Postgraduate Certificate
Body Control Rigging and Tool Creation with Python

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Postgraduate Certificate
Body Control Rigging and Tool Creation with Python

Course Modality: **Online**

Duration: **6 weeks**

Certificate: **TECH Technological University**

Official N° of hours: **150 h.**

Website: **www.techtitute.com/us/videogames/postgraduate-certificate/body-control-rigging-tool-creation-phython**

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01
Introduction

Correct control rigging is essential in the character development process. It is the connection point between the rigger and the animator. Therefore, providing an intuitive and accessible Set-Up will speed up project times and help to achieve a satisfactory result that will help obtain a satisfactory result. The development of control rigging involves the use of very specific tools. Therefore, for this program, a particularly technical syllabus with all the definitions and processes involved has been proposed. All this, with online methodology and in different formats that favor the assimilation of the contents and provides the student with a learning process that is adapted to his or her time and preferences.

" *In this program you will learn how to synchronize your work with that of the animator. A quality highly demanded by companies"*

The design of control elements is usually a very repetitive process. It is essential to use tools that allow us to save time. Because sometimes, shortening the deadlines is almost as important as the final result. For this reason, the last topics will cover the creation of our own tools that will help to develop the control system. that will help to develop the control system more quickly.

Script Editor, the Python programming language and the Maya command library will prove crucial in this process. Opening a wide range of possibilities to perform the most complex tasks in a comfortable way.

These shortcuts will be used to launch the different processes involved in the creation of controls. Mainly, NURBS curves, Constrain elements and Parent Constrain. Always, taking into account the hierarchy of elements and the final solution when connecting the deformation and control rigging.

In order to carry out this learning process, a proven methodology has been implemented that offers the contents in a 100% online mode. Therefore, the entire syllabus will be available from the first day and without timetables, facilitating the student's personal and work conciliation.

This **Postgraduate Certificate in Body Control Rigging and Creation of Tools with Python** 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 body Control Rigging. and tool creation with Python

◆ 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

The Postgraduate Certificate details the fundamentals of Python programming for Rigging. Therefore, you will be able to create your own tools and speed up your work"

Knowing the uses and classes of Constrain elements is essential to create a proper control rigging. The TECH teaching faculty will provide you with all the keys"

Learn the function of the Roots in setting the initial position of the controls thanks to TECH experts.

The Script Editor is one of the most useful tools in Maya. In this Postgraduate Certificate you will learn how to use it professionally.
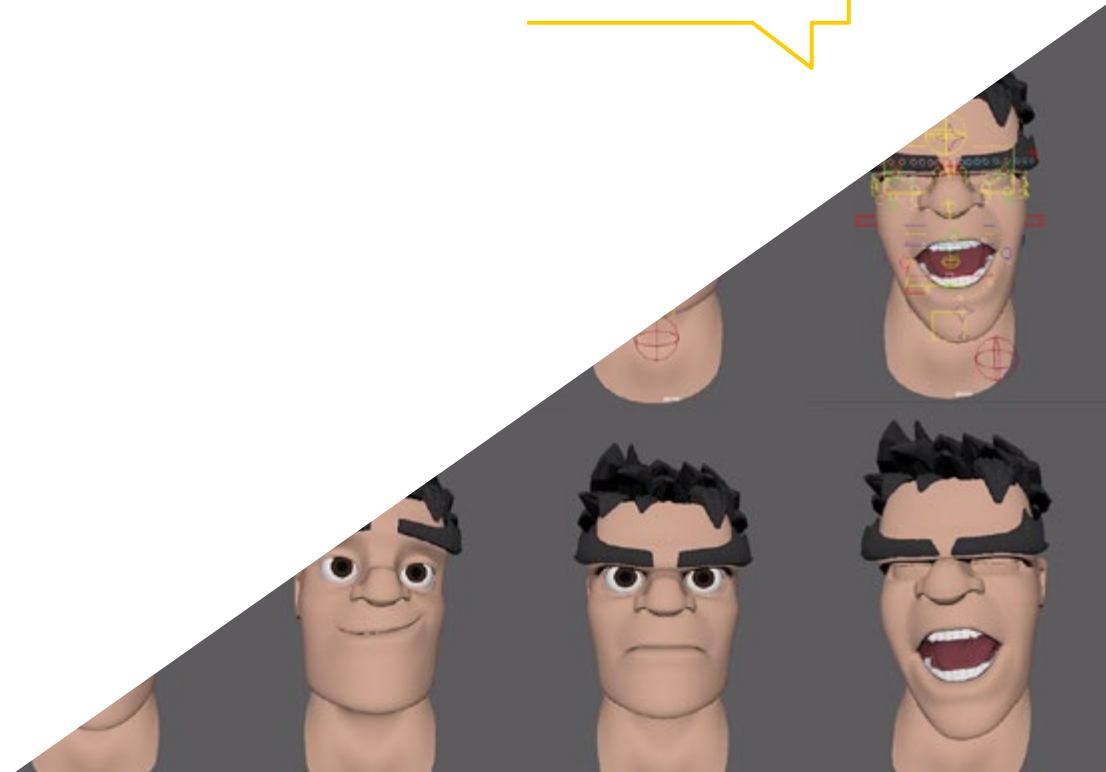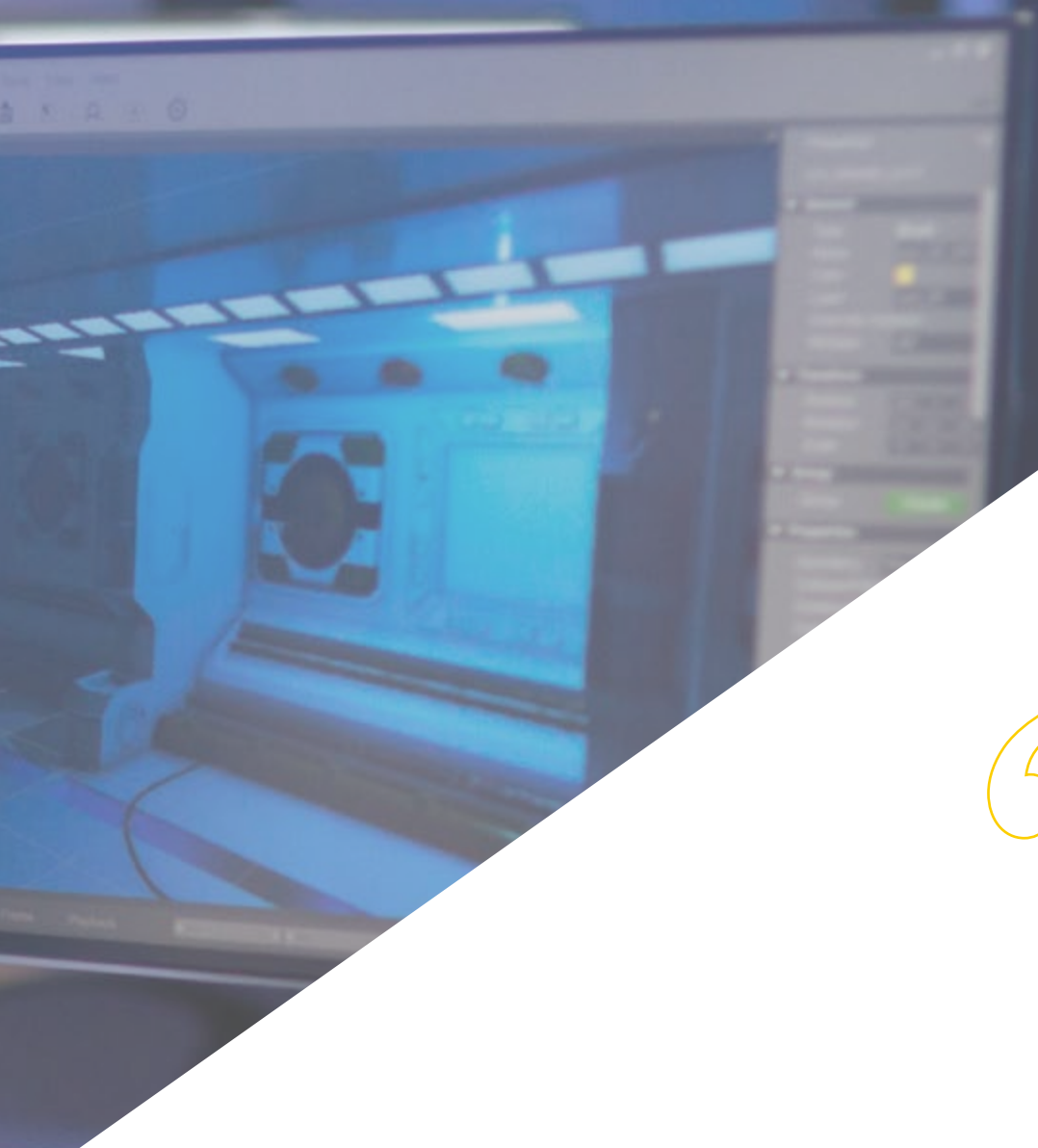
The program includes, in its teaching staff, professionals from the sector who bring to this program the experience of their work, in addition to recognized specialists from prestigious reference societies and universities.

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

The qualification in this program will be able to understand and put into practice a Rig control. Always, adapting it to the characteristics of the project and the character itself. To do this, you will learn to create controls, for example, through NURBS type curves, either predefined or edited by the Rigger itself; Finally, the student will learn the basics of Python for Rigging, will work with the Script Editor tool and create Roots automatically with Python.

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At TECH, you will learn to work with predefined NURBS curves and to edit them according to the needs of the project"
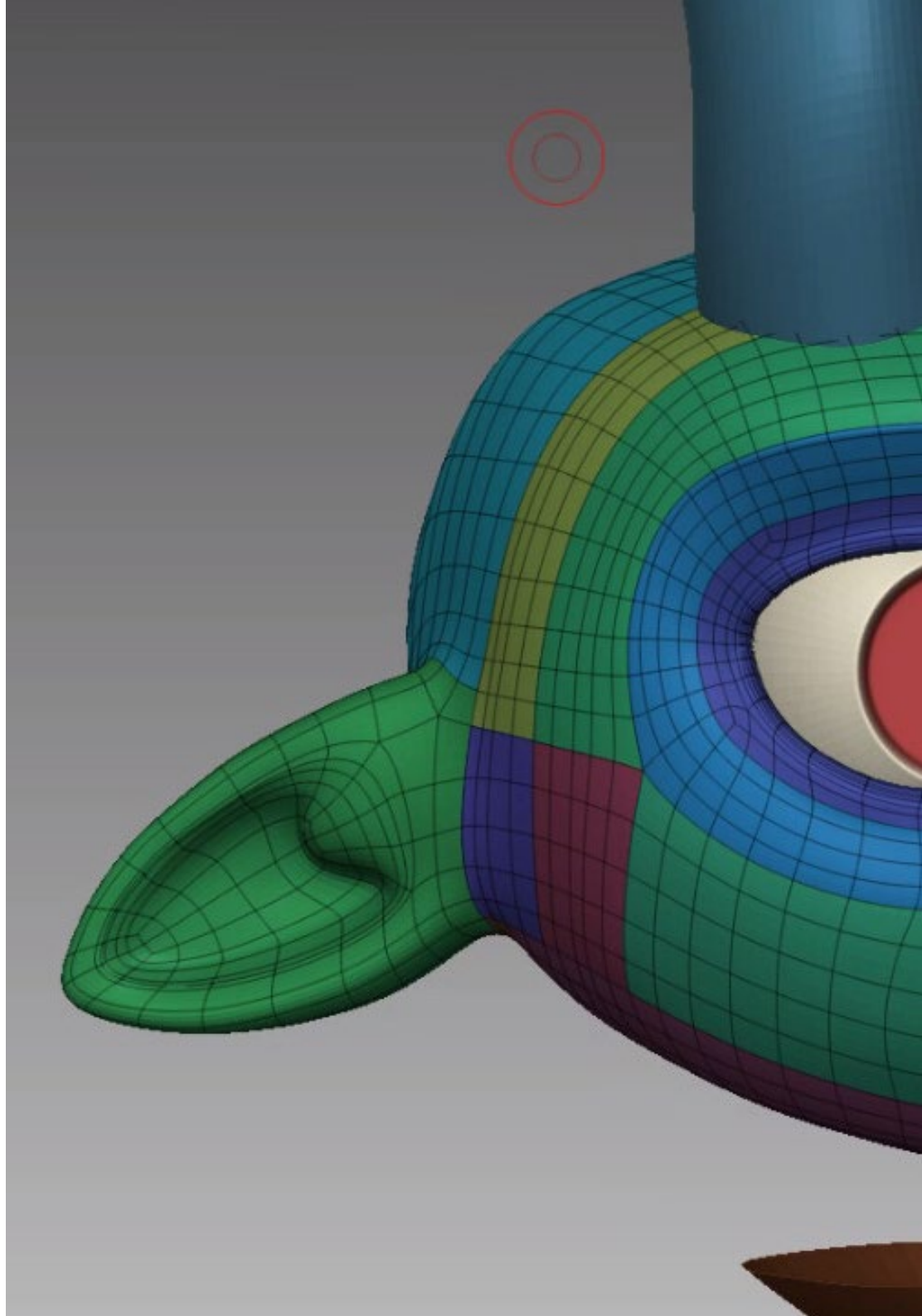
General Objectives

- Understand how a Control Rig works
- Create appropriate controls for the Rig
- Understand the possibilities of Python for Maya
- Elaborate concrete Scripts for your project

Get familiar with the connection of deformation and control Riggings through Parent Constrain thanks to the specialized topic proposed by TECH"
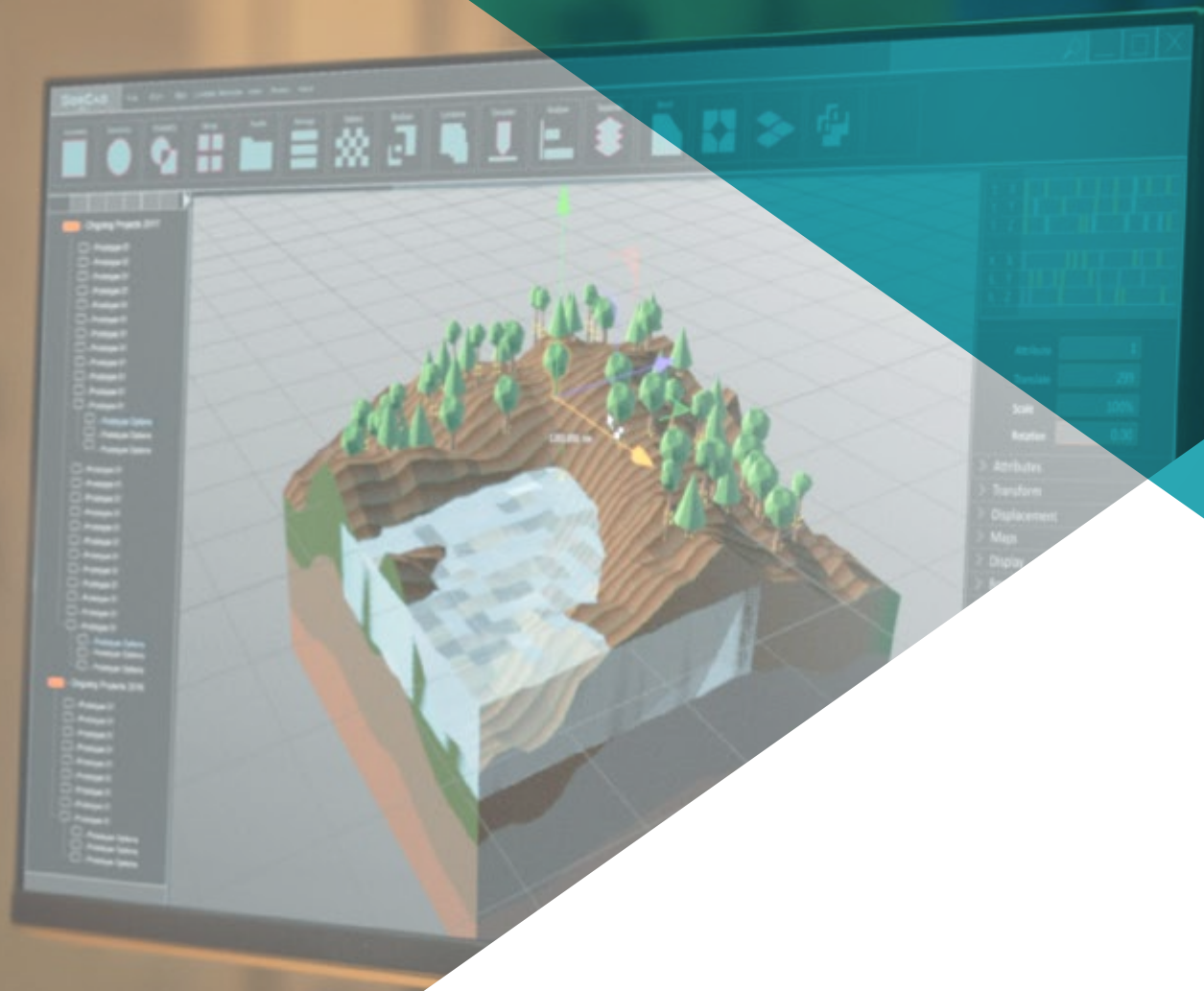
Specific Objectives

- ◆ Acquire knowledge of 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
- ◆ Develop custom Scripts for Rigging work

03
Course Management

The Postgraduate Certificate in Body Control Rigging and Tool Creation with Python is one of the most technical in its field. For this reason, it is particularly necessary the presence of a teaching staff that masters to the maximum the elements that compose it. The students of this Postgraduate Certificate will have the opportunity to ask the most specific questions on topics such as Python programming, Constrain elements or the creation of custom scripts.

The faculty of this Postgraduate Certificate will teach you how to create roots automatically with Python to speed up your projects"

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)

Structure and Content

The content of this Postgraduate Certificate presents the controlrigging system and offers different ways to speed up its development. Concepts such as NURBS type curves or Constrain elements will be discussed in the first topics, along with the creation of controls on the human body and the establishment of their initial positions. Finally, Python variables, functions and loops for Rigging will be covered, as well as the necessary notions to elaborate Scripts that connect and disconnect the deformation Rigging and control Rigging.

Learn how to set up a control system and the different nomenclatures that exist. Always, with the help of an industry professional"

With the program proposed by TECH, you will have access to the Maya command libraries for Python and learn how to create custom tools"

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 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.

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

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%

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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 Body Control Rigging and Tool Creation with Python guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This **Postgraduate Certificate in Body Control Rigging and Creation of Tools with Python** 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 Body Control Rigging and Tool Creation with Python**
Official N° of hours: **150 h.**

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Awards the following

DIPLOMA

to

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

POSTGRADUATE CERTIFICATE

in

Body Control Rigging and Tool Creation with Pythong

This is a qualification awarded by this University, equivalent to 150 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

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*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.

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