

Postgraduate Certificate Development of Artificial Intelligence Projects in the Classroom



Postgraduate Certificate Development of Artificial Intelligence Projects in the Classroom

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

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

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Methodology

p. 20

06

Certificate

p. 28

01

Introduction

During their learning process, students often have doubts about the subject matter that prevent them from making progress. Most of the time, these doubts arise when students are out of school hours. In these situations, Artificial Intelligence (AI) can be used to support students during their learning process. An example of this is *chatbots*, which provide answers to students' questions at any time of the day. In addition, these resources provide interactive learning experiences through educational games, which makes the assimilation of concepts more effective. For this reason, TECH is developing an online university program that will focus on the integration of intelligent agents in education platforms.



“

Delve into the integration of Artificial Intelligence projects in specific subjects in the best digital university in the world according to Forbes”

The development of Machine Learning Projects in the educational field is of great importance, as it serves to improve knowledge retention and understanding of concepts. Through resources such as educational games with AI, students become more involved in the learning process and get immediate feedback to correct errors. In addition, these tools help students acquire various skills, including problem solving, critical thinking or decision making.

In order for teachers to get the most out of these projects, TECH is creating a Postgraduate Certificate that will focus on the integration of AI projects in the classroom. The syllabus will provide multiple strategies oriented to the implementation of educational plans using Machine Learning. This will allow educators to enrich the students' experience in subjects such as History, Mathematics or English. Likewise, the syllabus will delve into how to run virtual assistants on educational platforms, in order to resolve any doubts that students may have. It should be noted that the program will include the analysis of real case studies, so that the specialists can extract valuable lessons that they can then apply in their work practice.

As for the teaching methodology, the training will have an online learning system that will allow the experts to continue developing their work without interruptions, since this program will not subject them to rigid schedules or uncomfortable commutes. They will also have at their disposal a highly prestigious teaching staff, who will be in charge of providing all their knowledge to the student using the most advanced multimedia resources (among which interactive summaries and infographics stand out). The only requirement is that students have a device with Internet access, so that they can access the Virtual Campus and enjoy an educational process that will broaden their professional horizons.

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 notable features are:

- ♦ 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 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



Employ the most innovative Artificial Intelligence measurement tools to analyze the impact of your educational projects"

“

You will apply the most effective strategies to ensure excellence-based assistance”

You will develop educational chatbots that will provide assistance to students to improve their academic performance.

Thanks to the Relearning system used by TECH you will reduce the long hours of study and memorization.

The program's 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 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 academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.



02

Objectives

This program will provide graduates with advanced competencies to effectively implement AI projects in the classroom. In this way, professionals will drive innovations aimed at solving educational problems. In addition, they will design and implement resources such as educational *chatbots* to provide student assistance. Educators will provide highly innovative and cutting-edge proposals that will enrich student learning.





“

A high intensity program that will make you advance quickly and efficiently in your learning”



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
- ♦ Train 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



With the highest rated learning assistance methods in online teaching, this course will allow you to learn smoothly, steadily and effectively”

03

Course Management

For any student it is a real motivation to be able to take a program in which the teaching team is made up of professionals in their area of study, as is the case with this Postgraduate Certificate. This is a group of specialists versed in the Development of AI Projects in the Classroom, with a long and extensive professional career. Their experience and quality will be reflected in the syllabus developed, so that the student acquires the best result of this academic experience.





“

An experienced teaching staff will guide you throughout the learning process and resolve any doubts you may have"

Management



Dr. Peralta Martín-Palomino, Arturo

- ♦ CEO and CTO at Prometheus 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
- ♦ Ph.D. in Psychology from the University of Castilla - La Mancha
- ♦ Ph.D. in Economics, Business and Finance from the Camilo José Cela University
- ♦ Ph.D. in Psychology from the University of Castilla-La Mancha and Executive MBA from the University Isabel I
- ♦ Professional Master's Degree in Sales and Marketing Management, Isabel I University
- ♦ Expert Master's Degree in Big Data by Hadoop Training
- ♦ Professional Master's Degree in Advanced Information Technologies from the University of Castilla - La Mancha
- ♦ Member of: SMILE Research Group



Mr. Nájera Puente, Juan Felipe

- ♦ Data Analyst and Data Scientist
- ♦ Director of Studies and Research at the Council for Quality Assurance in Higher Education
- ♦ 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

- ♦ Education, Business and Marketing Specialist
- ♦ Responsible for Technical Training at Securitas Seguridad España
- ♦ *Product Manager* in Electronic Security at Securitas Seguridad España
- ♦ Business Intelligence Analyst at Ricopia Technologies
- ♦ Computer Technician and Head of 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, Madrid

04

Structure and Content

Designed by experts in the field, this Postgraduate Certificate will focus on the theoretical and practical development of AI projects in the educational environment. The syllabus will provide the most advanced strategies to implement in the plans of different subjects, including History, Mathematics or English. Likewise, the syllabus will delve into various applications ranging from the incorporation of intelligent agents in educational platforms to the use of AI in video games. Moreover, teachers will carry out measurements of the impact of their projects in order to verify their effectiveness.





“

You will make continuous improvements in your procedures, applying Machine Learning to optimize the learning experience”

Module 1. Development of Artificial Intelligence Projects in the Classroom

- 1.1. Planning and Design of AI Projects in 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 the Development of Educational Projects
 - 1.2.2. Tools for Educational Projects in History
 - 1.2.3. Tools for Educational Projects in Mathematics
 - 1.2.4. Tools for Educational Projects in English
- 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 IA Projects in Specific Subjects
 - 1.4.1. Mathematics and AI
 - 1.4.2. History and IA
 - 1.4.3. Languages and IA
 - 1.4.4. Other Subjects
- 1.5. Project 1: Developing educational projects using machine learning
 - 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



- 1.7. Project 3: Development of Educational *Chatbots* for Student Assistance
 - 1.7.1. First Steps
 - 1.7.2. Requirements
 - 1.7.3. Tools to be Used
 - 1.7.4. Project definition
- 1.8. Project 4: Integration of Intelligent Agents in Educational Platforms
 - 1.8.1. First Steps
 - 1.8.2. Requirements
 - 1.8.3. Tools to be Used
 - 1.8.4. Project definition
- 1.9. Evaluating and Measuring the Impact of AI Projects in Education
 - 1.9.1. Benefits of Working with AI in the Classroom
 - 1.9.2. Actual Data
 - 1.9.3. IA in Classroom
 - 1.9.4. AI Statistics in Education
- 1.10. Analysis and Continuous Improvement of AI in Education Projects
 - 1.10.1. Current Projects
 - 1.10.2. Commissioning
 - 1.10.3. What the Future Holds
 - 1.10.4. Transforming the Aulas 360

“*TECH provides you with a high-quality and flexible Postgraduate Certificate. View it conveniently from your computer, mobile or tablet!*”



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 Education School we use the Case Method

In a given situation, what should a professional do? Throughout the program students will be presented with multiple simulated cases based on real situations, where they will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method.

With TECH, educators can experience a learning methodology that is shaking the foundations of traditional universities around the world.



It is a technique that develops critical skills and prepares educators to make decisions, defend their arguments, and contrast opinions.

“

Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”

The effectiveness of the method is justified by four fundamental achievements:

1. Educators who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process is solidly focused on practical skills that allow educators to better integrate the knowledge into daily practice.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life teaching.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

Our University is the first in the world to combine case studies with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.



Educators will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we have trained more than 85,000 educators with unprecedented success in all specialties. 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

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.

The overall score obtained by our learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



Study Material

All teaching material is produced by the specialist educators who teach the course, specifically for the course, so that the teaching content is really 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.



Educational Techniques and Procedures on Video

TECH introduces students to the latest techniques, with the latest educational advances, and to the forefront of Education. All this, first-hand, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



Interactive Summaries

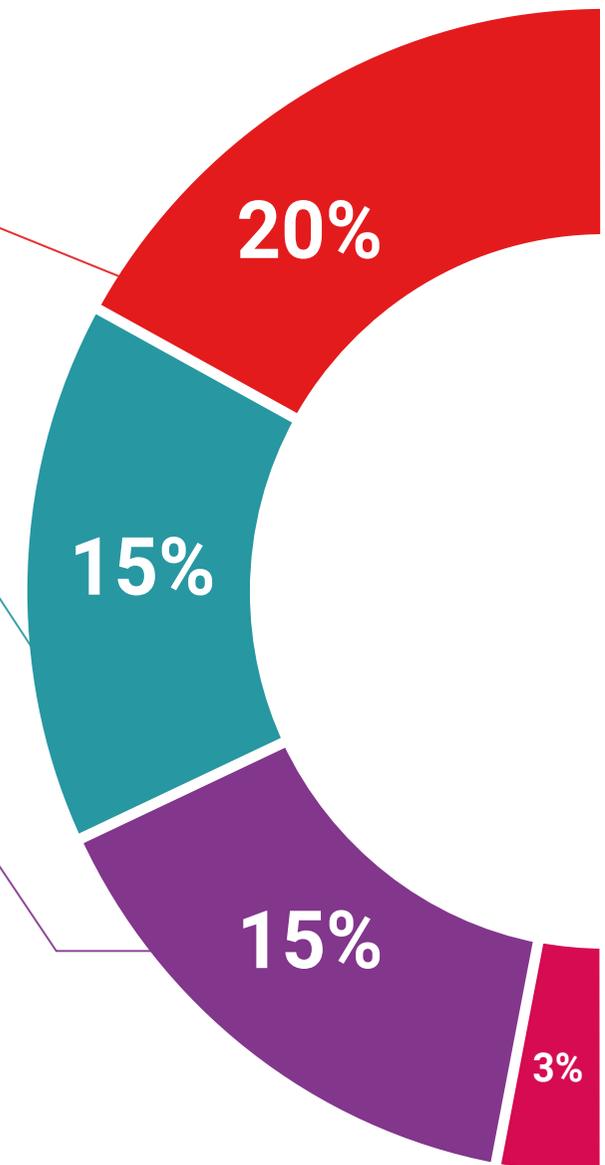
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive multimedia content presentation training Exclusive system was awarded by Microsoft as a "European Success Story".



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.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



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.



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.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.



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 Technological University.



“

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

This **Postgraduate Certificate in Development of Artificial Intelligence Projects in the Classroom** 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 Development of Artificial Intelligence Projects in the Classroom**

Official N° of Hours: **150 h.**



*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.

future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

tech technological
university

personalized service innovation

knowledge present

in the Classroom

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

development languages

virtual classroom

Postgraduate Certificate Development of Artificial Intelligence Projects in the Classroom