

# Postgraduate Certificate 2D Design for Video Games





## Postgraduate Certificate 2D Design for Video Games

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

Website: [www.techtitute.com/us/videogames/postgraduate-certificate/2d-design-video-games](http://www.techtitute.com/us/videogames/postgraduate-certificate/2d-design-video-games)

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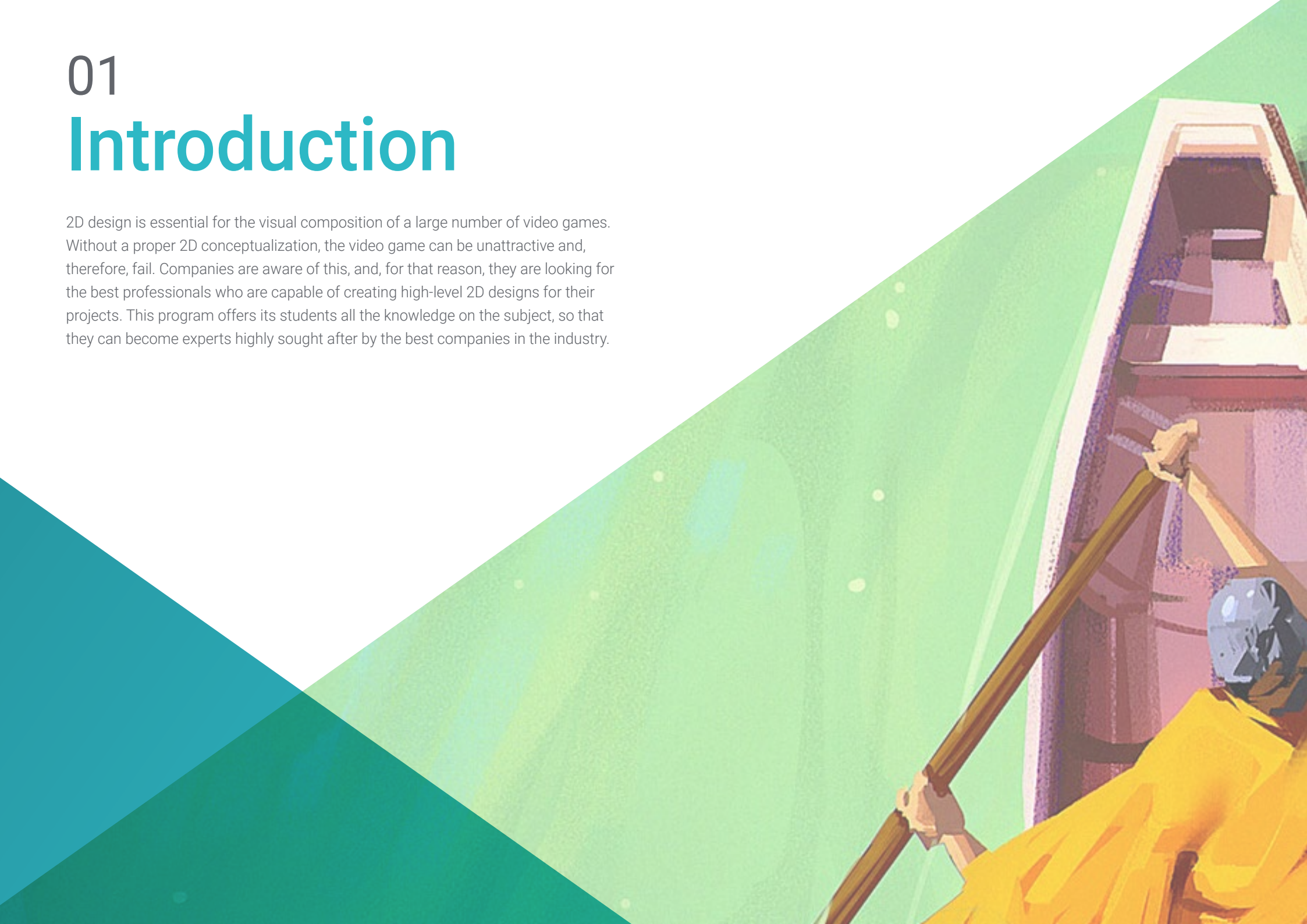
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# 01

# Introduction

2D design is essential for the visual composition of a large number of video games. Without a proper 2D conceptualization, the video game can be unattractive and, therefore, fail. Companies are aware of this, and, for that reason, they are looking for the best professionals who are capable of creating high-level 2D designs for their projects. This program offers its students all the knowledge on the subject, so that they can become experts highly sought after by the best companies in the industry.



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*Make the best 2D design for video games  
and see how the biggest companies in  
the industry start to knock on your door”*

A large number of professionals specializing in different fields are involved in the development of a video game. Depending on the genre, style and target audience of the video game, it will have a specific visual focus. Therefore, some video games will be designed for the most part in 3D and others which are partially or completely in 2D.

In this way, 2D design is an important part of the video game industry, requiring experts in this type of tasks to carry out the creation of the important aesthetic component. But there is a shortage of qualified personnel to take on this task, so companies in the sector are urgently looking for new professionals to take on the 2D design of their projects.

This Postgraduate Certificate in 2D Design for Video Games therefore offers students the skills and knowledge required to access major positions in the industry, which needs experts who can deal with all the emerging projects of these characteristics.

This **Postgraduate Certificate in 2D Design for Video Games** contains the most complete and up-to-date educational program on the market. The most important features include:

- ◆ The development of case studies presented by experts in 2D design applied to the field of 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
- ◆ 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



*This program is what you have been looking for to give your career in video games a boost”*

“

*Don't wait any longer. You know that will this Postgraduate Certificate you will achieve all your professional goals”*

*The industry is looking for professionals in 2D design for video games: they are waiting for you.*

*Learn everything about 2D design and see how your career progresses rapidly.*

The program's teaching staff includes professionals from the sector who contribute their work experience to this 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 learning 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 main objective of this Postgraduate Certificate in 2D Design for Video Games is to offer students an enormous professional improvement, which is why this innovative program has been created with an eminently practical approach. In this way, students who complete this program will acquire the most innovative knowledge and skills and will be able to directly put them into practice in their professional careers, providing a great opportunity to progress.







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*Your objective is to work for the big companies of the industry and this Postgraduate Certificate will make it easy for you”*



## General Objectives

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- ◆ Learn how to correctly compose realistic and visually appealing environments
- ◆ Explore the different digital graphic resources, as well as the most commonly used digital supports
- ◆ Expand knowledge of the implementation of characters in video games
- ◆ Understand which elements make up 2D design



*Achieve the job of your dreams thanks to this Postgraduate Certificate*





## Specific Objectives

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- ◆ Use vector drawing, image processing and 2D animation applications
- ◆ Obtain a spatial vision and knowledge of the techniques of graphic representation, both by traditional methods of metric geometry and descriptive geometry, as well as by computer-aided design applications
- ◆ Design and create graphic elements and their application in the development of video games

# 03

## Structure and Content

This Postgraduate Certificate in 2D Design for Video Games has been designed by the best experts in the field and has been structured in one module, in which you can learn issues such as video game design with Game Maker and vector graphics with Illustrator software. Therefore, these contents are highly specialized, like those demanded by companies in the industry, which are looking for professionals with knowledge of the specific tools used in this field.





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*The best content on 2D design applied to video games, now within your reach”*

## Module 1. 2D Design

- 1.1. Video Game Design
  - 1.1.1. History of Video Games
  - 1.1.2. Basic Tools for the Development of Video Games: Game Maker
  - 1.1.3. Basic Tools for the Development of Video Games: 2D Unity
  - 1.1.4. Basic Tools for the Development of Video Games: Godot
- 1.2. Game Maker: Introduction, Installation and Interface
  - 1.2.1. Introduction
  - 1.2.2. Installation
  - 1.2.3. Interface
  - 1.2.4. Company Policies: Game Maker
- 1.3. Game Maker: Animation and Motion
  - 1.3.1. What are Sprites?
  - 1.3.2. Pixel Art
  - 1.3.3. How to Create Sprites: Software Alternatives
  - 1.3.4. Animations Creation and Implementation in Game Maker
- 1.4. Game Maker: Visual Scripting
  - 1.4.1. What is Visual Scripting?
  - 1.4.2. Visual Scripting in Game Maker: Implementation
  - 1.4.3. Basic Blocks of Visual Scripting
  - 1.4.4. Advanced Blocks of Visual Scripting
- 1.5. Game Maker: Programmatic Scripting
  - 1.5.1. Comments
  - 1.5.2. Variables
  - 1.5.3. Programs and Algorithms
  - 1.5.4. Control Structures
  - 1.5.5. Programming in GML
- 1.6. Game Maker: Menus and Other Elements of the Program
  - 1.6.1. Introduction to the Interface
  - 1.6.2. Workflow
  - 1.6.3. Project Testing
  - 1.6.4. Planning a New Project





- 1.7. Game Maker: Creation of Video Games as Practical Examples
  - 1.7.1. Introduction
  - 1.7.2. Advantages and Disadvantages of Using GML
  - 1.7.3. Commercial Video Games Created with Game Maker
  - 1.7.4. Commercialization and Distribution of Video Games Created with Game Maker
- 1.8. Illustrator: Introduction and Vector Graphics
  - 1.8.1. What are Vector Graphics?
  - 1.8.2. Advantages and Disadvantages of Vector Graphics
  - 1.8.3. Video Games that use Vector Graphics
  - 1.8.4. Optimization of the Workflow with Vector Graphics
- 1.9. Illustrator: Working with Vectors
  - 1.9.1. Drawing with Basic Geometric Shapes
  - 1.9.2. Guide Rulers and Grid
  - 1.9.3. Tracing
  - 1.9.4. Bézier Curves
- 1.10. Illustrator: Workflow and Integration in a Video Game
  - 1.10.1. Fitting Illustrator into a Company's Workflow
  - 1.10.2. Concept Art of Characters with Illustrator
  - 1.10.3. Concept Art of Environments with Illustrator
  - 1.10.4. Implementation of Illustrator in Video Games

“ This is your big opportunity,  
don't let it slip away”

04

# 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.

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*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.



# 05 Certificate

The Postgraduate Certificate in 2D Design for Video Games guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.





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

This **Postgraduate Certificate in 2D Design for 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 2D Design for Video Games**

Official N° of Hours: **150h.**



\*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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