

Postgraduate Certificate Rigging in Video Games





Postgraduate Certificate Rigging in Video Games

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/videogames/postgraduate-certificate/rigging-video-games

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01

Introduction

Rigging in Video Games still presents multiple possibilities for expansion. Over the course of year, the techniques and technologies used in this field vary greatly. That is why series present so many differences between their own titles, producing very noticeable advances in a short period of time. In this regard, an up-to-date program has been developed to keep trends in the sector, enabling its qualification graduates to anticipate changes and innovations that may occur. The Unity video game engine, the Skinning process, facial Rigging or the adaptation of movie Rigs to videogames, among other elements, will be analyzed. Always, through a 100% online methodology and without schedules that facilitates the organization on the part of the student.





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This program delves into the Skinning process, as well as the limitations of Skin Cluster for Unity”

Unlike 3D characters designed for film, the production of a video game requires the model and rig to run in a third program, the game engine. These tend to be more limited with respect to the systems used in film Rigging. For this reason, a filmRig is not likely to work in a video game engine.

To address this problem, a specific topic has been dedicated to the adaptation of film Rigs to video games. Exploring the limitations, creating a skeleton for Humanoid and connecting the video game skeleton to the cinema skeleton with Python.

This will be followed by delving into everything related to the Unity video game engine. From downloading and installing it to importing and exporting a Rig. Passing through the creation of Character Definition, the Avatar tool or Retargeting.

In addition, you will learn how to use Mixamo to create skeletons. A free tool with a large library of characters and animations. We will also focus on the process of finishing with the clothing Rig, weapons or Twists Joints.

All this, through a 100% online format, without timetables and with all the syllabus available from the first day. All you need is a device with an internet connection. In this way, students can organize themselves according to their Preferences. Thus enhancing learning.

This **Postgraduate Certificate in Rigging in 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 in 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 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



TECH faculty will help you learn about and identify the different types of Rigs available in Unity”

“

Importing and exporting Rigs is almost as important as the development itself, so a specific topic has been set aside to learn about these processes”

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.

The program includes specific sections to deal with the creation of a facial Rig and its influence painting.

With TECH, you will learn to connect a film-type skeleton with that of a video game.



02 Objectives

Students who complete this Postgraduate Certificate in Rigging in Video Games will know how to create a Rig and work with it in the Unity engine. You will learn about the differences with a Rig limitations, the use of the program itself and the keys to import and export and the keys to import and export. At the same time, we will teach how to use Mixamo and different online resources for Rigging and animation will be presented.





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Configure a Rig in Unity
with Humanoid system”



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



A specific section has been dedicated to the adaptation of Rigs and online animations in the character"





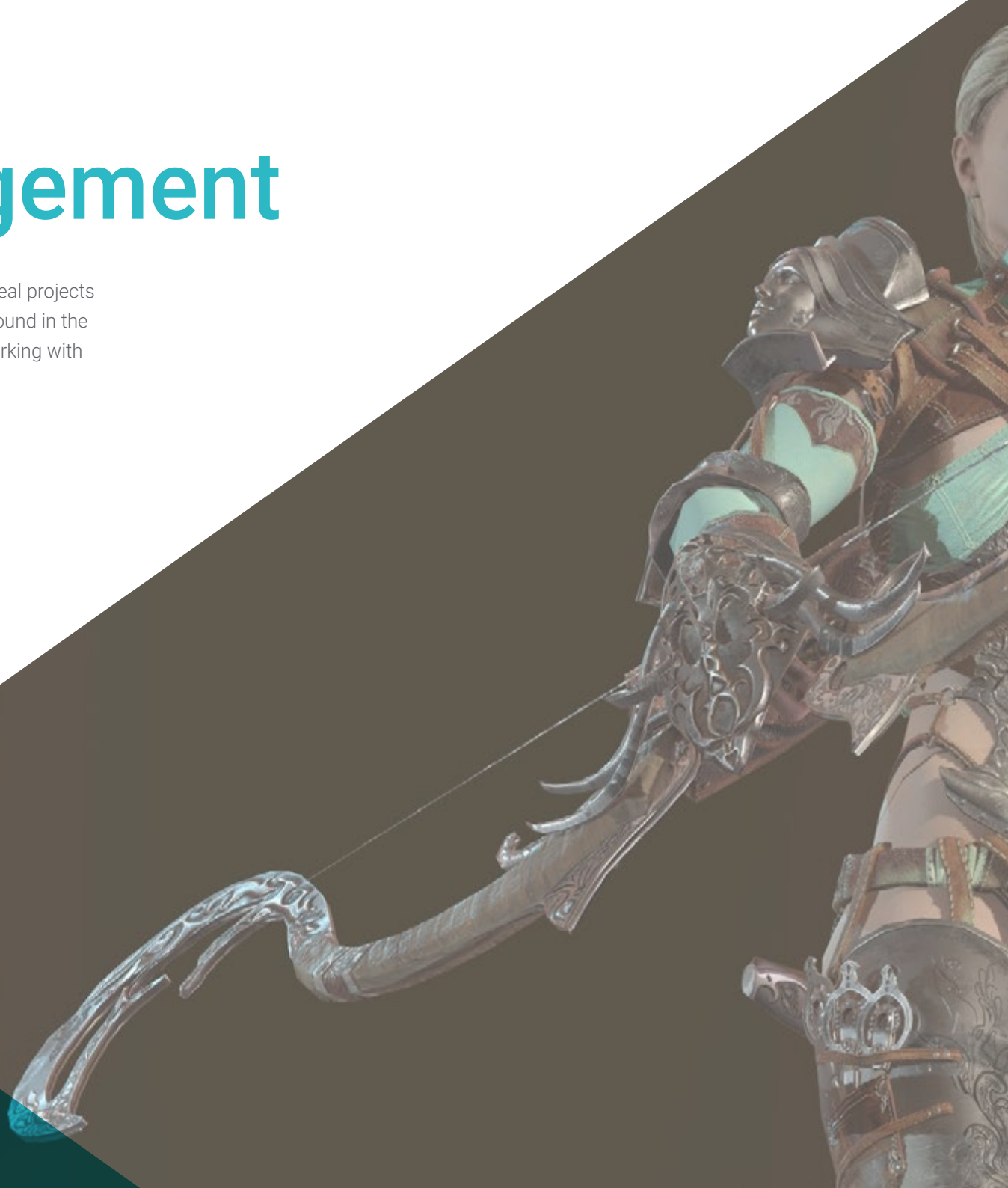
Specific Objectives

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

03

Course Management

The teaching staff of this Postgraduate Certificate has experience in real projects Rigging in Video Games. In addition to an extensive academic background in the field. As a result, students will receive very useful tips applicable to working with Unity, as well as the rest of the elements that make up the syllabus.





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At TECH, we provide you with first class experts to help you learn how to use Unity with ease and professionalism”

Management



Mr. Guerrero Cobos, Alberto

- Rigger and animator Video Games video game 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 content of the Postgraduate Certificate in Rigging in Video Games begins by explaining how to work with Unity: downloading, installation, interface, navigation, Rig types, Avatar tool, Retargeting, Humanoid, Skin Cluster, etc. Subsequently, it discusses the use of Human IK and Mixamo, to finish with the export and import processes in Unity.



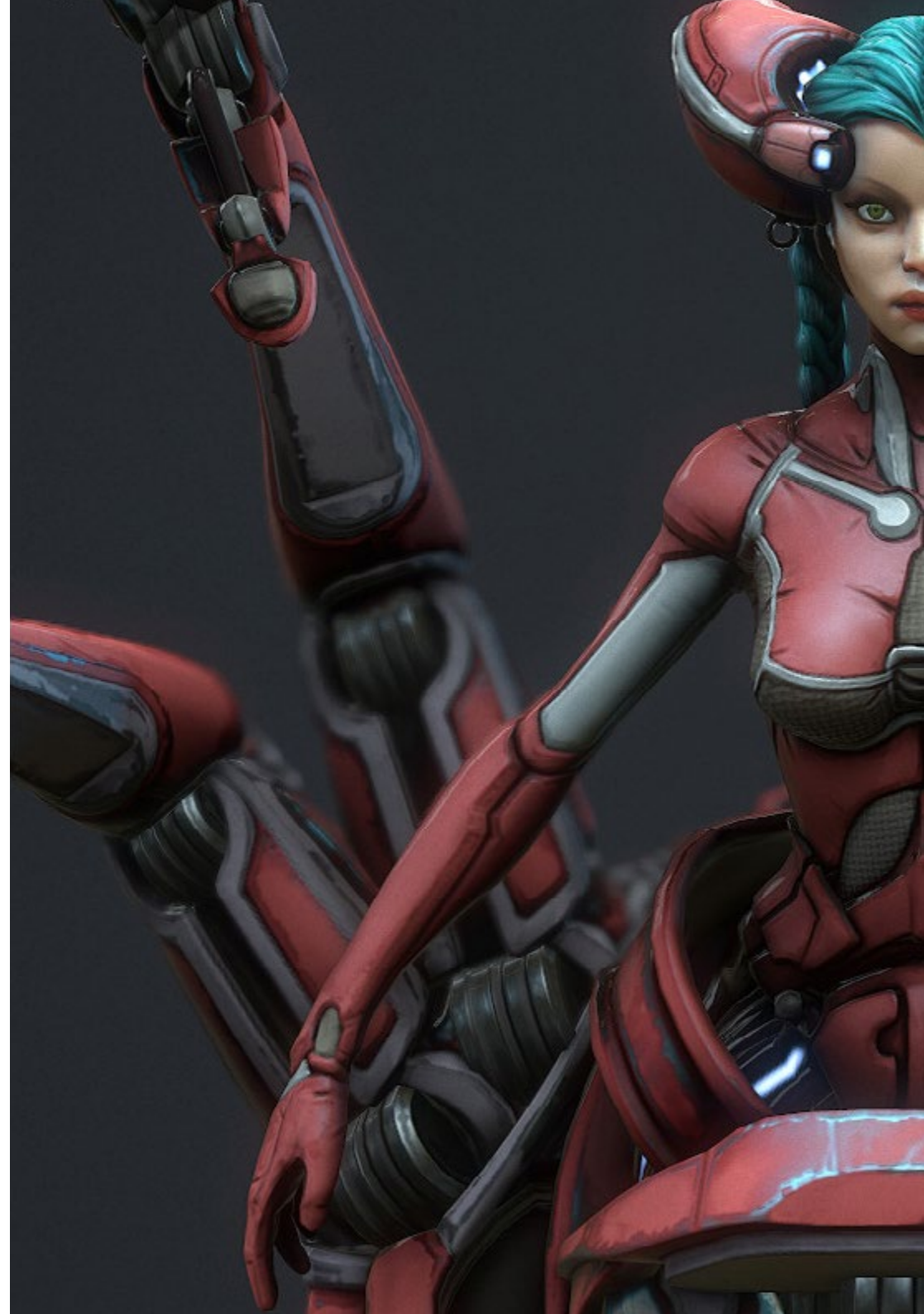


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In this qualification you will learn to work with Unity, the video game engine used in hits such as Pokemon Go or Hearthstone”

Module 1. Rigging for Video Games

- 1.1. Rigging for Video Games in Unity
 - 1.1.1. Film and Video Game Rig
 - 1.1.2. Download and Installation
 - 1.1.3. Unity Interface and Navigation
- 1.2. Unity Rigging Tools
 - 1.2.1. Unity Rig Types
 - 1.2.2. Avatar Tool
 - 1.2.3. Retargeting
- 1.3. Rigging for Video Games
 - 1.3.1. Problem and Solution Approach
 - 1.3.2. System Creation
 - 1.3.3. Painting of Influences
- 1.4. Adapt a Cinematic Rig to Video Games
 - 1.4.1. Rig Exploration and Limitations
 - 1.4.2. Creation of a Skeleton for Unity Humanoid
 - 1.4.3. Connecting Video Game Skeleton to Movie Skeleton with Python
- 1.5. Skinning for Video Games
 - 1.5.1. Limitations of Skin Cluster Deformer for Unity
 - 1.5.2. Influence Weighing
 - 1.5.3. Facial Controller Treatment
- 1.6. Completed Rig for Video Games
 - 1.6.1. Character Clothing Rig
 - 1.6.2. Root Motion and Character Weapons
 - 1.6.3. Twist Joints
- 1.7. Human IK
 - 1.7.1. Human IK Tool
 - 1.7.2. Creation of Character Definition
 - 1.7.3. Eyes, Auxiliary Joints and Rig Control





- 1.8. Mixamo
 - 1.8.1. Free Rig Tool and Mixamo Animations
 - 1.8.2. Library of Characters and Animations
 - 1.8.3. Rig Creation with Mixamo
- 1.9. Import and Export of Rigs and Animations
 - 1.9.1. Export
 - 1.9.2. Import
 - 1.9.3. Baking Animations
- 1.10. Rig Import in Unity
 - 1.10.1. Rig import Configuration in Unity
 - 1.10.2. Humanoid Configuration
 - 1.10.3. Rig Physics Configuration



Upon completion of this Postgraduate Certificate, you will have learned how to correctly configure Humanoid for importing Rigs into Unity”

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.





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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”

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.



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.





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 Rigging in Video Games guarantees you, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Rigging in 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 **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in Rigging in Video Games**

Official N° of hours: **150 h.**



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

future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present
online training
development language
classroom



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