Postgraduate Certificate
Advanced Torso, Neck and Head Rigging

tech global university

Postgraduate Certificate
Advanced Torso, Neck and Head Rigging

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

Website: **www.techtitute.com/us/videogames/postgraduate-certificate/advanced-torso-neck-head-rigging**

Index

01
Introduction

When it comes to animation, the animator may require that the torso and head rig system be configured to perform certain movements that a basic rig does not provide. Therefore, it is important to analyze the problems that a basic Rig can cause to the animator during his work. In addition, it is necessary to raise on the deformation Rig an advanced and professional control system that provides automatisms to our character. Therefore, avoiding these limitations and making easier the work of animating. In the development of this advanced system will also be known new tools of Autodesk Maya, with which all the automatisms of the advanced head and torso control Rig will be engineered. The content will be taught 100% online and without timetables, so that students have the possibility of organizing the course according to their own schedule.

" *Learn how to set up and work with the Spline IK Handle tool and then incorporate it into the model"*

Throughout the course, the student will obtain the keys needed to correctly carry out the Advanced Rigging of Torso, Neck and Head. The Spline IK Handle tool will be used, Clusters will be defined, IK controls for Clusters will be created and NURBS curves for FK controls will be elaborated.

In order to refine the torso movements, we will use the IK Handle parameters, the Connection Editor tool and set up a Twist system. For the neck and head, guide curves and clusters will be created and the hierarchy and nomenclature will be defined.

The final part of the Postgraduate Certificate is reserved for editing parameters and setting up the Isolate mode for the head, using the tools Node Editor, Node Constrain and applying Parent Constrain to two elements at the same time. You will also learn how to connect the deformation and control rigs.

These contents will be taught in a totally online format, without timetables and with 100% of the syllabus available from the first day. In addition, the program has been developed in a multitude of formats so that the student can select the one that best suits their circumstances. Thus facilitating the reconciliation and assimilation of concepts.

This **Postgraduate Certificate in Advanced Torso, Neck and Head Rigging** 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 advanced torso, neck and head rigging
- 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 the self-assessment process can be carried out 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

In this Postgraduate Certificate, you will learn how to design an advanced Rigging system taking into account the limitations it presents"

At TECH, you will implement a professional work methodology with all the necessary Isolate mode tools for the Head Rig"
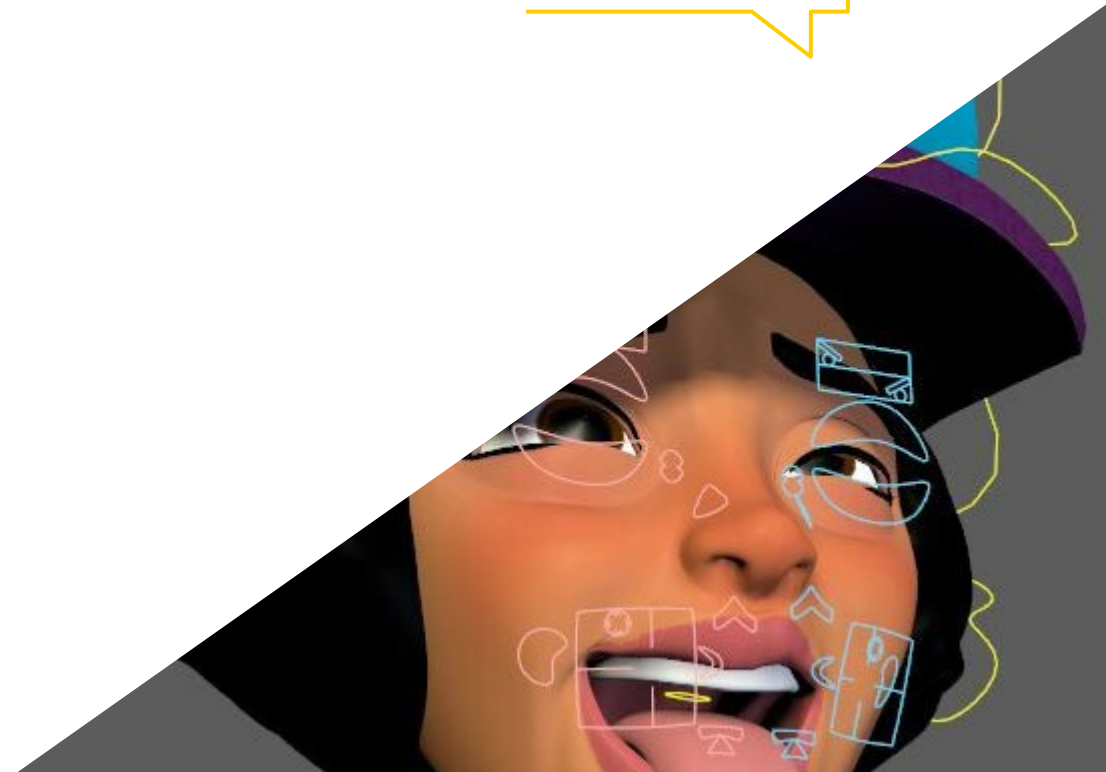
The proposed program includes the connection of the deformation and control rigs. An essential task in the Rigger's work.

*The graduates will learn how to control the IK Handle parameters to make the torso movements realistic.*

The program includes, in its teaching staff, professionals from the sector who bring to this program the experience of their work, 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 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 throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

02
Objectives

Students of the Postgraduate Certificate in Advanced Torso, Neck and Head Rigging will have acquired the most advanced techniques in 3D character Rigging. They will be able to create character systems and mechanisms adjusted to the nature of the production to the nature of the production and adopting specialized skills to tackle Rigging jobs in film or video games. In addition, they will know how to handle essential tools such as Spline IK Handle or Node Editor.
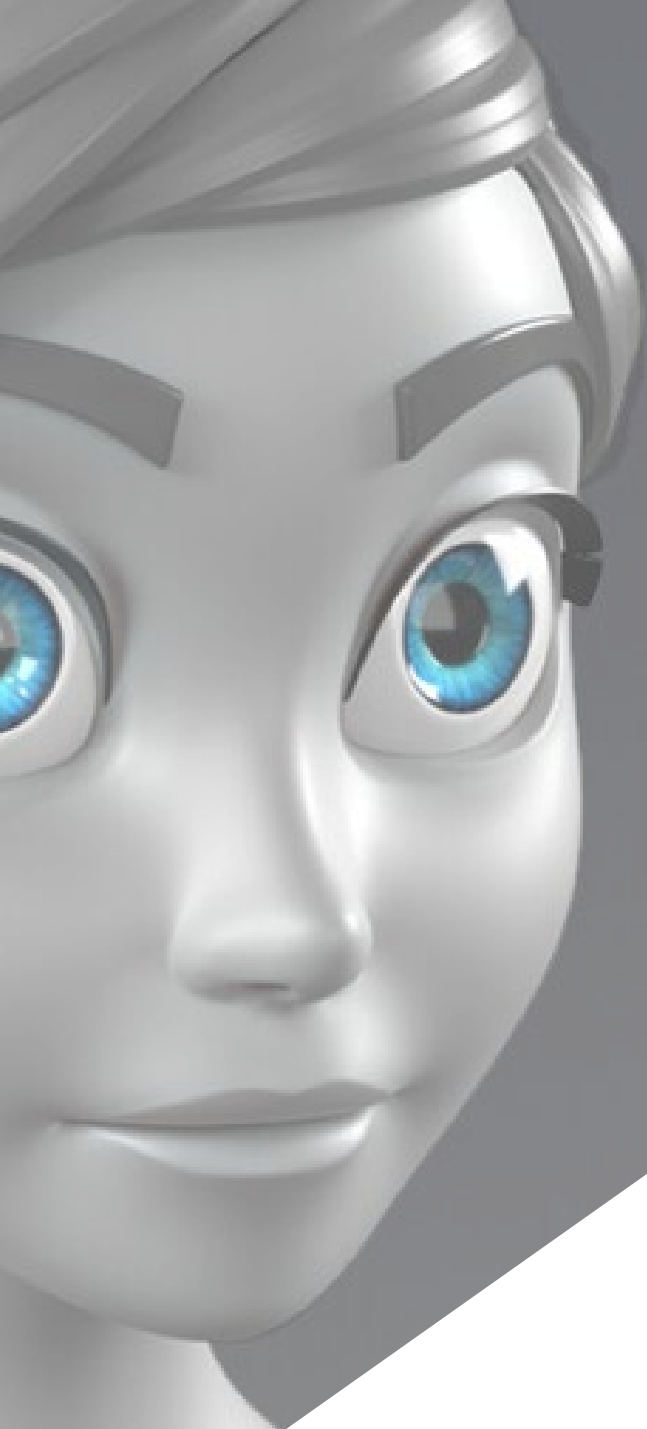
In TECH you will learn how to create IK controls for Clusters applicable to the torso of the characters"

General Objectives

- Acquire advanced rigging techniques for 3D characters
- Learn how to use the latest software
- Analyze 3D models for rigging purposes
- Propose systems and mechanisms of the character adjusted to the nature of the production
- Provide the tools and specialized skills to tackle rigging jobs in film or video games

Proper use of Cluster elements is essential for realistic Rigs. At TECH, we teach you all the the tricks you need to know"

Specific Objectives

- Conceive the limitations of basic rigging and the needs of the animator
- Come up with a versatile and advanced system for the torso, neck and head of the character
- Master the use of the Spline IK Handle tool for torso system development
- Master the use of cluster elements
- Edit and limiting transformations of Rig components
- Engineer a character head locking system through the Node Editor
- Build a proper hierarchy of all the elements of a Rig

03
Course Management

This Postgraduate Certificate is taught by experts with extensive experience in the rigging industry, who have worked on real projects and know the keys to realistic head, neck and torso movement. You will learn how to create advanced systems using Clusters and Parent Constrains, always having the possibility to consult with the faculty. the possibility of consulting any doubt with the teaching staff.

Learn how to use the Connection Editor tool in a professional way thanks to the advice provided by TECH's teaching staff"

International Guest Director

Jessica Bzonek is a leading designer and creator of 3D characters, with more than ten years of experience in the video game industry that have established her as an influential professional in the international scene. In fact, her career has been characterized by her commitment to innovation and collaboration, fundamental aspects in her work, where technology and art are creatively intertwined. She has contributed to the realization of important animation projects, including "Avatar: Frontiers of Pandora" and "The Division 2: Year 4", which has consolidated her reputation as an expert in the creation of pipelines and rigging.

She has also held the position of Associate Technical Director of Cinematics at Ubisoft Toronto, where she has been essential in the production of high-quality cinematic sequences. Here, she has been particularly noted for her participation as a co-presenter at the 2024 Ubisoft Developers Conference, a testament to her leadership in the industry. She has also played a crucial role at Stellar Creative Lab, where she co-developed a custom automated system for character rigs. In this regard, her ability to manage the communication of issues and solutions between departments has been instrumental in optimizing workflows.

Jessica Bzonek's career has also included significant work at DHX Media, where she has worked closely with supervisors and other pipeline workers to solve problems and test new tools, organizing learning sessions that have promoted team cohesion. At Rainmaker Entertainment Inc. he has developed character and element rigs, using a modular rigging system that has improved the functionality of the production process. Finally, her work as a Junior Rigging Artist, at Bardel Entertainment, has allowed her to develop scripts to optimize the workflow.

Ms. Bzonek, Jessica

- Associate Technical Director of Cinematics at Ubisoft, Toronto, Canada
- Technical Director of Pipeline / Rigging at Stellar Creative Lab
- Pipeline Technical Director at DHX Media
- Character Pipeline Technical Director at DHX Media
- Creature Pipeline Technical Director at Rainmaker Entertainment Inc.
- Junior Rigging Artist at Bardel Entertainment
- Course in 3D Animation and Visual Effects at the Vancouver Film School
- Course in Advanced Character Rigging by Gnomon
- Course in Introduction to Python by UBC - Continuing Education
- B.A. in Multimedia and History from McMaster University

Thanks to TECH, you will be able to learn with the best professionals in the world"

Management

Mr. Guerrero Cobos, Alberto

- Rigger and animator Video Games videogame Vestigion Lovem Games
- Master's Degree in Art and Production in Animation by the University of South Wales
- Master's Degree in 3D Character Modeling at ANIMUM
- Master's Degree in 3D Character Animation for Film and Video Games by ANIMUM
- Degree in Multimedia and Graphic Design at the University School of Design and Technology (ESNE)
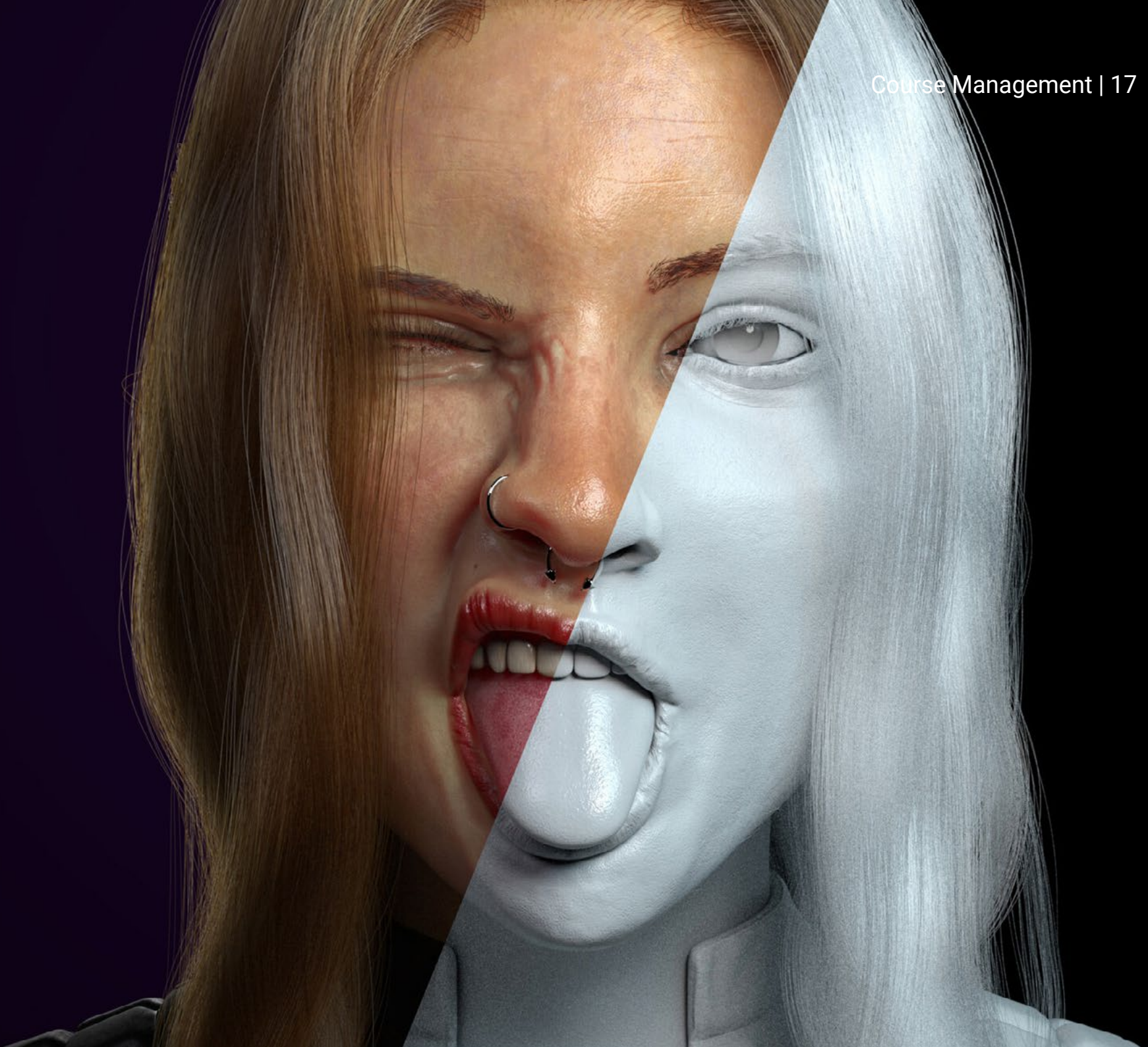
04
Structure and Content

The syllabus begins with torsorigging, presenting the advanced system and its limitations You will learn how to use the Spline IK Handle tool, Clusters or NURBS curves, among other elements Clusters or NURBS curves, among other elements The characteristics of head and neck rigging are then explained. In this part you will learn how to learn how to use the Isolate mode The last topic, on the other hand, will be dedicated to the connection of the dedicated to the connection of the Deformation Rig and the Control Rig.
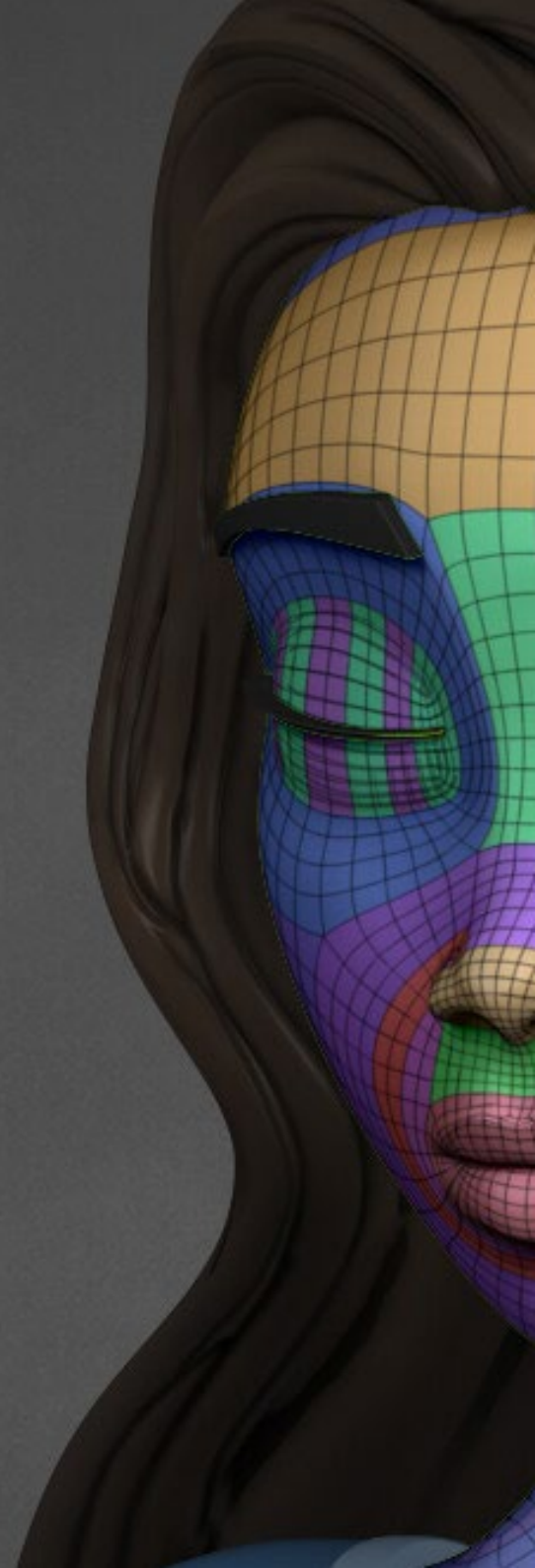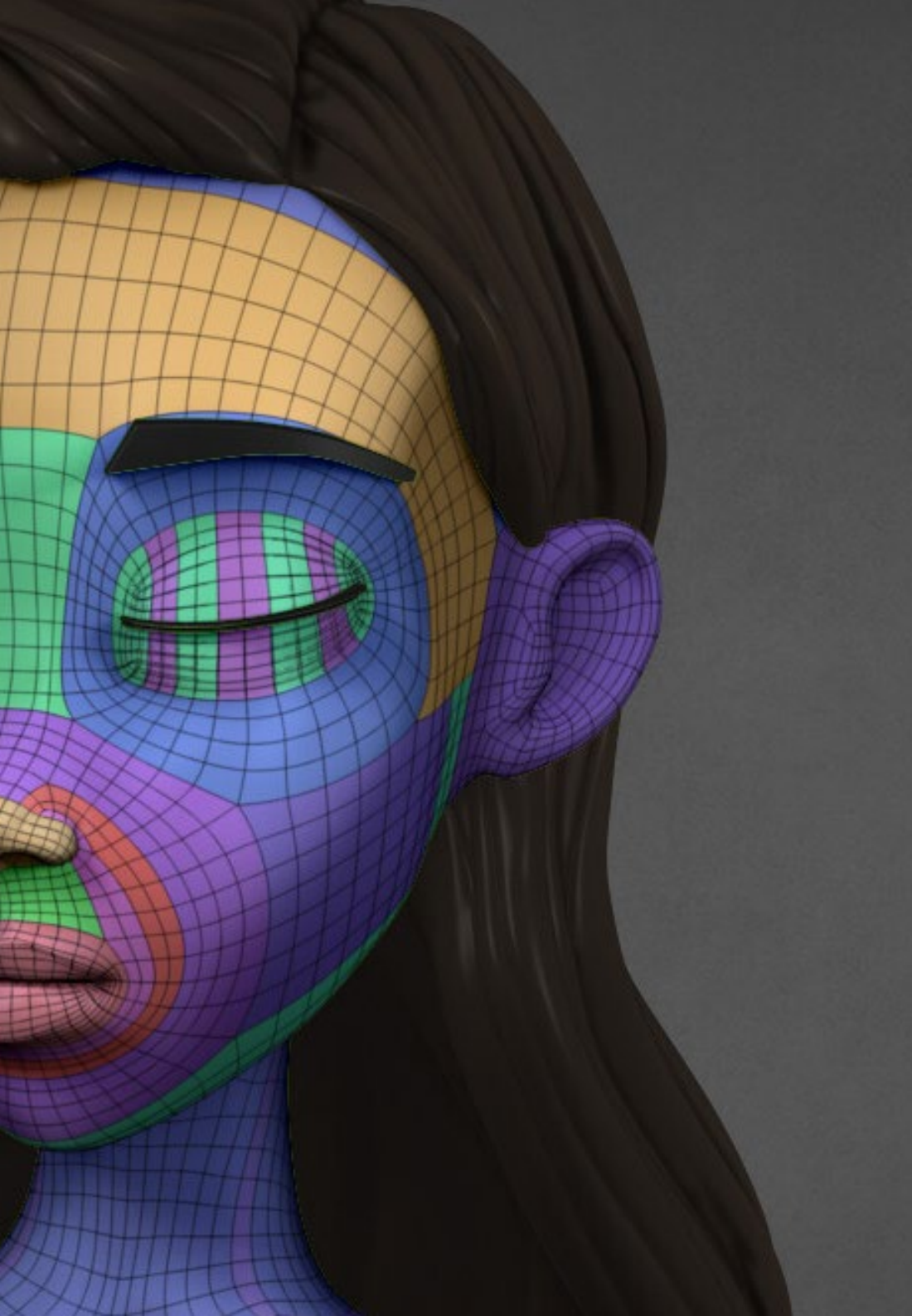
tech

The connection of deformation and control rigs can present certain difficulties In this program, you will learn how to detect possible errors and how to propose solutions"

A specific topic has been reserved to deal with parameter editing, with processes such as locking and hiding information or limiting transformations"

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.

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 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

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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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 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 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.

20%

25%

4%

3%

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 Advanced Torso, Neck and Head Rigging guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.

"
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 Advanced Torso, Neck and Head Rigging** 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.
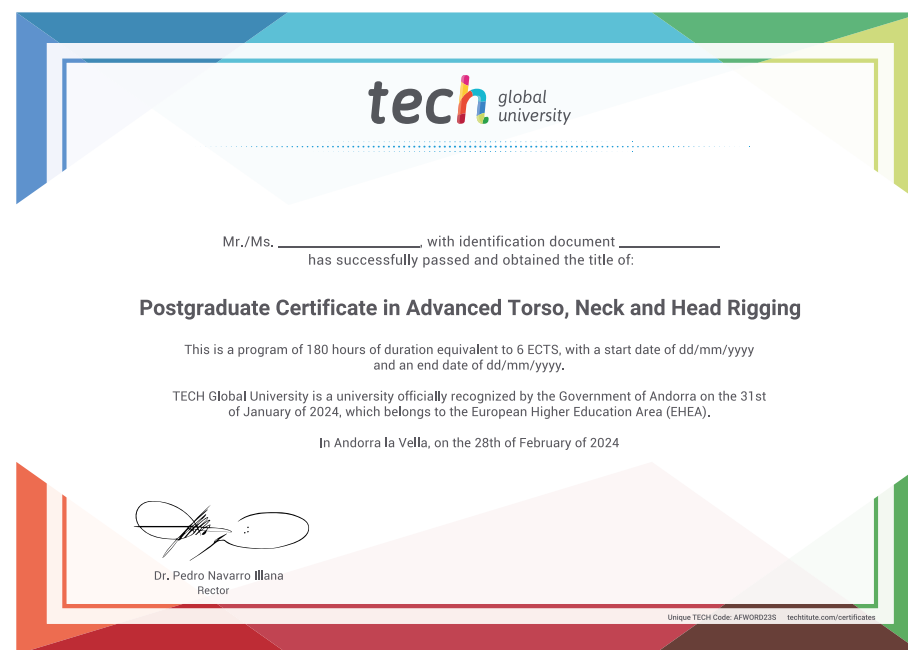
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Advanced Torso, Neck and Head Rigging**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**

tech global university

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

Postgraduate Certificate in Advanced Torso, Neck and Head Rigging

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

Dr. Pedro Navarro Illana
Rector

Unique TECH Code: AFWORD23S   techtitute.com/certificates

*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.

Postgraduate Certificate
Advanced Torso, Neck and Head Rigging

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

Postgraduate Certificate
Advanced Torso, Neck and Head Rigging

tech global university