Professional Master's Degree
Design and Creation of 3D Characters for Animation and Video Games

tech technological university

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Professional Master's Degree
Design and Creation of 3D Characters for Animation and Video Games

» Modality: **online**
» Duration: **12 months**
» Certificate: **TECH Technological University**
» Dedication: **16h/week**
» Schedule: **at your own pace**
» Exams: **onlinew**

Website: **www.techtitute.com/in/videogames/professional-master-degree/master-design-creation-3d-characters-animation-video-games**

Index

01
Introduction

Cinema and video games are, without a doubt, the greatest exponents of the animation industry. A few decades ago, this technology did not even exist. However, today it is advancing exponentially, almost without allowing us to analyze the magnitude of the changes that are the taking place. It was not so long ago that platform games revolutionized the market, just as virtual reality is doing today. And any prediction that foresees a paradigm shift in 20 years is pure chance. Therefore, there is no choice but to advance at the same time as technologies, analyzing them from within and participating in their development. In this sense, TECH proposes a working scheme in the field of Rigging based on the most widely used techniques and tools in the sector. Emphasizing hands-on learning as a method to internalize knowledge. These contents are offered in a 100% online 100% online and in different formats, so that students can choose the one that best suits their preferences.

Predicting the future of the video game industry is unfeasible. However, with our program you will acquire the necessary knowledge so that you will be the one who participates in the advances"

Just as the video game industry is growing, so is the film industry. Rigging, and 3D animation in general, are bringing about major changes in the way movies are produced. For example, in the past, if an actor was unable to continue filming, the film production had to be completely reorganized Today, technological advances make it possible to reproduce the actor's appearance with hyper-realistic results. This is why the demand for the Rigger profile is growing steadily.

Therefore, TECH has developed an extensive curriculum specialized in Rigging for characters. Where theoretical concepts are supported with practical material, process guides and tools required by the role of Rigger.

However, TECH is aware that Rigging can be one of the most complex jobs in the industry. For this reason, the contents of the Professional Master's Degree have been arranged exponentially. Going from the general to the specific and from the simple to the complex. So that the student can come to understand the most advanced concepts.

On the other hand, the program is based on Autodesk Maya, the most used software in the videogame and 3D film industry. Operative on Windows, Linux and MacOS with a free license for educational purposes.

The entire Professional Master's Degree in Design and Creation of 3D Characters for Animation and Video Games will be taught in online mode, without schedules, and with 100% of the contents available from the first moment. It will only require a device with internet access. Therefore, each student will be able to organize independently, facilitating family and work conciliation.

This **Professional Master's Degree in Design and Creation of 3D Characters for Animation and Video Games** 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 Rigging and Set-Up of video game characters for video games
- 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

Convert your Passion into your profession. Thanks to TECH you will start to create the characters that will be part of your video game"

Using virtual reality glasses is like peeking into the window of the future of video games. Enroll in this Professional Master's Degree and take the leap to the other side"
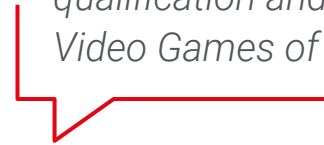
The video game sector is booming, and its possibilities are endless. Enroll in this qualification and start developing the Video Games of the future.

There are more and more movies, series and video games. Do not lag behind and become a professional Rigging thanks to this qualification.

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.

Theultimerdia 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

The professional will obtain a high specialization in advanced Rigging techniques for 3D characters. Among the main learning focuses are the use of relevant software, the analysis of 3D models for rigging and the design of systems and mechanisms of the character adjusted to the nature of the production. The purpose of the program is, therefore, to provide the professional with specialized tools and skills that allow him/her to cover all types of Rigging assignments for cinema or video games. Regardless of the technical specifications or the nature of the character.

"

Relying on TECH you can become a Rigging professional capable of tackling any kind of assignment in the field of film and video games"

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

Facial Rigging is one of the most difficult techniques. However, TECH has designed a specific module with everything you need to know"

Specific Objectives

Module 1. Rigging

- Conceive the role of the Rigger
- To understand in a specialized way the production chain
- Know the differences between film and video game production
- Identify the production phases of a rigging process
- Identify the fundamental parts of a rig
- Master the Autodesk Maya software as a rigging tool
- To know in a professional way the different types of systems and elements that can compose a character rig
- Master the job search system in the industry

Module 2. Body Deformation Rigging

- To know in a specialized way the deformation rigging and its relevance
- To set up the bone system by studying the pose of the model
- Conceive the possible errors that can occur in deformation rigging
- To create in a professional way a bone chain by means of Joints type elements
- Know how to correctly orient and place bones in the deformation system
- To perform in a professional way a correct methodology in the painting process to understand the influences on the geometry
- Conceive how all the tools available in Autodesk Maya work for Skinning work

Module 3. Body control rigging and tool creation with Python

- Highly knowledgeable about the functions that a control rig has and its relevance
- Master the standard nomenclature of the elements in the industry
- Create and edit NURBS type curve elements for the creation of controls for the Rig
- Analyze the character to propose a suitable control Rig
- Configure the controls properly to facilitate the animation phase
- Conceive Constrain tools and their possibilities
- Introduce the Python programming language for tool creation in Autodesk Maya in Autodesk Maya
- Develop custom Scripts for Rigging work

Module 4. Advanced limb rigging

- Professionally create direct kinematic chains
- Professionally create inverse kinematics chains
- Create a hybrid FK and IK system for a character
- Create custom attributes on Rig elements in a specialized way
- Connecting parameters and values through the Node Editor tool
- Instantiate attributes in Node Shapes
- Analyze the behavior of human body joints
- Create automations and systems for character's feet and hands
- Create custom tool for the use of FK/IK with Python
- Analyze and develop the behavior of quadruped limbs

Module 5. Advanced Torso, Neck and Head Rigging

- Conceive the limitations of basic rigging and the needs of the animator
- To 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 the development of the torso system
- Master the use of Clusters type elements
- Edit and limit transformations of Rig components
- Engineer a character's head locking system through the Node Editor
- Build a proper hierarchy of all the elements of a Rig

Module 6. Advanced Deformation Systems, Rigging of Props and Clothing

- Develop a Twist type twisting system
- Develop a Stretch & Squash type limb stretching and shrinking system
- Develop a Bendylike flexible limb system for cartoons
- Conceive software optimization limitations with computer heavy rigs
- Specialized approach to a low-performance proxy system
- To design in a professional way a Rig system for the character's clothing and apparel
- Propose a Rig system for the character's weapon mechanics

Module 7. Advanced Facial Rigging

- Identify and analyze the anatomy and facial expressions of the human body
- Introduce different types of Rig facial deformation systems
- Introduce different types of facial rig control systems
- Develop Blend Shapes systems, from modeling to configuration
- Developing a rig system for jaw and tongue

- Develop an advanced lip rig system with Sticky Lips capability
- Developing eye rig and eyelid movement
- Automate facial systems
- Incorporate dynamic systems for character hair rigging
- Connecting the facial rig to the body rig

Module 8. Rigging for Video Games

- Analyze the differences between movie rigs and video games
- Know the limitations of Rigging in video game engines
- To know Unity video game engine in a professional way
- Configure a Rig in Unity with Humanoid system
- Adapt a cinematic rig for video games
- Exporting and importing our Rig in the game engine
- Designing online resources for rigging and animation in videogames
- Adapt Rigs and online animations to our character

Module 9. Muscle Systems

- Specialized knowledge of the use of muscular systems in film productions
- Analyze the muscular anatomy of the human body
- Conceiving the elements involved in a muscular system
- Creating and editing capsules from scratch for muscle systems

- Learn how to use the Muscle Builder tool of Autodesk Maya in a professional way
- Configuring skin deformation with muscular system
- Configuring muscle behavior
- Configure our character's muscle collisions
- Working with the cache to optimize muscle mechanisms

Module 10. Processes and Extra Tools for the Rigger in Industry

- Organize the Rig elements in our scene
- Manage the weighting of deformation influences of our Rig
- Prepare and protect the model for the animator's use
- Be highly knowledgeable in the technique of retopology
- Develop a 2D facial Rigging system on 3D models
- Master Spine2D as a 2D Rig and animation software
- Download and install plugins and online tools in our Autodesk Maya program
- Handle Motion Tracking in a professional way
- Develop professional set-up with the MGTools Pro 3 tool
- Develop auto rigs with Rdm Tools v2
- Edit and develop a presentation Reel of our Rig
- Training on how to search for official documentation online

03
Skills

The completion of this Professional Master's Degree offers the opportunity to specialize in one of the most in-demand sectors in the animation industry. Upon completion of the program, the student will be able to design his own rigging systems,totally suitable for the Rigging systems, totally suitable for the animator to do his job and the production to run its course. In addition, you will become an expert in Maya, whose concepts and processes are applicable to other software. In this way, you will be able to tackle a rigging job regardless of the tool to be used.

"TECH is committed to training Rigging professionals who are aware of industry trends"

General Skills

- Possess all the previous and fundamental knowledge of the Rigging world
- Develop your own rigging systems
- Master the Autodesk Maya program
- Apply the concepts and processes learned to any other Rigging software
- Work fluently regardless of the computational load required by the rigging system
- Develop riggings compatible with video game engines

TECH assures you the learning of the most demanded tools in the Rigging field"
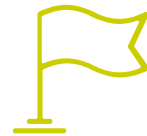
Specific Skills

- Internalize different methodologies so that the body deformation rigging system is developed in a logical and adequate way

- To design control elements that can be connected to the character's skeleton

- Know the problems that a basic torso rig can present to the animator

- Perform anatomical studies of human facial and body muscles

- Create your own tools to speed up certain processes that may become repetitive

- Identify the possibilities offered by the Forward Kinematic (FK) and Inward Kinematic (IK) systems

- Add custom attributes and parameters to Control Rig elements

- Master the Stretch & Squash and Bendy & Twist systems

- Adapt the rigging process of a character's clothing, props or weapons so that they can be attached to a dynamic system

- Learn how to use muscle systems to apply them to hyper-realistic 3D characters

Course Management

The director in charge of the Professional Master's Degree in Design and Creation of 3D Characters for Animation and Video Games has extensive experience in the sector. In addition to programs that include Bachelor's, Master's Degrees and specialized courses. C and 3D Animation professionals who will put all their knowledge, tips and tricks at the student's disposal. Combining theoretical and practical study to facilitate the internalization of learning.

"*Practice essential in any of the learning process. Therefore, at TECH, you will assimilate all the concepts related to Rigging while developing your own characters and animations*"

Management

Mr. Guerrero Cobos, Alberto

- Rigger and animator Video Games videogame Vestigion Lovem Games
- Master of 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)

Structure and Content

An extensive syllabus has been developed that approaches rigging from various perspectives. With the intention of making learning as complete as possible. The phases of the Rigging process, the parts of a Rig, its tools and the elements that come into play will be broken down in depth. In addition, specific sections have been reserved for specific processes such as body deformation and control rigging, limb, neck, torso and head rigging, clothing and facial rigging, among others. All this, through the Autodesk Maya tool, one of the most widely used in the world.

"The curriculum offered by TECH has been arranged from less to more difficult, so that learning is efficient and homogeneous"

Module 1. Rigging

1.1. The Role of the Rigger
    1.1.1. Riggers
    1.1.2. Production
    1.1.3. Interdepartmental communication
1.2. Rigging Phases
    1.2.1. Deformation Rigging
    1.2.2. Control Rigging
    1.2.3. Changes andBbug Fixes
1.3. Parts of a Rig
    1.3.1. Corporate Rigging
    1.3.2. Facial Rigging
    1.3.3. Automatic
1.4. Differences between Rig for Film and Video Games
    1.4.1. Rigging for Animated Film
    1.4.2. Rigging for Video Games
    1.4.3. Simultaneous use of Other Software
1.5. 3D Model Study
    1.5.1. Topology
    1.5.2. Poses
    1.5.3. Elements, Hair and Clothing
1.6. Software
    1.6.1. Autodesk Maya
    1.6.2. Mayer's Installation
    1.6.3. Required Maya Plugins
1.7. Maya Rigging Basics
    1.7.1. Interface
    1.7.2. Navigation
    1.7.3. Rigging Panels
1.8. Main Elements of Rigging
    1.8.1. Joints (bones)
    1.8.2. Curves (Controls)
    1.8.3. Constrains
1.9. Other Rigging Elements
    1.9.1. Clusters
    1.9.2. Non-Linear Deformers
    1.9.3. Mixing Shapes
1.10. Specialization
    1.10.1. Rigger Specialization
    1.10.2. The Reel
    1.10.3. Portfolio and Employment Platforms

Module 2. Body Deformation Rigging

2.1. Systems and Models
    2.1.1. Revision of the Model
    2.1.2. System Vulnerabilities
    2.1.3. Joints Nomenclatures
2.2. Joints Chain Creation
    2.2.1. Joints Editing Tools
    2.2.2. Factors to Consider
    2.2.3. Location and Hierarchy of Joints
2.3. Joints Orientation
    2.3.1. The Importance of a Correct Orientation
    2.3.2. Joints Orientation tools
    2.3.3. Symmetry of Joints
2.4. Skinning
    2.4.1. Skeleton to Geometry Linking
    2.4.2. Influence Painting Tools
    2.4.3. Symmetry of Influences in the Model
2.5. Painting of Influences Absolutes
    2.5.1. Influence pPainting Process Approach
    2.5.2. Influences on Body Parts between Two Joints
    2.5.3. Influences on Body Parts between Three or More Joints
2.6. Smoothed Lower Body Influences of the Character
    2.6.1. Joint Movements
    2.6.2. Animations for Influence Smoothing
    2.6.3. Smoothing Process

Module 3. Body Control Rigging and Tool Creation with Python

Module 5. Advanced Torso, Neck and Head Rigging

Module 6. Advanced Deformation Systems, Rigging of Props and Clothing

Module 7. Advanced Facial Rigging

7.1.   Facial Rig
    7.1.1.   Deformation Methods
    7.1.2.   Control Methods
    7.1.3.   Facial Expression Study
7.2.   Facial Rigging Using Blend Shapes
    7.2.1.   Key Shapes Facial Partition
    7.2.2.   Muscle Movement Modeling
    7.2.3.   Deformation Distribution Blend Shapes
7.3.   Facial Control Rigging
    7.3.1.   Joystick Controls Set-Up
    7.3.2.   Facial Controls
    7.3.3.   Set Driven Key Tool
7.4.   Jaw and Tongue Rigging
    7.4.1.   Anatomical Study and Approach
    7.4.2.   Jaw Deformation and Jaw Control
    7.4.3.   Tongue Deformation and Control
7.5.   Lip Rigging
    7.5.1.   System Approach
    7.5.2.   Deformer Wire and Controls
    7.5.3.   Painting of Influences
7.6.   Sticky Lips System
    7.6.1.   Sticky Lips
    7.6.2.   System Approach
    7.6.3.   Development
7.7.   Automation
    7.7.1.   Benefits and Examples of Facial Automation
    7.7.2.   Approach
    7.7.3.   Development
7.8.   Eye and Eyelid Rigging
    7.8.1.   Approach
    7.8.2.   Deformation Rigging and Eye Control
    7.8.3.   Eyelid System
7.9.   Hair Rig
    7.9.1.   Hair Systems
    7.9.2.   Geometric Hair System
    7.9.3.   XGen Generated Hair System
7.10.   Connection of Facial Rig to Body Rig
    7.10.1.   Rig System Analysis
    7.10.2.   Deformer Hierarchy
    7.10.3.   Hierarchy and Prevention of Double Transformations

Module 8. Rigging for Video Games

8.1.   Rigging for Video Games in Unity
    8.1.1.   Film and Video Game Rig
    8.1.2.   Download and Installation
    8.1.3.   Unity Interface and Navigation
8.2.   Unity Rigging Tools
    8.2.1.   Unity Rig Types
    8.2.2.   Avatar Tool
    8.2.3.   Retargeting
8.3.   Facial Rigging for Video Games
    8.3.1.   Problem and Solution Approach
    8.3.2.   System Creation
    8.3.3.   Painting of Influences
8.4.   Adapt a Cinematic Rig to Video Games|
    8.4.1.   Rig Exploration and Limitations
    8.4.2.   Creation of Skeleton for Unity Humanoid
    8.4.3.   Connecting Video Game Skeleton to Movie Skeleton with Python
8.5.   Skinning for Video Games
    8.5.1.   Limitations of Skin Cluster Deformer for Unity
    8.5.2.   Influence Weighing
    8.5.3.   Facial Controller Treatment
8.6.   Completed Rig for Video Games
    8.6.1.   Character Clothing Rig
    8.6.2.   Root Motion and Character Weapons
    8.6.3.   Twist Joints

8.7.   Human IK
    8.7.1.   Human IK Tool
    8.7.2.   Creation of Character Definition
    8.7.3.   Eyes, Auxiliary Joints and Rig Control

8.8.   Mixamo
    8.8.1.   Free Rig Tool and Mixamo animations
    8.8.2.   Library of Characters and Animations
    8.8.3.   Rig Creation with Mixamo

8.9.   Import and Export of Rigs and Animations
    8.9.1.   Export
    8.9.2.   Import
    8.9.3.   Baking Animations

8.10.   Rig Import in Unity
    8.10.1.   Rig Import Configuration in Unity
    8.10.2.   Humanoid Configuration
    8.10.3.   Rig Physics Configuration

Module 9. Muscular Systems

9.1.   Muscular Systems
    9.1.1.   Muscular Systems
    9.1.2.   Behavior of Elastic Masses
    9.1.3.   Workflow with Maya Muscle System

9.2.   Muscular Anatomy Focused on Character Rigging
    9.2.1.   Upper Body
    9.2.2.   Undercarriage
    9.2.3.   Arms

9.3.   Capsule Creation
    9.3.1.   Capsule Creation
    9.3.2.   Capsule Configuration
    9.3.3.   Conversion of Rig Elements to Capsules

9.4.   Muscle Building
    9.4.1.   Muscle Creation Window
    9.4.2.   State of Poses and Muscle Sculpting
    9.4.3.   Muscle Editing

9.5.   Muscle Builder Tool
    9.5.1.   Muscle Building with Muscle Builder
    9.5.2.   Muscle Shape Editing
    9.5.3.   Muscle Finish

9.6.   Muscle Spline Deformer with Muscle Spline Deformer
    9.6.1.   Create Muscle Spline Deformer
    9.6.2.   Spline Deformer Configuration
    9.6.3.   Master Muscle Control

9.7.   Skin Deformation
    9.7.1.   Types of Deformations
    9.7.2.   Muscle Deformer Application
    9.7.3.   Connection of Muscle Objects to Muscle Deformers

9.8.   Muscle Behavior
    9.8.1.   Muscle Directional Object
    9.8.2.   Deformation Displacement
    9.8.3.   Strength, Jiggle and Heavy Muscle

9.9.   Muscle Collisions
    9.9.1.   Types of Collisions
    9.9.2.   Intelligent Collisions
    9.9.3.   KeepOut Nodes

9.10.   Working with Cache
    9.10.1.   Performance Problems with Muscular Systems
    9.10.2.   Cache
    9.10.3.   Cache Point Management

Module 10. Processes and extra tools for the Rigger in Industry

TECH offers you an extensive program that covers every aspect of Rigging and its industry"

06
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.

30%

10%

8%

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.

Certificate

The Professional Master's Degree in Design and Creation of 3D Characters for Animation and Video Games guarantees students, in addition to the most rigorous and up-to-date, access to a Professional Master's Degree issued by TECH Technological University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"
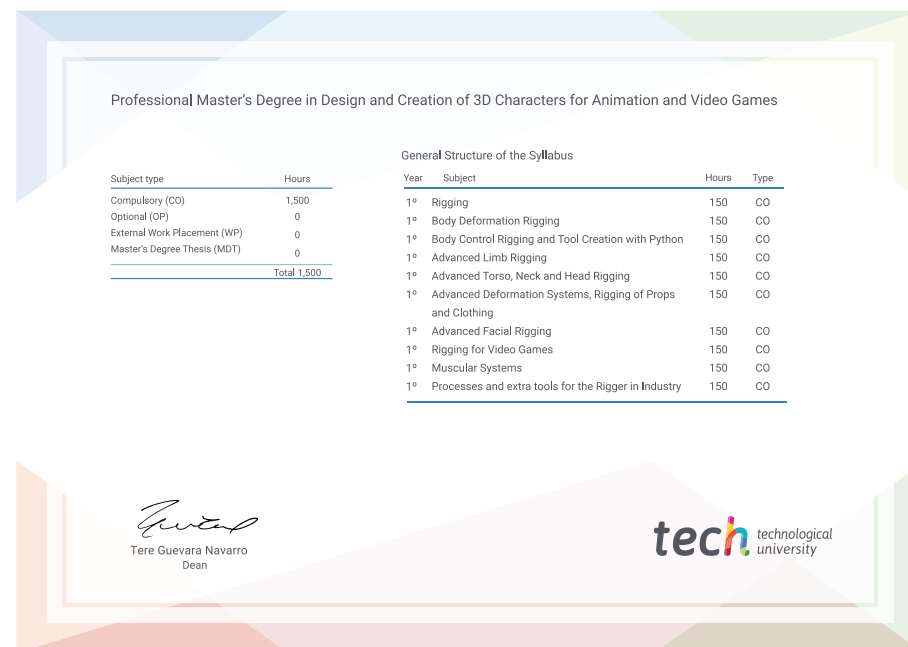
This **Professional Master's Degree in Design and Creation of 3D Characters for Animation and Video Games** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Professional Master's Degree** issued by **TECH Technological University** via tracked delivery*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Professional Master's Degree, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Professional Master's Degree in Design and Creation of 3D Characters for Animation and Video Games**

Official Nº of hours: **1,500 h.**

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tech technological university

Awards the following
CERTIFICATE
to

Mr./Ms. _____ with identification number _____.
For having successfully passed and accredited the following program

PROFESSIONAL MASTER'S DEGREE
in

Design and Creation of 3D Characters for Animation and Video Games

This is a qualification awarded by this University, equivalent to 1,500 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

Unique TECH Code: AFWORD23S   techtitute.com/certificates

Professional Master's Degree in Design and Creation of 3D Characters for Animation and Video Games

Subject type	Hours
Compulsory (CO)	1,500
Optional (OP)	0
External Work Placement (WP)	0
Master's Degree Thesis (MDT)	0
Total	1,500

General Structure of the Syllabus

Year	Subject	Hours	Type
1º	Rigging	150	CO
1º	Body Deformation Rigging	150	CO
1º	Body Control Rigging and Tool Creation with Python	150	CO
1º	Advanced Limb Rigging	150	CO
1º	Advanced Torso, Neck and Head Rigging	150	CO
1º	Advanced Deformation Systems, Rigging of Props and Clothing	150	CO
1º	Advanced Facial Rigging	150	CO
1º	Rigging for Video Games	150	CO
1º	Muscular Systems	150	CO
1º	Processes and extra tools for the Rigger in Industry	150	CO

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*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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Professional Master's Degree

Design and Creation of 3D Characters for Animation and Video Games

» Modality: **online**
» Duration: **12 months**
» Certificate: **TECH Technological University**
» Dedication: **16h/week**
» Schedule: **at your own pace**
» Exams: **online**

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