Postgraduate Certificate

Development of Artificial Intelligence Projects in the Classroom

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Postgraduate Certificate
Development of Artificial
Intelligence Projects in
the Classroom

» Modality: **online**
» Duration: **6 weeks**
» Certificate: **TECH Global University**
» Accreditation: **6 ECTS**
» Schedule: **at your own pace**
» Exams: **online**

Website: **www.techtitute.com/artificial-intelligence/postgraduate-certificate/development-artificial-intelligence-projects-classroom**

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01
Introduction

The incorporation of Artificial Intelligence (AI) in the development of educational games is a valuable strategy to motivate students in their learning process. These resources provide immediate feedback to users, identifying errors and offering explanations to correct them. In this way, active learning is promoted, so that students understand the concepts in a more effective way. In addition, these pedagogical tools provide encouragement by offering both personalized challenges and rewards. While learners expand their theoretical knowledge, they also develop important social skills, such as problem solving, empathy and collaboration. TECH has launched an innovative 100% online learning, which will provide teachers with strategies for implementing AI-based projects.

With the Relearning system you will integrate the concepts in a natural and progressive way. Forget about memorizing!"

The design and planning of projects based on Machine Learning serve to optimize teaching processes. For example, AI is useful to personalize the experience for learners by tailoring both content and resources to their particular needs. Students can achieve their educational goals using the most sophisticated technology. To this end, it is essential for teaching professionals to keep abreast of the latest trends in this field.

To help them keep up to date on this subject, TECH has developed a state-of-the-art study, which will focus on the latest educational techniques using AI. Under the supervision of an experienced teaching staff, the syllabus will give graduates the keys to integrating technological projects into the classroom.

At the same time, the syllabus will delve into specific applications of Machine Learning, including the development of chatbots and educational games. In this way, teachers will obtain formulas to measure the impact of their academic procedures, improving them to provide quality services. On the other hand, the program will include real cases and complex resolutions in simulated learning environments.

The university program is based on the Relearning method, of which TECH is a pioneer. This system uses the reiteration of key contents in a natural way, ensuring that they remain in the memory of the graduates without the need to memorize. It should be noted that the only thing required to access the Virtual Campus is an electronic device with Internet access (cell phones, tablets or computers). In addition, students will be able to access a digital library full of additional didactic materials to enrich their educational experience.

This **Postgraduate Certificate in Development of Artificial Intelligence Projects in the Classroom** contains the most complete and up-to-date program on the market. Its most important features include

- The development of case studies presented by experts in Development of Artificial Intelligence Projects in the Classroom
- The graphic, schematic and practical contents of the book provide theoretical and practical information on those 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
- Content that is accessible from any fixed or portable device with an Internet connection

You will obtain the most innovative measurement tools with Artificial Intelligence to analyze the impact of your educational projects"

"*You will use Artificial Intelligence systems to create educational games that will strengthen the assimilation of knowledge in your students*"

You will design and implement the most effective strategies to ensure excellence-based educational assistance.

You will achieve your goals thanks to TECH's didactic tools, including explanatory videos and interactive summaries.

The program's teaching staff includes professionals from the sector who contribute their work experience to this specializing 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 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 during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

02
Objectives

Upon completion of this Postgraduate Certificate, graduates will be highly qualified in the design and implementation of AI projects in educational contexts. In addition to gaining a deep understanding of the theoretical foundations of Machine Learning, teachers will develop new skills to nurture their daily praxis. It should be noted that professionals will carry out innovations aimed at solving educational problems. In this way, they will provide original and cutting-edge solutions to improve attention to students.

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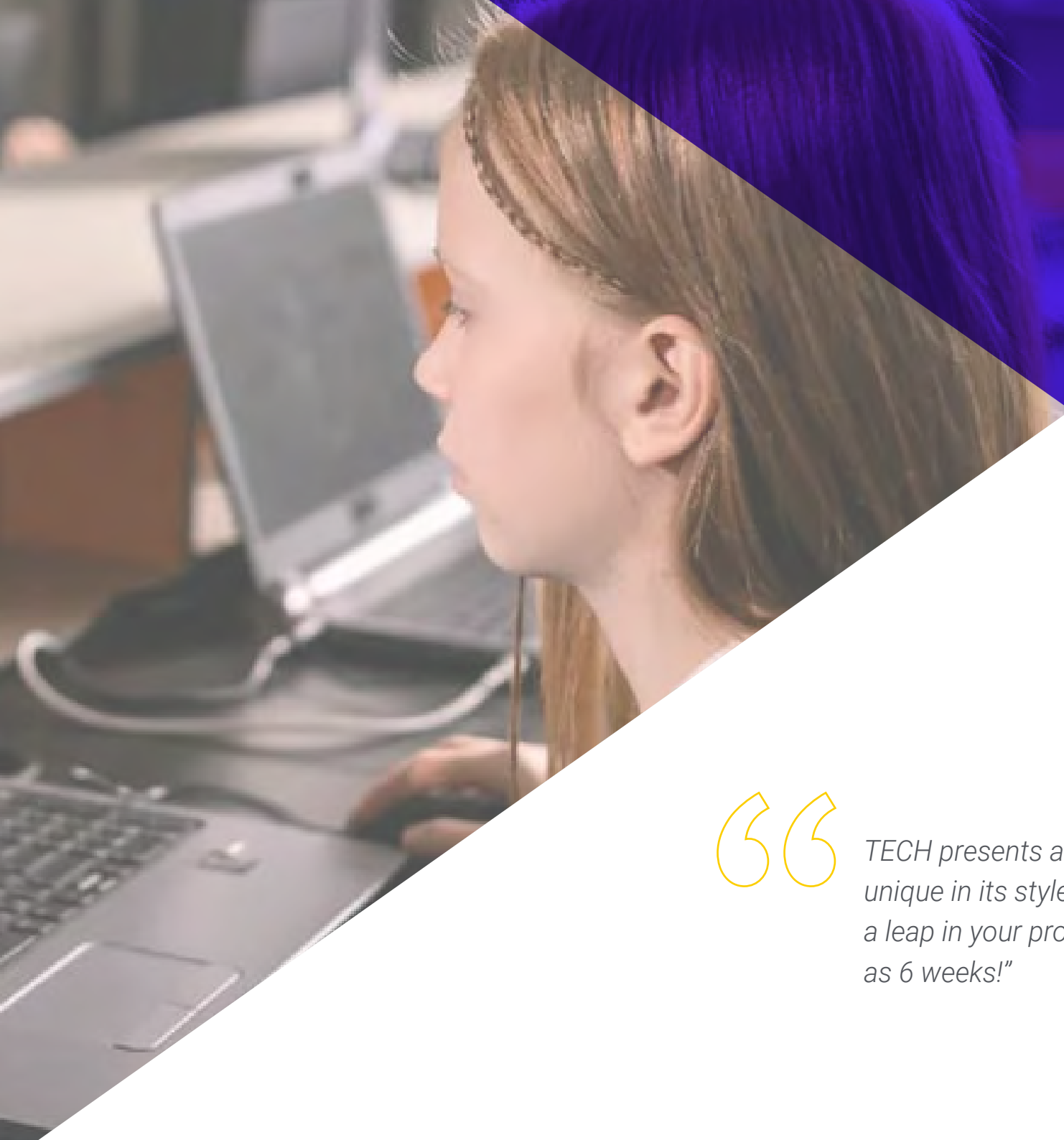
TECH presents a Postgraduate Certificate unique in its style, which will help you take a leap in your profession. And in as little as 6 weeks!"

General Objectives

- Understand the fundamental ethical principles related to the application of Artificial Intelligence (AI) in educational settings

- Analyze the current legislative framework and the challenges associated with the implementation of AI in educational settings

- Develop critical skills to evaluate the ethical and social impact of AI in education

- Encourage the responsible design and use of AI solutions in educational contexts, considering cultural diversity and gender equity

- Specialize in the design and implementation of AI projects in the educational environment

- Provide an in-depth understanding of the theoretical foundations of AI, including machine learning, neural networks, and natural language processing

- Develop skills to integrate AI projects effectively and ethically into the educational syllabus

- Understand the applications and impact of AI in teaching and learning, critically assessing its current and potential uses

- Apply generative AI to personalize and enrich teaching practice, creating adaptive educational materials

- Identify, evaluate, and apply the latest trends and emerging technologies in AI relevant to education, reflecting on their challenges and opportunities

Specific Objectives

- Plan and design educational projects that effectively integrate AI in educational environments, mastering specific tools for its development
- Design effective strategies to implement AI projects in learning environments, integrating them in specific subjects to enrich and improve the educational process
- Develop educational projects applying machine learning to improve the learning experience, integrating AI in the design of educational games in playful learning
- Create educational *chatbots* to assist students in their learning processes and resolution of doubts, including intelligent agents in educational platforms to improve interaction and teaching
- Perform continuous analysis of AI in Education projects to identify areas for improvement and optimization

TECH's main objective is to help graduates acquire academic and professional excellence"

03

Course Management

In its commitment to offer the highest quality education, TECH has selected a high-level teaching staff. Each expert has an extensive professional background, which has allowed them to be part of prestigious educational institutions. In this sense, they have achieved extraordinary results in the academic field, providing personalized attention to students. In this way, graduates will have all the necessary guarantees to specialize in a sector that offers numerous job opportunities.

You will have the support of a teaching staff made up of distinguished professionals in Artificial Intelligence applied in the classroom"

Management

Dr. Peralta Martín-Palomino, Arturo

- CEO and CTO at Prometeus Global Solutions
- CTO at Korporate Technologies
- CTO at AI Shephers GmbH
- Consultant and Strategic Business Advisor at Alliance Medical
- Director of Design and Development at DocPath
- PhD. in Psychology from the University of Castilla La Mancha
- PhD in Economics, Business and Finance from the Camilo José Cela University
- PhD in Psychology from University of Castilla La Mancha
- Máster in Executive MBA por la Universidad Isabel I
- Master's Degree in Sales and Marketing Management, Isabel I University
- Expert Master's Degree in Big Data by Hadoop Training
- Master's Degree in Advanced Information Technologies from the University of Castilla La Mancha
- Member of: SMILE Research Group

Mr. Nájera Puente, Juan Felipe

- Director of Studies and Research at the Council for Quality Assurance in Higher Education
- Data Analyst and Data Scientist
- Production Programmer at Confiteca C.A
- Processes Consultant at Esefex Consulting
- Academic Planning Analyst at San Francisco de Quito University
- Professional Master's Degree in Big Data and Data Science at the International University of Valencia
- Industrial Engineer from San Francisco de Quito University

Professors

Ms. Martínez Cerrato, Yésica

- Responsible for Technical Training at Securitas Seguridad España
- Education, Business and Marketing Specialist
- Product Manager in Electronic Security at Securitas Seguridad España
- Business Intelligence Analyst at Ricopia Technologies
- Computer Technician and Responsible for OTEC computer classrooms at the University of Alcalá de Henares
- Collaborator in the ASALUMA Association
- Degree in Electronic Communications Engineering at the Polytechnic School, University of Alcalá de Henares

04
Structure and Content

This program will focus on the practical and theoretical development of Artificial Intelligence (AI) projects in the educational system. Its objective will be to train students to implement and manage Machine Learning projects in the classroom. To achieve this, the program will delve into the most advanced tools for integrating procedures in specific subjects. Applications ranging from the incorporation of intelligent agents in educational platforms to the use of AI in video games will be analyzed. You will also delve into concepts such as neural networks, natural language processing and ethical considerations.

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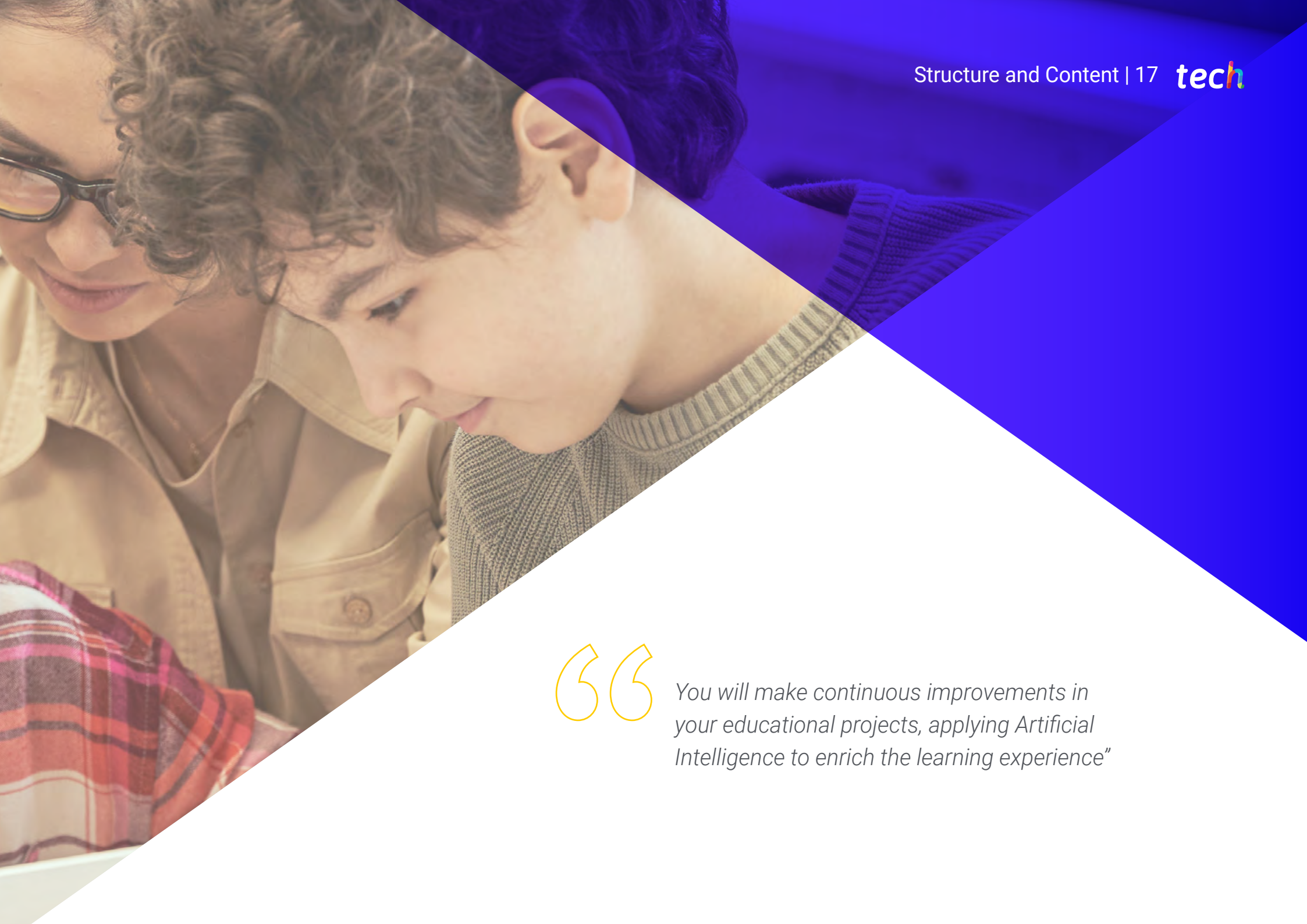
You will make continuous improvements in your educational projects, applying Artificial Intelligence to enrich the learning experience"

Module 1. Development of Artificial Intelligence Projects in the Classroom

1.1.   Planning and Design of AI Projects in Education with Algor Education
    1.1.1.   First Steps to Plan the Project
    1.1.2.   Knowledge Bases
    1.1.3.   Design of AI Projects in Education

1.2.   Tools for the Development of Educational Projects with AI
    1.2.1.   Tools for Developing Educational Projects: TensorFlow Playground
    1.2.2.   Tools for Educational Projects in History
    1.2.3.   Tools for Educational Projects in Mathematics; Wolfram Alpha
    1.2.4.   Tools for Educational Projects in English: Grammarly

1.3.   Strategies for Implementing AI Projects in the Classroom
    1.3.1.   When to Implement an AI Project
    1.3.2.   Why Implement an AI Project
    1.3.3.   Strategies to Be Implemented

1.4.   Integration of AI Projects in Specific Subjects
    1.4.1.   Mathematics and AI: Thinkster Math
    1.4.2.   History and AI
    1.4.3.   Languages and AI: Deep L
    1.4.4.   Other Subjects: Watson Studio

1.5.   Project 1: Developing Educational Projects Using Machine Learning with Khan Academy
    1.5.1.   First Steps
    1.5.2.   Requirements
    1.5.3.   Tools to Be Used
    1.5.4.   Project Definition

1.6.   Project 2: Integration of AI in the Development of Educational Games
    1.6.1.   First Steps
    1.6.2.   Requirements
    1.6.3.   Tools to Be Used
    1.6.4.   Project Definition

You will acquire knowledge without geographical limitations or preestablished timing" Enroll now!”

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.
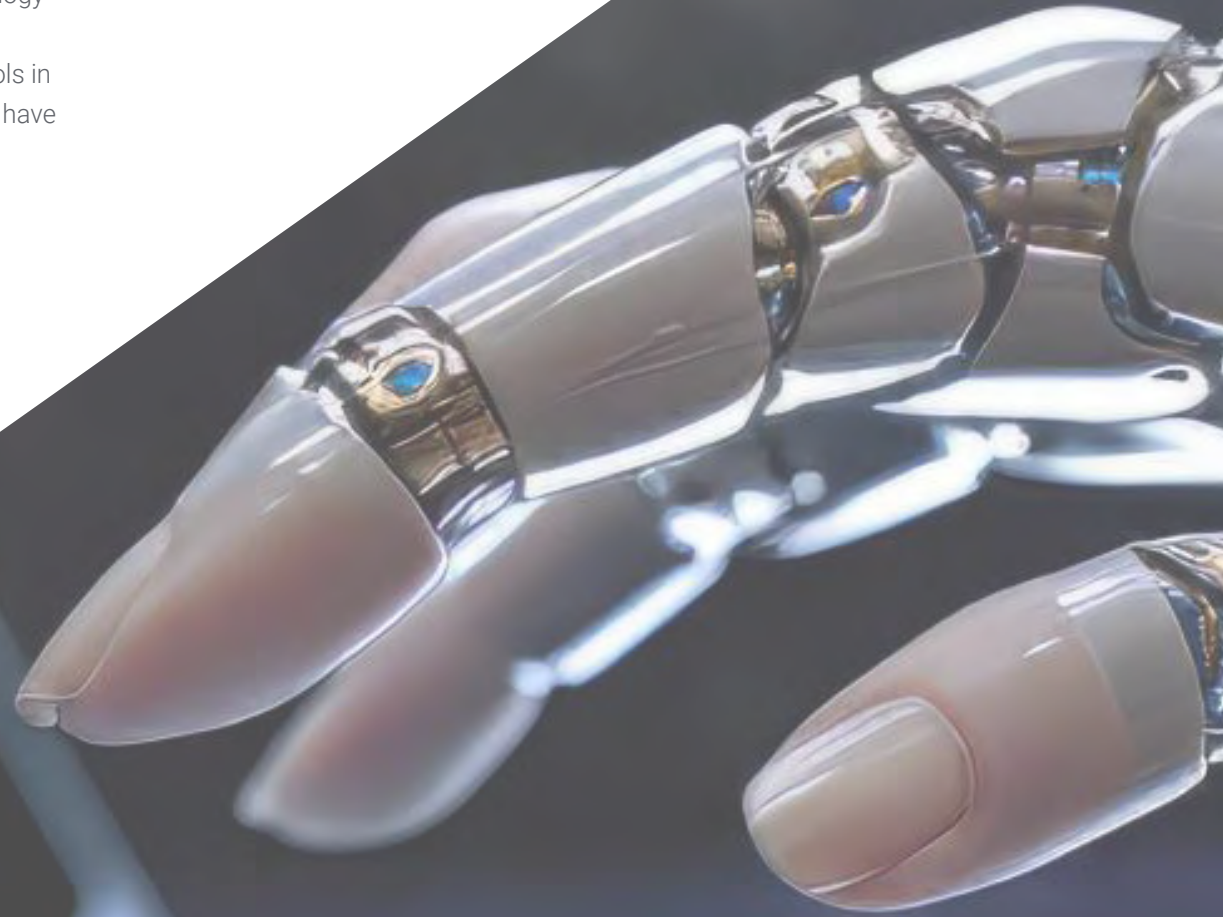
Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

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.

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 Information Technology 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. Throughout the course, students will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 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.

30%

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.

10%

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 that we are experiencing.

8%

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.

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 Development of Artificial Intelligence Projects in the Classroom guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.

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

This private qualification will allow you to obtain a **Postgraduate Certificate in Development of Artificial Intelligence Projects in the Classroom** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Development of Artificial Intelligence Projects in the Classroom**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**

tech global university

Mr./Ms. _____, with identification document _____ has successfully passed and obtained the title of:

Postgraduate Certificate in Development of Artificial Intelligence Projects in the Classroom

This is a private qualification of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Dean

Unique TECH Code: AFWORD23S   techtitute.com/certificates

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

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