Postgraduate Certificate
Humanoid Modeling

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Postgraduate Certificate

Humanoid Modeling

Course Modality: **Online**
Duration: **6 weeks**
Certificate: **TECH Technological University**
Official N° of hours: **150 h.**
Website: **www.techtitute.com/videogames/postgraduate-certificate/humanoid-modeling**

Index

01

Introduction

The visual impact of works in the video game industry is related to the improvement of techniques and the use of new technologies. In the art of Digital Sculpting, a professional modeler must know the best practices of the character creation process and its character. Therefore, the student must have a good knowledge base of human anatomy, as well as of topology applied to sculpture, so that in the development of models they behave correctly and come to life through animation. This is how this specialized program arises, where the student will be able to handle all these concepts in a syllabus developed for online study in at least 6 weeks, through the most avant-garde methodology of the current university environment.

In the video game industry the more realism the more impact. Achieve perfect and amazing designs by studying advanced Humanoid Modeling techniques"

The outlook for the video game industry in the coming years is unimaginable, considering that it has been an industry that is constantly evolving and becoming more and more realistic in its development. The use of new technologies such as the metaverse or artificial intelligence, among others, will imply the professional handling of all these techniques, as well as a deep knowledge of the basic aspects in order to continue advancing and not be left behind.

In this Postgraduate Certificate in Humanoid Modeling you will study the physiognomy of the human face, its topology to animate it and create the main expressions of a person using the morphers modifier. This technique allows the modeler a high quality of execution, obtaining realistic results in each of his works. The correct use of the conformation of the meshes in the different models and the optimization of resources will be promoted, in order to obtain final results of optimum quality, both in team work and at a personal level.

A syllabus developed in such a way that the student can work with more artistic formats such as Dynamesh or use 3D scanning techniques, since it shows the conformation of the mesh to perform manual retopologies in different softwares, its psychology and the different styles of representation. By positioning it with fast rigging systems through ZSpheres and motion capture, testing motion quality and generating groups of people without excessive rendering costs, up to building complex scenes.

All this thanks to the accompaniment of a team of expert teachers for 6 weeks, through the most innovative and revolutionary methodology of the current university environment, deployed in a secure study platform, with a rigorously selected content and distributed in a variety of written and audiovisual formats, which also allows the professional to train completely online, to obtain the knowledge of one of the most demanded specializations in the video game industry in recent years.

This **Postgraduate Certificate in Humanoid Modeling** is the most comprehensive and up-to-date educational program on the market. The most important features include:

- The development of case studies presented by experts in 3D Modeling and Digital Sculpture
- The graphic, schematic, and eminently 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
- Access to content from any fixed or portable device with an Internet connection

Achieve the correct use of model mesh conformation and become a specialist in the field. Optimize resources and enhance final quality"

The interaction that takes place between the teacher and the student, thanks to the multiple multimedia resources implemented in this program, facilitates the learning process. Live the experience"

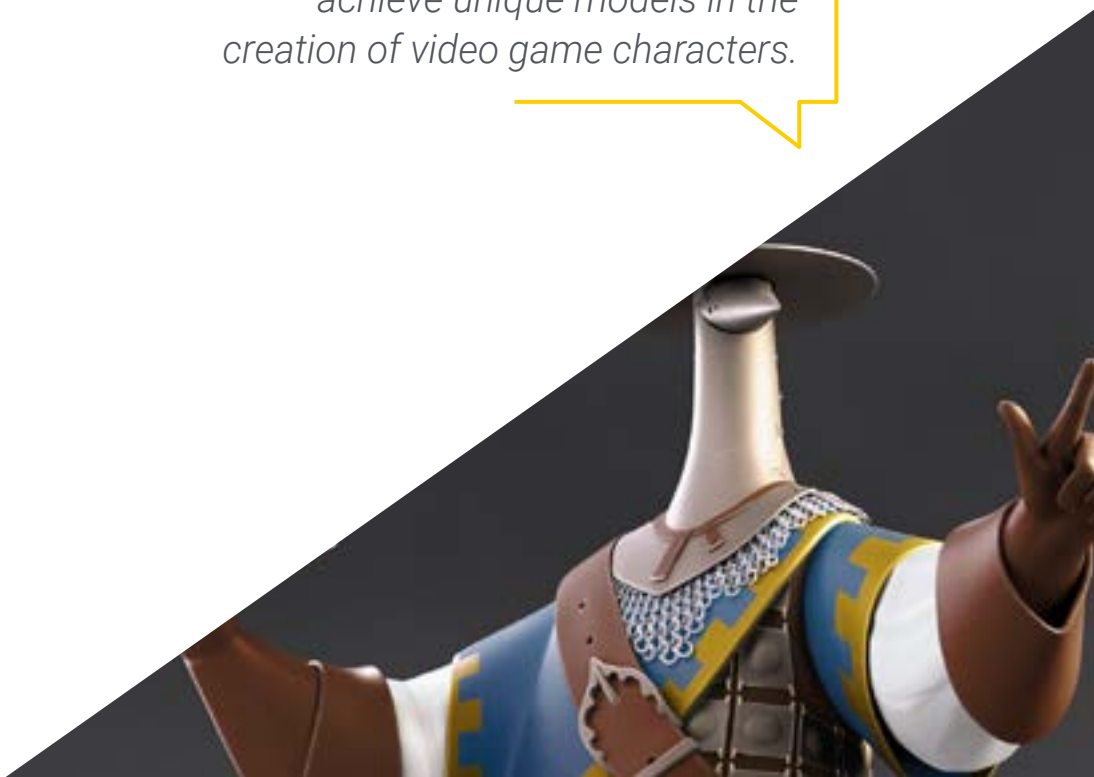
With this program you will master new 3D modeling techniques, artistic formats such as Dynamesh, performing manual retopologies in different softwares.

Learn everything you need to achieve unique models in the creation of video game characters.

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

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training programmed to train 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 during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.



02

Objectives

This program aims to provide in-depth knowledge on the creation of humanoid models, from all perspectives. The student learns to perfectly control posing systems and facial expressions through the use of Rig with ZSpehes, motion capture and morpher and to make increasingly realistic projects, thanks to the set of techniques and tools detailed in a specialized syllabus. This will allow you to offer your clients or employers differentiating results in the development of their new projects.

If you want to advance your career and differentiate yourself, training is a must. Don't miss this exclusive TECH opportunity"

General Objectives

- Knowledge of human and animal anatomy to apply it to modeling, texturing, lighting and rendering processes in an accurate way
- Understand the need for a good topology at all levels of development and production
- Creation of realistic and cartoon-like characters of high quality
- Advanced handling and use of various organic modeling systems
- Understand current systems in the film and video game industry to deliver great results

Specific Objectives

- Handle and apply anatomy to human sculpture
- Know the correct topology of models to be used in 3D animation, video games and 3D printing
- Characterize and stylize humanized characters
- Making manual retopologies with 3ds Max, Blender and ZBrush
- Create groups of people and multiple objects
- Use predefined and human base grids

Apply new techniques with a high quality of execution and enhance your career opportunities"

03

Course Management

To ensure that the learning process runs smoothly, TECH has selected an expert teaching staff composed of professionals specialized in the field of 3D modeling. They will transmit their knowledge through innovative methods, so that the student learns the subjects of study in an effective way and is able to integrate them in their professional performance.

A teaching team with a proven track record will make your learning experience memorable"

Management

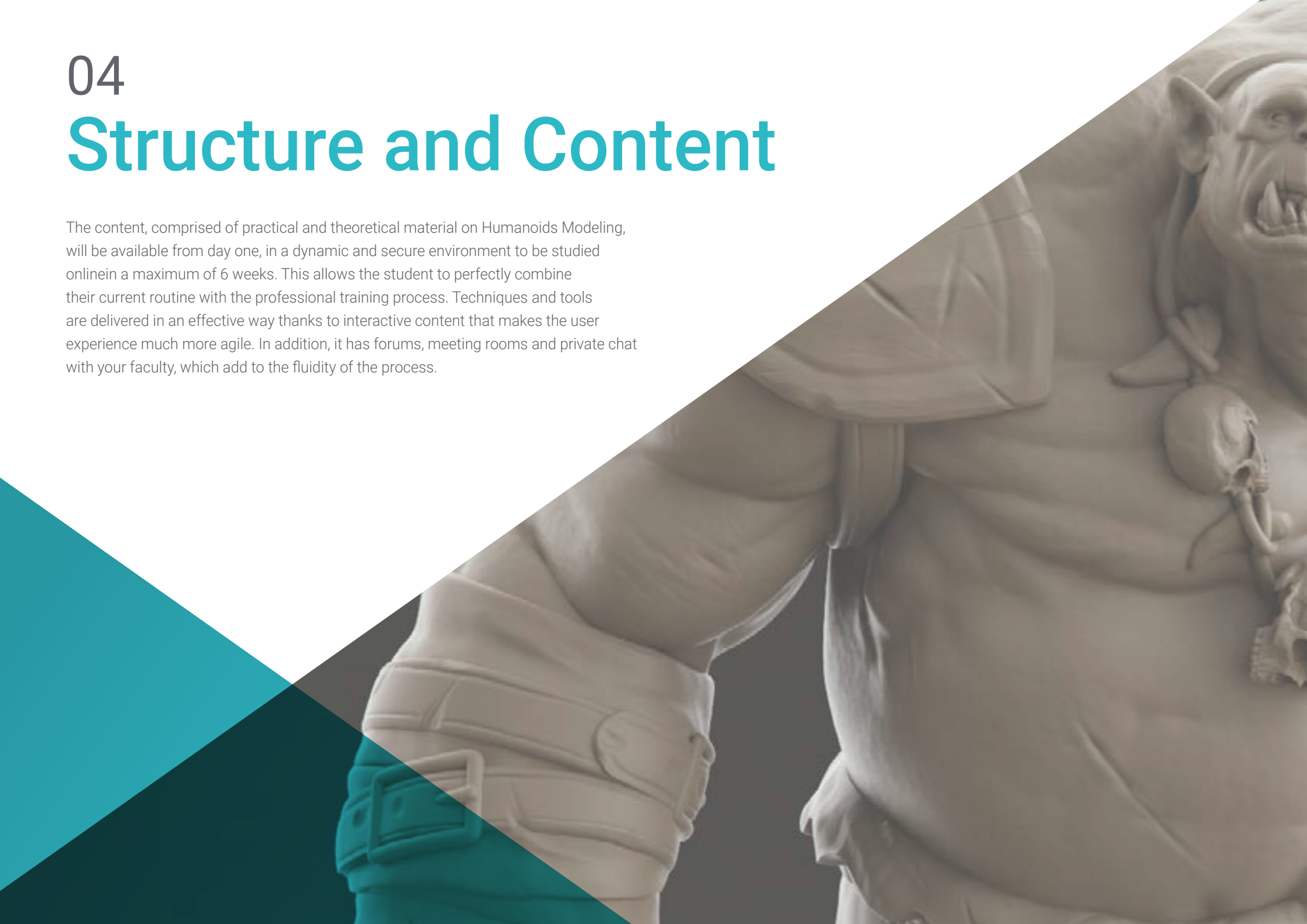
Mr. Sequeros Rodríguez, Salvador

- Freelance 2D/3D modeler and generalist
- Concept art and 3D modeling for Slicecore Chicago
- Videomapping and modeling Rodrigo Tamariz Valladolid
- Professor of Higher Level Training Cycle 3D Animation Superior School of Image and Sound ESISV Valladolid
- Professor of Higher Level Training Cycle GFGS 3D Animation European Institute of Design IED Madrid
- 3D modeling for the falleros Vicente Martinez and Loren Fandos Castellón
- Master in Computer Graphics, Games and Virtual Reality URJC University. Madrid
- Bachelor of Fine Arts at the University of Salamanca (specializing in Design and Sculpture)

04

Structure and Content

The content, comprised of practical and theoretical material on Humanoids Modeling, will be available from day one, in a dynamic and secure environment to be studied onlinein a maximum of 6 weeks. This allows the student to perfectly combine their current routine with the professional training process. Techniques and tools are delivered in an effective way thanks to interactive content that makes the user experience much more agile. In addition, it has forums, meeting rooms and private chat with your faculty, which add to the fluidity of the process.



A revolutionary study methodology that allows you to become a professional in an agile and dynamic way"

Module 1. Humanoid

1.1. Human Anatomy for Modeling
- 1.1.1. Canon of Proportions
- 1.1.2. Evolution and Functionality
- 1.1.3. Superficial Muscles and Mobility

1.2. Lower Body Topology
- 1.2.1. Torso
- 1.2.2. Legs
- 1.2.3. Feet

1.3. Upper Body Topology
- 1.3.1. Arms and Hands
- 1.3.2. Neck
- 1.3.3. Head and Face and Inside Mouth

1.4. Characterized and Stylized Characters
- 1.4.1. Details with Organic Modeling
- 1.4.2. Anatomy Characterization
- 1.4.3. Styling

1.5. Expressions
- 1.5.1. Facial Animations and Layer
- 1.5.2. Morpher
- 1.5.3. Texture Animation

1.6. Pose
- 1.6.1. Character Psychology and Relaxation
- 1.6.2. Rig with Zpheras
- 1.6.3. Posed with Motion Capture

1.7. Characterizations
- 1.7.1. Tattoos
- 1.7.2. Scars
- 1.7.3. Wrinkles, Freckles and Marks

1.8. Manual Retopology
  1.8.1. in 3ds Max
  1.8.2. Blender
  1.8.3. Zbrush and Projections
1.9. Predefined
  1.9.1. Fuse
  1.9.2. Vroid
  1.9.3. MetaHuman
1.10. Crowds and Repetitive Spaces
  1.10.1. Scatter
  1.10.2. Proxys
  1.10.3. Object Groups

Enroll now and get your degree in 6 weeks in such a specialized area to stand out in your work environment and open new doors and possibilities"

05

Methodology

This training program offers 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"

At TECH we use the Case Method

Our program offers a revolutionary method of skills and knowledge development. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

At TECH, you will experience a way of learning that is shaking the foundations of traditional universities around the world"

We are the first online university to combine Harvard Business School case studies with a 100% online learning system based on repetition.

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

A learning method that is different and innovative

This intensive Video Game Design program at TECH Technological University prepares you to face all the challenges in this field, both nationally and internationally. We are committed to promoting your personal and professional growth, the best way to strive for success, that is why, at TECH Technological University, you will use Harvard case studies, with which we have a strategic agreement that allows us, to offer you material from the best university in the world.

> *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

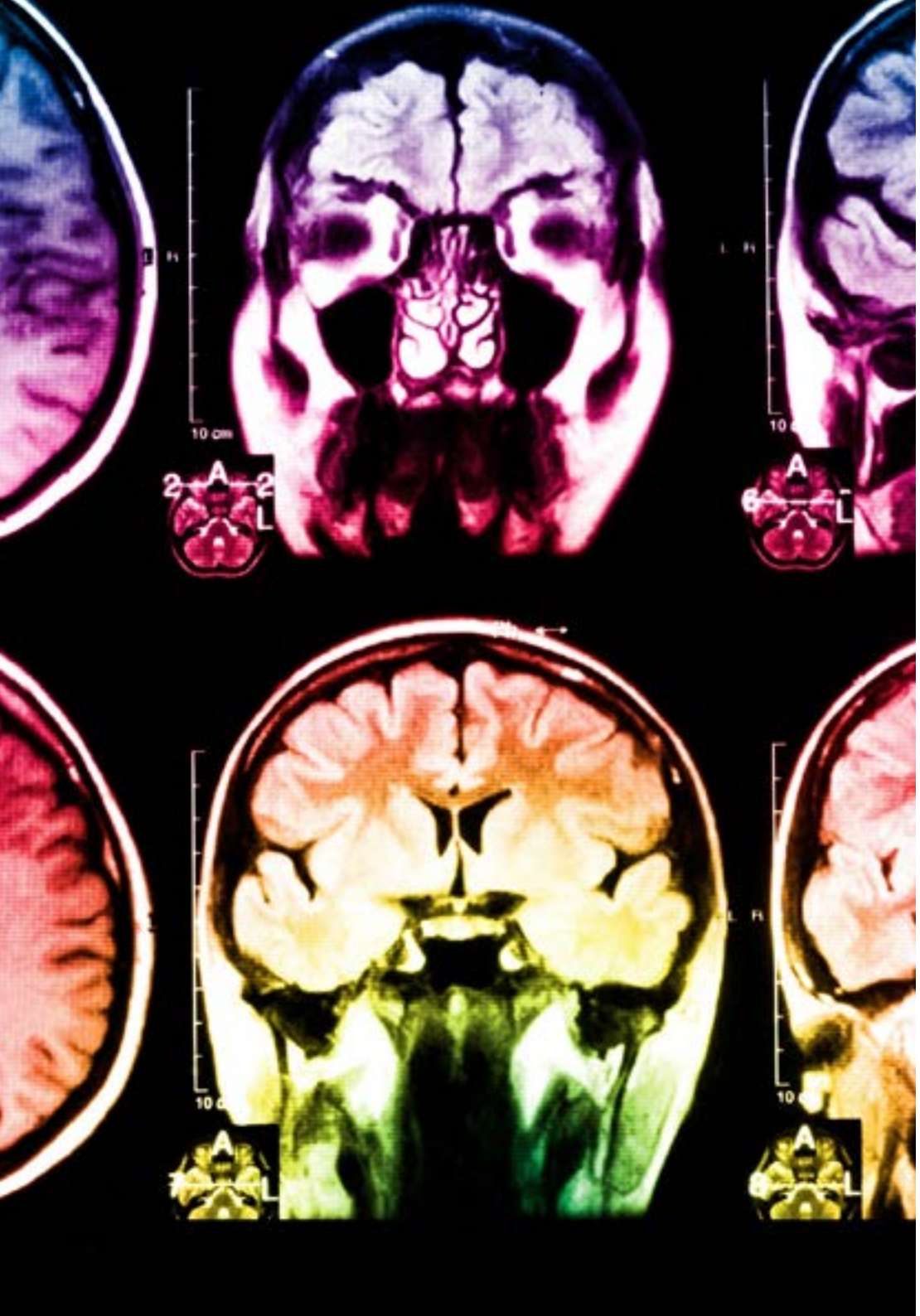
Our university is the first in the world to combine Harvard University case studies with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

We enhance Harvard case studies 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 university 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.

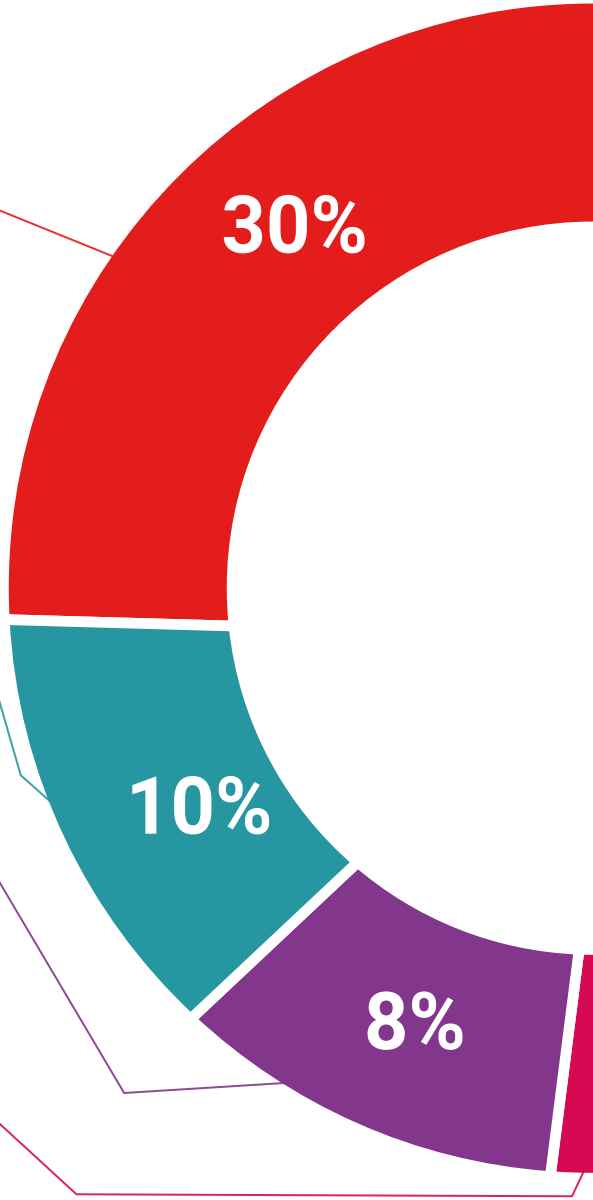
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

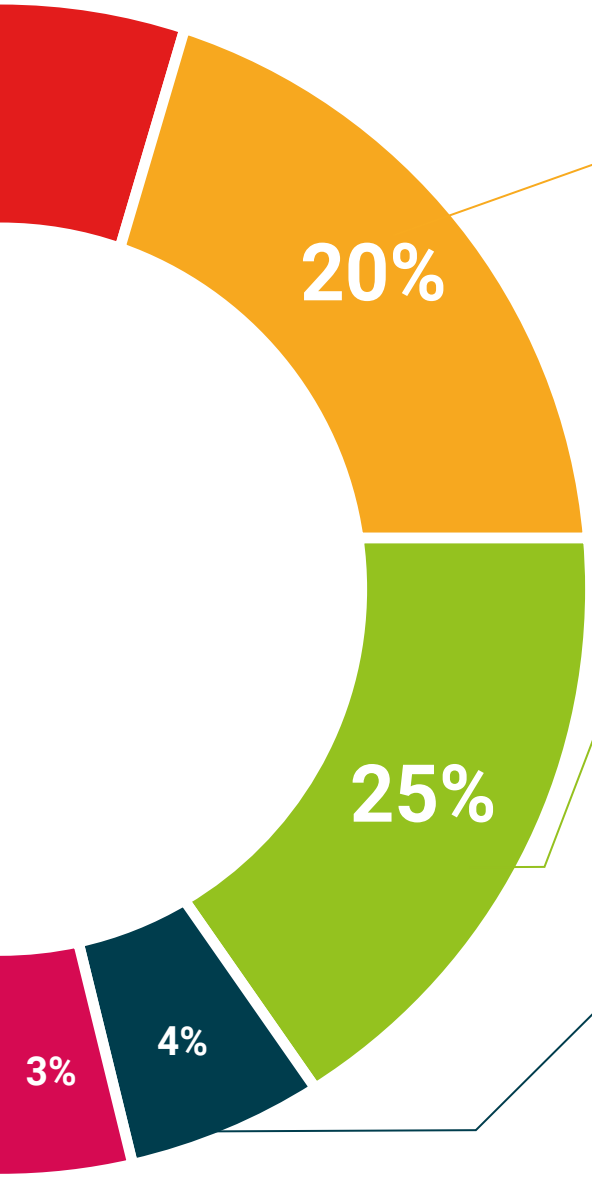
Practising Skills and Abilities

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

They will complete a selection of the best case studies in the field used at Harvard. Cases that are presented, analyzed, and supervised by the best senior management 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 multimedia content presentation training Exclusive system 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 your goals.

06

Certificate

The Postgraduate Certificate in Humanoid Modeling, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by TECH Technological University.

Successfully complete this training and receive your university degree without travel or laborious paperwork"

This **Postgraduate Certificate in Humanoid Modeling** is the most comprehensive and update educational program on the market.

After passing the evaluation the student will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery*.

The certificate 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 Humanoid Modeling**

Official Nº of hours: **150 h.**


tech technological university

Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Humanoid Modeling

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

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*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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