Postgraduate Certificate
Content Management Systems (CMS)

tech technological university

Postgraduate Certificate

Content Management
Systems (CMS)

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

Website: **www.techtitute.com/pk/videogames/postgraduate-certificate/content-management-systems-cms**

Index

01
Introduction

To carry out a correct development of projects related to the immersive video game industry in VR, it is necessary to master the main content management strategies based on its singularities, supported by the unique interactions that characterize it. Therefore, this is an area of the Gaming production environment that requires a broad, updated, specific and specialized knowledge, in order to always work in the most optimized and effective way possible and minimizing potential errors. Now, in order to delve deeper into it, the graduate can rely on this complete and comprehensive program designed by professionals specialized in the audiovisual entertainment sector. This is a 100% online educational experience through which you can work on perfecting skills such as immersive locomotion or VR animation, among others, through 150 hours of the best theoretical, practical and additional content.

Knowing in detail the keys to effective and optimized content management will allow you to develop even more immersive and unique VR games"

Virtual reality has gone from being an expectation of future development to being part of the daily life of professionals in the video game industry. The evolution of technology, as well as of complex computer and audiovisual systems, has boosted the growth of this area in a very short time and with truly promising results. For this reason, large companies in the sector such as Sony, Ubisoft and Bethesda, among others, have decided to bet on this genre, expanding the catalog with titles such as Half-Life: Alyx, Beat Saber or Resident Evil 7 VR.

Therefore, the knowledge of the main Content Management Systems, as well as the best strategies for the development of Gaming projects in VR has become a distinctive asset that has allowed tens of thousands of specialists to succeed in this industry. And in order to give the opportunity to more graduates, TECH and its team of experts have developed this Postgraduate Certificate. It is an immersive and multidisciplinary program through which students can explore aspects such as interaction, immersive locomotion, animation or the creation of avatars for video games, among others.

All this through 150 hours of the best theoretical, practical and additional content presented in different formats: detailed videos, self-knowledge exercises, research articles, complementary readings and dynamic summaries with which the professional will be able to delve in a personalized way into the aspects of the syllabus that most interest them. In addition, all the material will be available from the beginning of the program, which is developed 100% online. Thus, the graduate will attend a highly beneficial program for their professional development without schedules or on-site classes.

This **Postgraduate Certificate in Content Management Systems (CMS)** contains the most complete and up-to-date program on the market. The most important features include:

- The development of practical cases presented by experts in Video Games and Video Technologies
- The graphic, schematic, and practical contents with which they are created, provide 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
- Special emphasis on 3D modeling and animation in virtual environments
- 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

If you are looking for a program that allows you to explore graspable and throwable objects through the management of their weight and mass conditions, you have the perfect opportunity to get it"

In fewer than 6 weeks you will have mastered the main strategies of immersive locomotion with and without Facing.

" *TECH presents this program as a 100% online and unique educational opportunity to learn in detail the interactions of VR and its differences compared to traditional video games"*

A program adapted to you and your educational needs that you can access from any device with an Internet connection, whether PC, tablet or mobile phone.
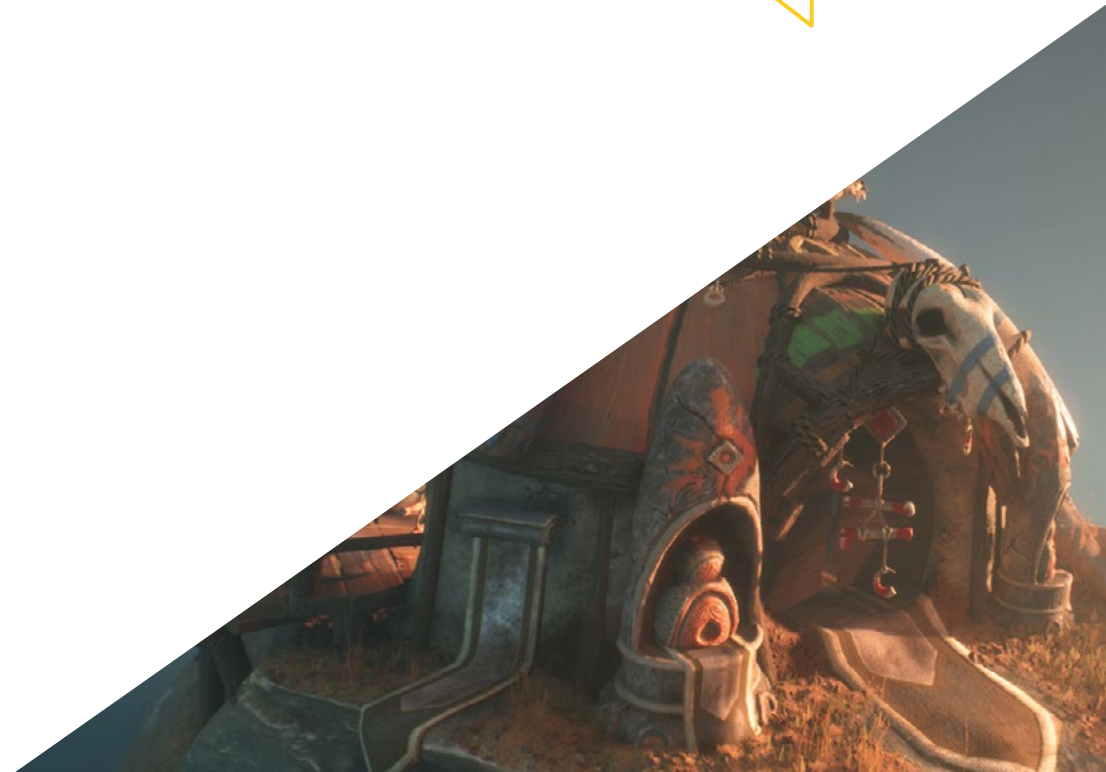
The program's teaching staff includes professionals from the sector who bring to this program the experience of their work, in addition to recognized specialists from prestigious reference societies and universities.

The multimedia content, developed with the latest educational technology, will provide professionals with situated and contextual learning, i.e., a simulated environment that will provide immersive training, designed for training oneself in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

02
Objectives

The current extensive demand for professionals who master the main strategies for developing video games in VR, as well as the most effective content management tools, is the reason why TECH has considered it essential to launch this program. For that reason it has created this program, whose main objective is to provide all the information that the graduate needs to specialize in a booming area within the industry of production and creation Gaming.

You will learn to use Audio Sources and Audio Listeners perfectly, being able to implement the best sound effects to your strategies for a more immersive experience"

General Objectives

- Apply acquired knowledge to the VR environment
- Adapting the behavior of video game components to VR
- Integrate the designed and implemented content into a complete playable project

"*TECH's goal with this Postgraduate Certificate is to help you achieve the professional success you crave and for which, no doubt, you will end up being prepared once you have passed the program*"

Specific Objectives

- Determine the main differences between traditional video games and video games based on VR environments
- Modify the interaction systems to adapt them to virtual reality
- Manage the physics engine to support player actions performed with VR devices
- Apply the development of UI elements to VR
- Integrate the developed 3D models into the VR scenario
- Configure avatars with the appropriate settings for a VR experience
- Optimize the VR project for its correct execution

03
Course Management

Having the support of a teaching team with expertise in the area in which the program specializes is one of TECH's ways of demonstrating its commitment to the growth of its graduates. For this reason, for this Postgraduate Certificate we have selected a group of professionals in programming, computer science and the audiovisual sector with extensive experience in the development of projects for the video game industry. Thanks to this, students will be able to learn in detail the latest developments in CMS and VR through the trajectory of experts.

A team of video game programming experts will guide you through this educational experience to ensure a highly beneficial program for your professional development"

Management

Mr. Ortega Ordóñez, Juan Pablo

- Director of Engineering and Gamification Design for the Intervenía Group
- ESNE Professor of Video Game Design, Level Design, Video Game Production, Middleware, Creative Media Industries, etc.
- Advisor in the foundation of companies such as Avatar Games or Interactive Selection
- Author of the book Video Game Design
- Member of the Advisory Board of Nima World

Professors

Mr. Ferrer Mas, Miquel
- Senior Unity Developer at Quantic Brains
- Lead Programmer at Big Bang Box
- Co-founder and Video Game Programmer at Carbonbyte
- Audiovisual Programmer at Unkasoft Advergaming
- Video Game Programmer at Enne
- Design Director at Bioalma
- Superior Technician in Computer Science at Na Camel-la
- Master's Degree in Video Game Programming at CICE
- Introduction to Deep Learning with PyTorch course by Udacity

04
Structure and Content

For the development of the content of this 100% online program, TECH has used the prestigious, effective and innovative Relearning methodology. This is a pedagogical strategy that consists of reiterating the most important concepts throughout the syllabus. In this way, the graduate attends a natural and progressive program, without having to invest extra hours in memorizing and guaranteeing the durability of the knowledge for a longer period of time.

You will have an exclusive module dedicated to a practical case: the development of an Escape Room in VR, so that you can improve your skills in a guaranteed way"

Module 1. VR Immersive Game Development

1.1. Uniqueness of VR

    1.1.1. Traditional Video Games and VR. Differences

    1.1.2. Motion Sickness: Smoothness vs. Effects

    1.1.3. Unique VR Interactions

1.2. Interaction

    1.2.1. Events

    1.2.2. Physical Triggers

    1.2.3. Virtual World vs.. Real World

1.3. Immersive Locomotion

    1.3.1. Tele-transportation

    1.3.2. Arm Swinging

    1.3.3. Forward Movement With and Without Facing

1.4. VR Physics

    1.4.1. Grippable and Throwable Objects

    1.4.2. Weight and Mass in VR

    1.4.3. Gravity in VR

1.5. UI in VR

    1.5.1. Positioning and Curvature of UI Elements

    1.5.2. Menu Interaction Modes in VR

    1.5.3. Best Practices for Comfortable Experiences

1.6. VR Animation

    1.6.1. Animated Model Integration in VR

    1.6.2. Animated Objects and Characters vs. Physical Objects

    1.6.3. Animated vs. Procedural Transitions

1.7. Avatars

    1.7.1. Avatar Representation from Your Own Eyes

    1.7.2. External Representation of Avatars

    1.7.3. Inverse Cinematic and Procedural Avatar Animation
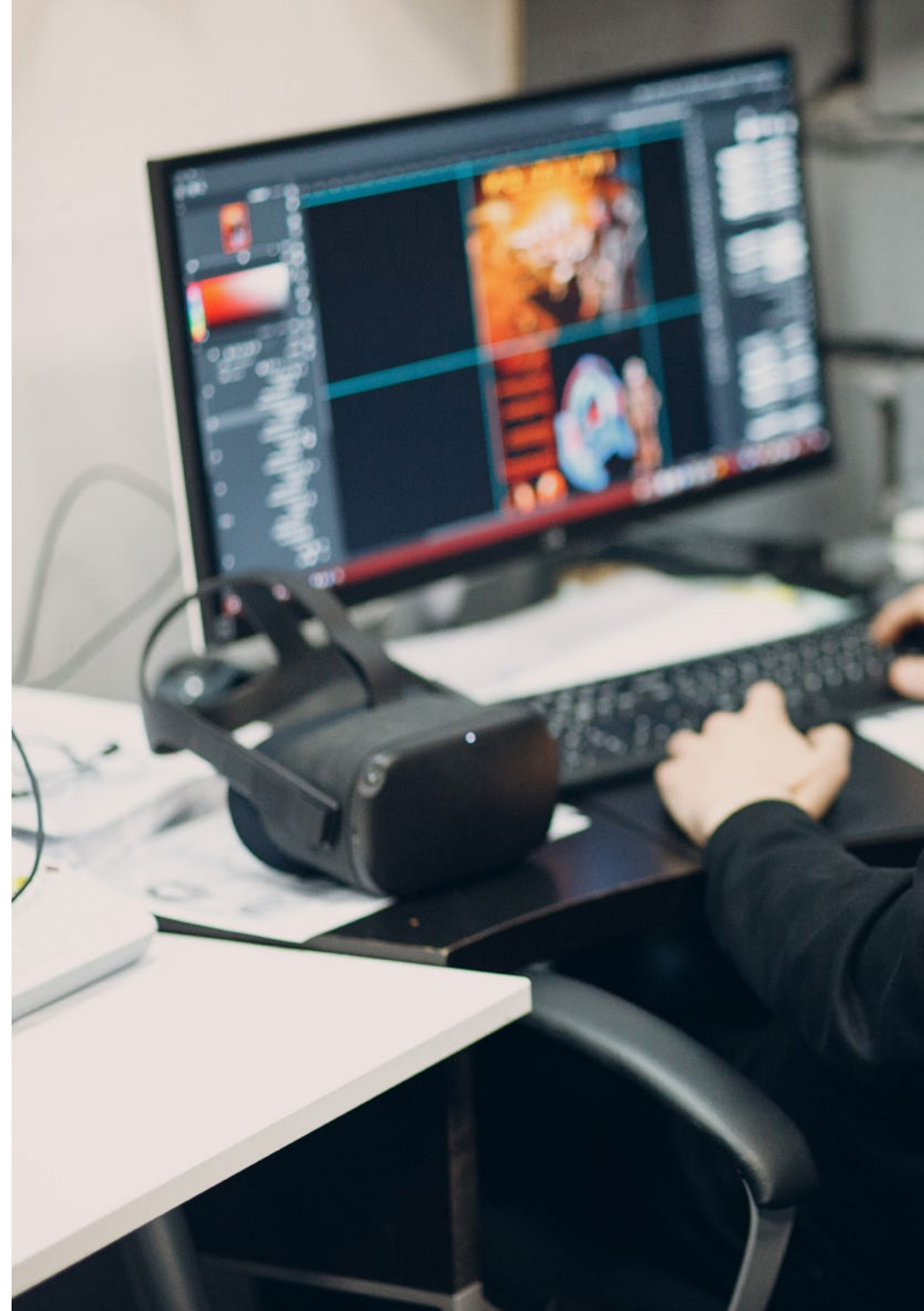
A program that will provide your projects with a degree of specialization, optimization and quality at the level of large companies in the Gaming sector such as Tencent or PlayStation"

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%

20%

25%

4%

3%
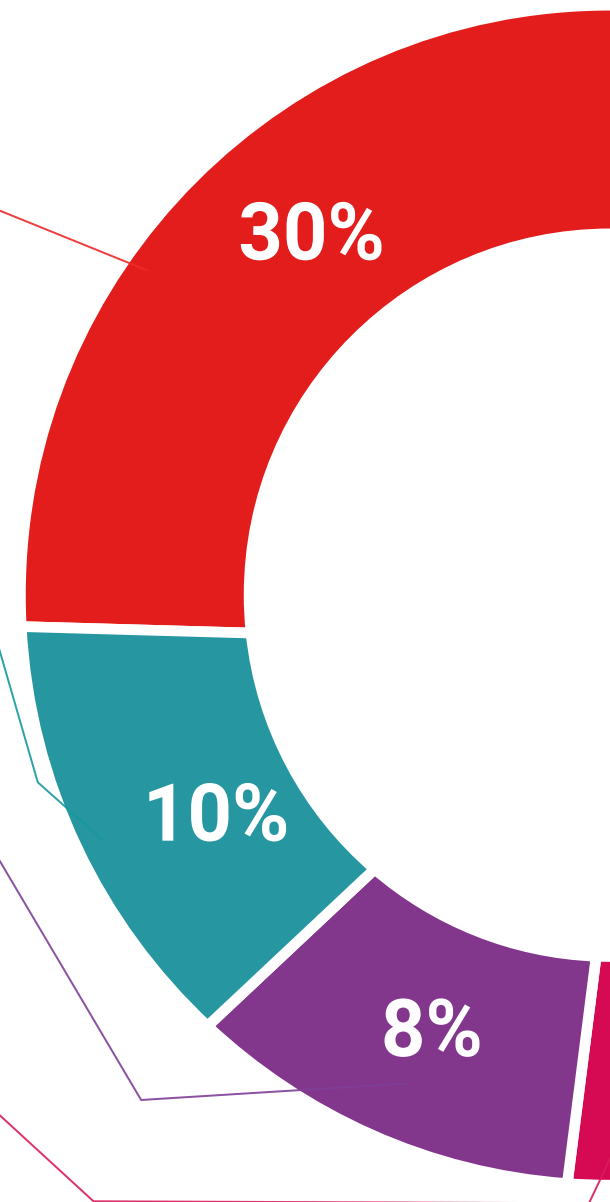
Case Studies

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 Content Management Systems (CMS) 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 Content Management Systems (CMS)** 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 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 Content Management Systems (CMS)**

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 DIPLOMA
in

Content Management Systems (CMS)

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

*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.

Postgraduate Certificate
Content Management Systems (CMS)

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

Postgraduate Certificate
Content Management Systems (CMS)

tech technological university