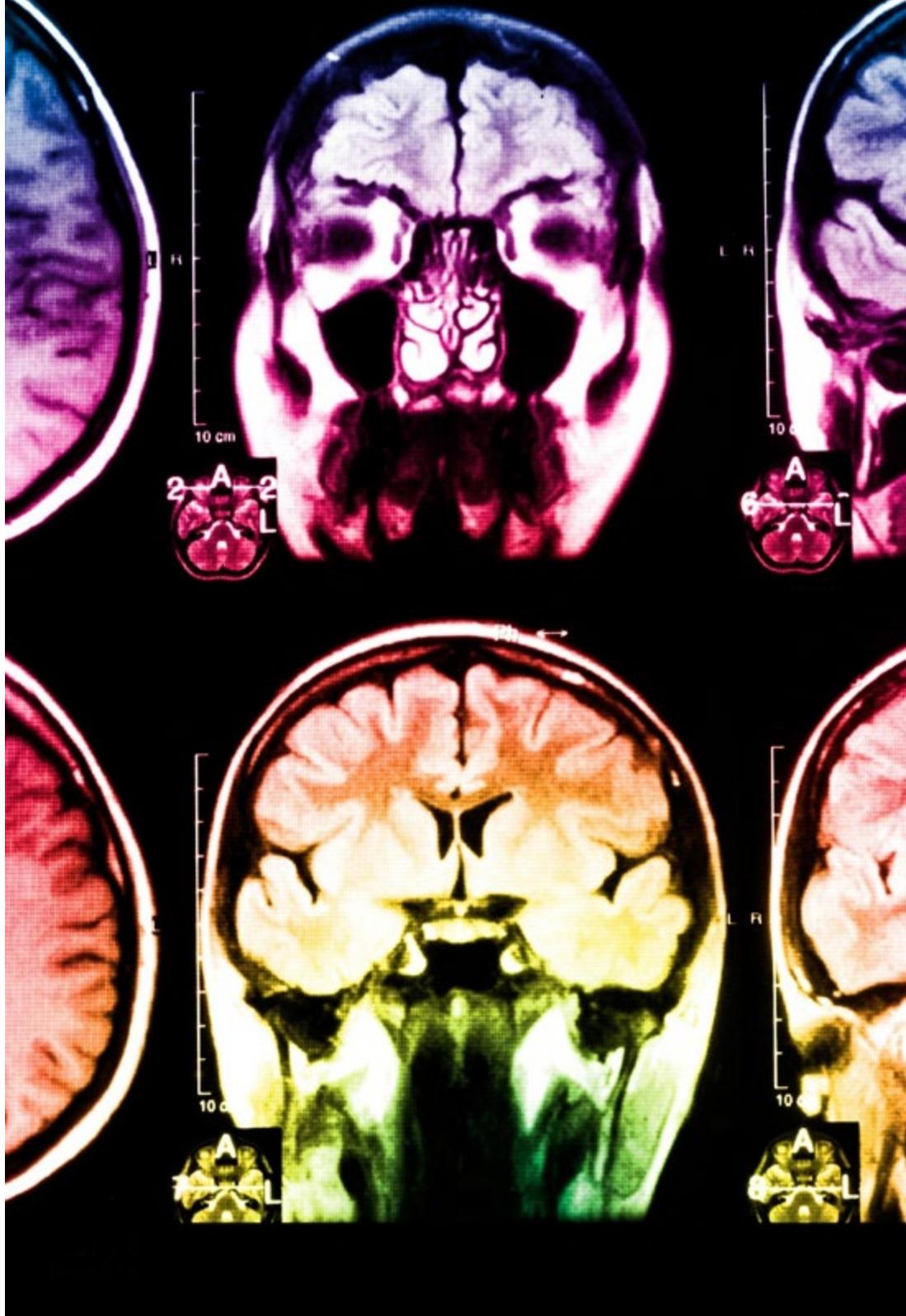
In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

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 adapted in 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.



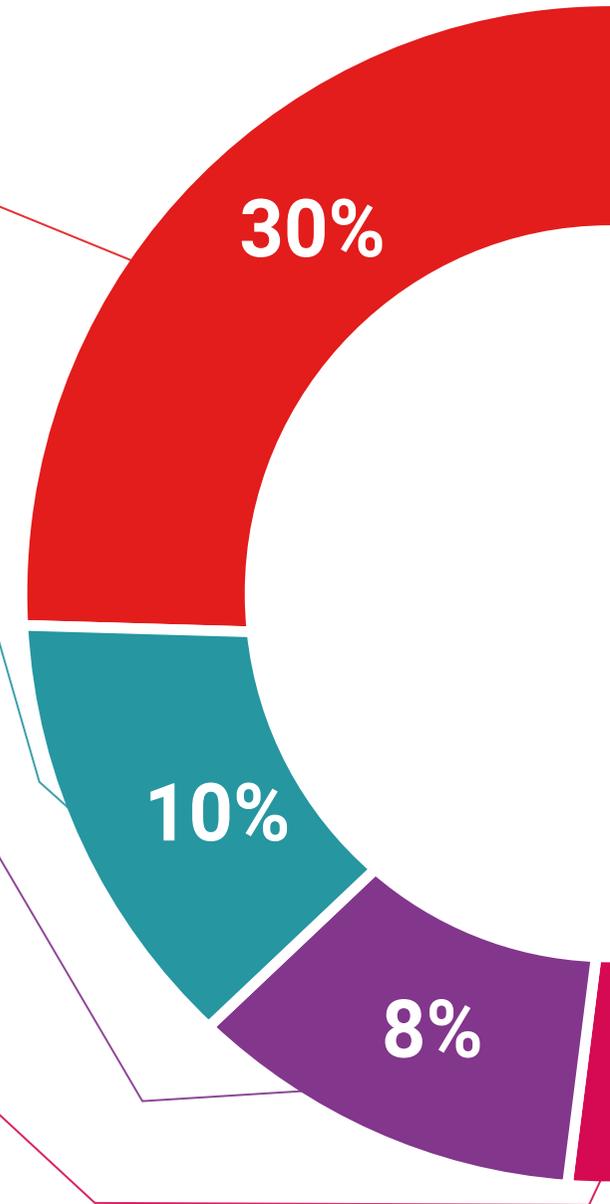
Practising Skills and Abilities

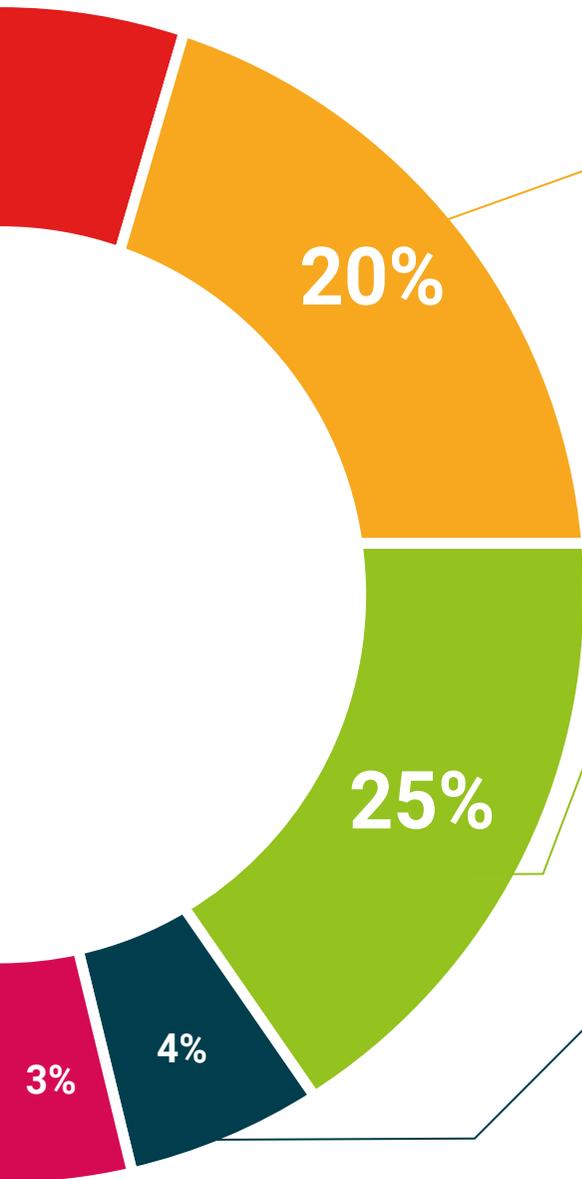
They will carry out activities to develop specific competencies and skills in each thematic area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



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

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.



06 Certificate

The Postgraduate Certificate in Hair, Clothes and Accessories Modeling guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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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 Certificate in Hair, Clothes 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, Clothes and Accessories Modeling**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



*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.

future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

personalized service innovation

knowledge present

development language

virtual classroom

tech global
university

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