

# Postgraduate Diploma

Application of Artificial Intelligence Techniques  
in the Life Cycle of Software Projects





## Postgraduate Diploma

### Application of Artificial Intelligence Techniques in the Life Cycle of Software Projects

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/information-technology/postgraduate-diploma/postgraduate-diploma-application-artificial-intelligence-techniques-life-cycle-software-projects](http://www.techtute.com/us/information-technology/postgraduate-diploma/postgraduate-diploma-application-artificial-intelligence-techniques-life-cycle-software-projects)

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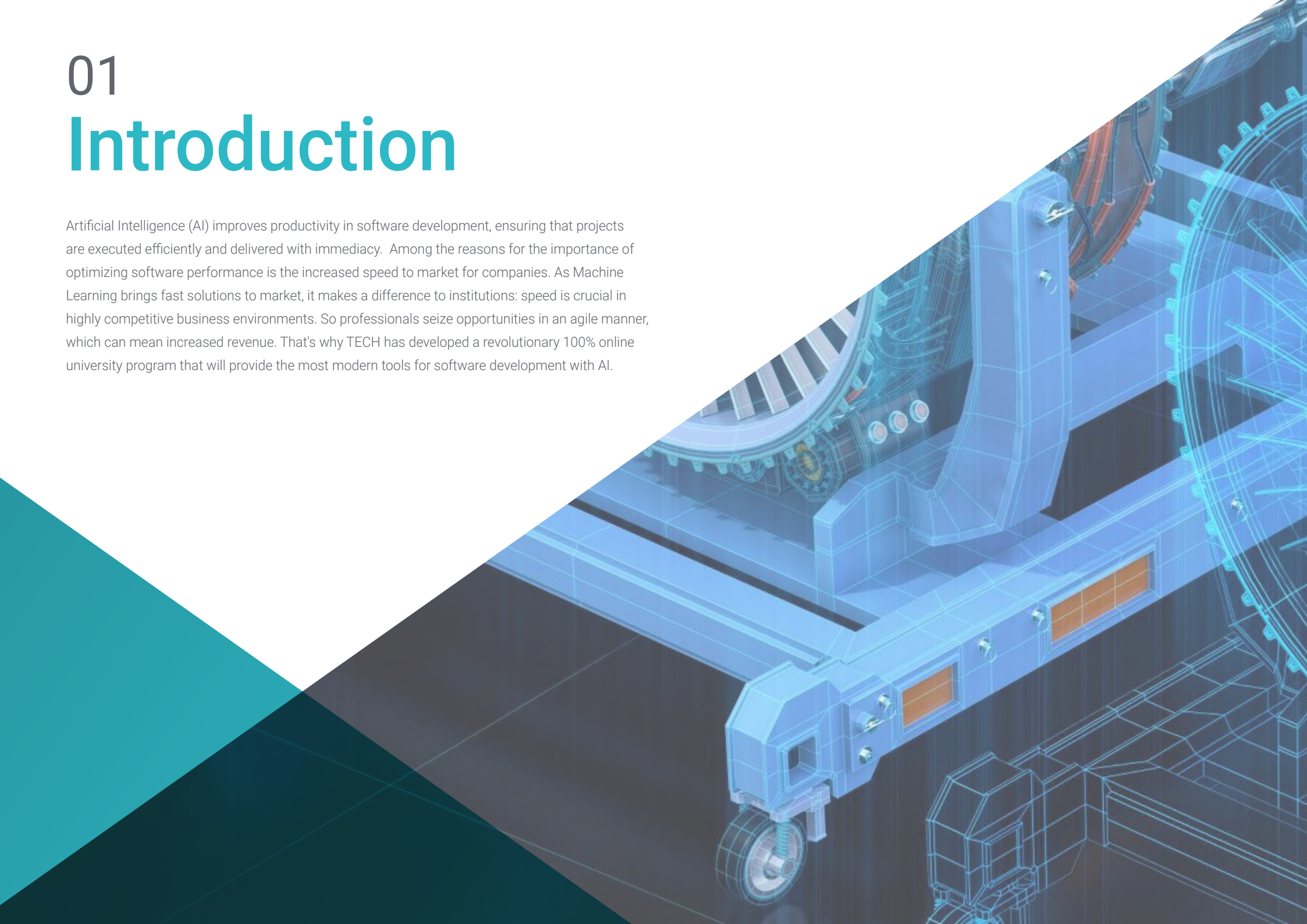
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# 01

# Introduction

Artificial Intelligence (AI) improves productivity in software development, ensuring that projects are executed efficiently and delivered with immediacy. Among the reasons for the importance of optimizing software performance is the increased speed to market for companies. As Machine Learning brings fast solutions to market, it makes a difference to institutions: speed is crucial in highly competitive business environments. So professionals seize opportunities in an agile manner, which can mean increased revenue. That's why TECH has developed a revolutionary 100% online university program that will provide the most modern tools for software development with AI.



“

*Manage Pair Programming with  
GitHub Copilot through 150  
hours of the best digital learning”*

Application Programming Interface Testing (API Testing) constitutes an essential part of ensuring software quality. Through these procedures, professionals verify that programs work as expected, which contributes to the overall quality of the application. In addition, as no manual interactions are required, coverage is faster and allows experts to save both time and resources. These tools can even be performed before user interfaces are developed, so that computer scientists can detect problems and correct them at an early stage of the development process.

In view of this, TECH is launching an innovative program that will delve into the Testing Life Cycle using AI systems. The academic itinerary will address strategies oriented to the planning of manual and automated tests, considering that their evaluation may require continuous adjustments according to the development of the projects. At the same time, the syllabus will provide students with a holistic vision in the implementation of specific algorithms to handle problems and thus enrich the products. Also, the didactic contents will promote interoperability between different languages through automatic translation, as well as the automation of routine tasks with Computational Intelligence tools.

In short, this 6-month university program will provide students with a solid theoretical and practical foundation, enabling them to apply it in real situations, thanks to the leadership and support of a distinguished faculty of experts with extensive professional experience. In this way, TECH makes available to the student the exclusive Relearning methodology, an innovative pedagogical methodology based on the reiteration of essential concepts, thus guaranteeing an effective assimilation of knowledge. The only requirement to enter the Virtual Campus is that the student has a device with Internet access, and may use their own cell phone.

This **Postgraduate Diploma in Application of Artificial Intelligence Techniques in the Life Cycle of Software Projects** the most complete and up-to-date program on the market. The most important features include:

- ♦ Development of practical cases presented by experts in Artificial Intelligence in Programming
- ♦ The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable 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



*Improve test coverage by identifying critical areas using Artificial Intelligence”*

“

*You will apply the most advanced strategies for automatic detection of changes and performance issues in web applications”*

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 course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*You will implement Clean Architecture in your software and improve communication between different teams.*

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



# 02 Objectives

In only 540 hours, graduates will master the configuration of software environments to get the most out of them through AI. They will also implement Machine Learning extensions in Visual Studio Code, thus improving software productivity. Experts will also implement specific techniques using ChatGPT, for automatic correction of possible code improvements. Students will also acquire skills to design robust test plans, covering different types of testing and ensuring software quality. In addition, they will apply secure development practices using strategies aimed at protecting sensitive data or preventing cyber-attacks.





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*With the best-rated study methods in online teaching, this program will allow you to make unstoppable progress in your professional growth”*



## General Objectives

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- ◆ Develop skills to configure and manage efficient development environments, ensuring a solid foundation for the implementation of AI projects
- ◆ Acquire skills in planning, executing and automating quality testing, incorporating AI tools for bug detection and correction
- ◆ Understand and apply performance, scalability and maintainability principles in the design of large-scale computing systems
- ◆ Become familiar with the most important design patterns and apply them effectively in software architecture



*You will enjoy a library full of multimedia resources in different audiovisual formats, such as interactive summaries or infographics”*





## Specific Objectives

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### Module 1. Software Development Productivity Improvement with Artificial Intelligence

- ♦ Delve into the implementation of must-have AI extensions in Visual Studio Code to improve productivity and facilitate software development
- ♦ Gain a solid understanding of basic AI concepts and their application in software development, including machine learning algorithms, natural language processing, neural networks, etc.
- ♦ Master the configuration of optimized development environments, ensuring that students are able to create environments conducive to AI projects
- ♦ Apply specific techniques using ChatGPT for the automatic identification and correction of potential code improvements, encouraging more efficient programming practices
- ♦ Promote collaboration between professionals from different programmers (from programmers to data engineers to user experience designers) to develop effective and ethical AI software solutions

### Module 2. Software Architecture for QA Testing

- ♦ Develop skills to design solid test plans, covering different types of testing and ensuring software quality
- ♦ Recognize and analyze different types of software frameworks, such as monolithic, microservices or service oriented
- ♦ Gain a comprehensive vision on the principles and techniques for designing computer systems that are scalable and capable of handling large volumes of data

- ♦ Apply advanced skills in the implementation of AI-powered data structures to optimize software performance and efficiency
- ♦ Develop secure development practices, with a focus on avoiding vulnerabilities to ensure software security at the architectural level

### Module 3. Artificial Intelligence for QA Testing

- ♦ Master principles and techniques for designing computer systems that are scalable and capable of handling large volumes of data
- ♦ Apply advanced skills in the implementation of AI-powered data structures to optimize software performance and efficiency
- ♦ Understand and apply secure development practices, with a focus on avoiding vulnerabilities such as injection, to ensure software security at the architectural level
- ♦ Generate automated tests, especially in web and mobile environments, integrating AI tools to improve process efficiency
- ♦ Use advanced AI-powered QA tools for more efficient bug detection and continuous software improvement

# 03

# Course Management

TECH aims to offer graduates with the best and most updated content. To this end, it provides each of its university programs with the most innovative didactic tools, successfully developing the process in each of its programs. In this way, the graduate will have access to material specifically designed by a teaching staff specialized in the Application of AI techniques in the Software Project Life Cycle. Their robust experience and extensive knowledge will take the graduate to the top of their professional career without any doubt.



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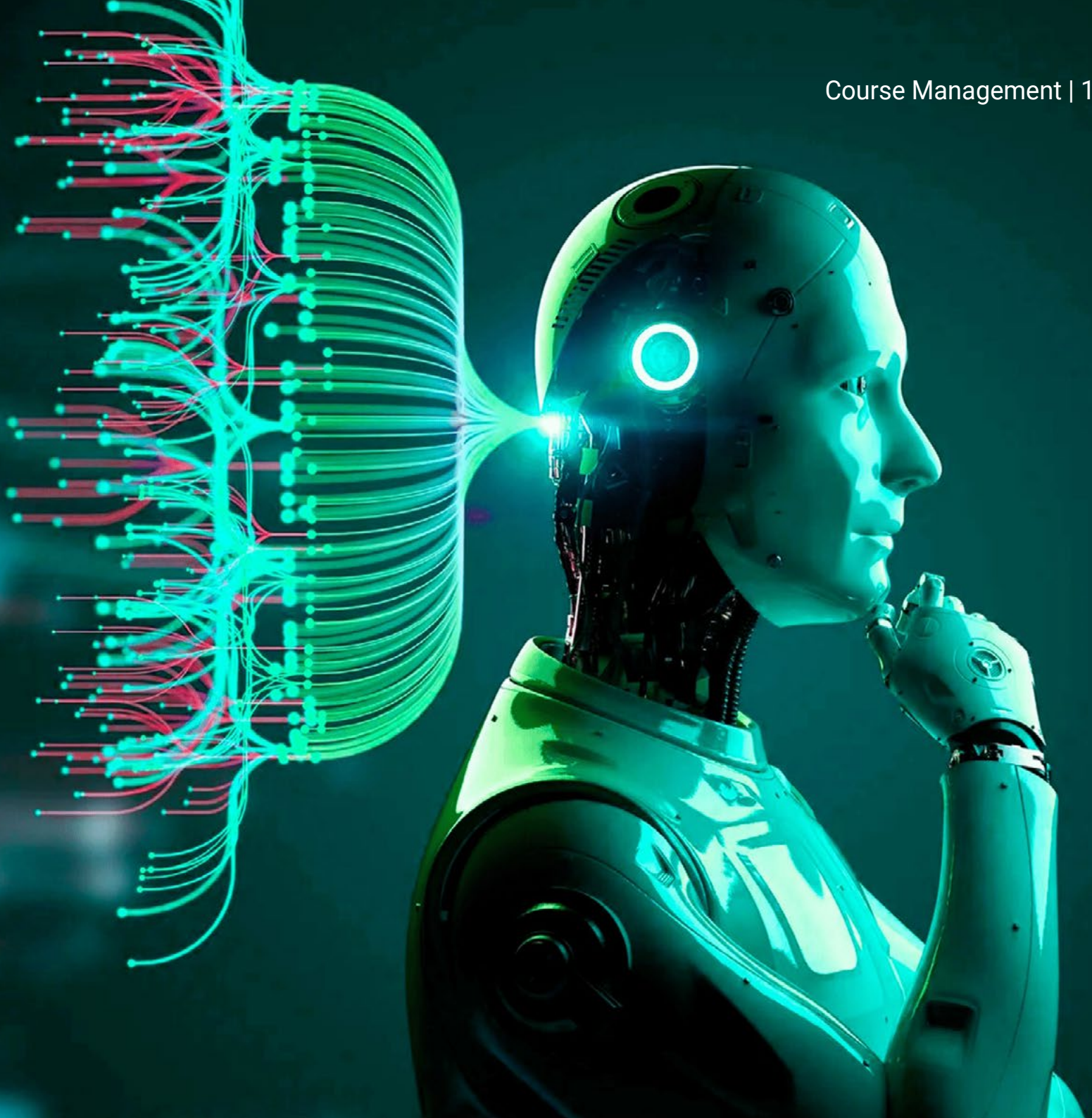
*An experienced teaching group will guide you throughout the learning process and resolve any doubts that may arise"*

## Management



### Dr. Peralta Martín-Palomino, Arturo

- CEO and CTO at Prometheus Global Solutions
- CTO at Korporate Technologies
- CTO at AI Shepherds 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



# 04

## Structure and Content

This Postgraduate Diploma will provide students with a comprehensive approach to the implementation of AI techniques in software projects. The itinerary will cover everything from the configuration of the development environment to repository management. It will also highlight the integration of elements in Visual Studio Code and code optimization with ChatGPT. The materials will delve into program architecture, providing both tools and methodologies for continuous performance monitoring, and will guide experts through the Testing Life Cycle, from test case creation to bug detection.





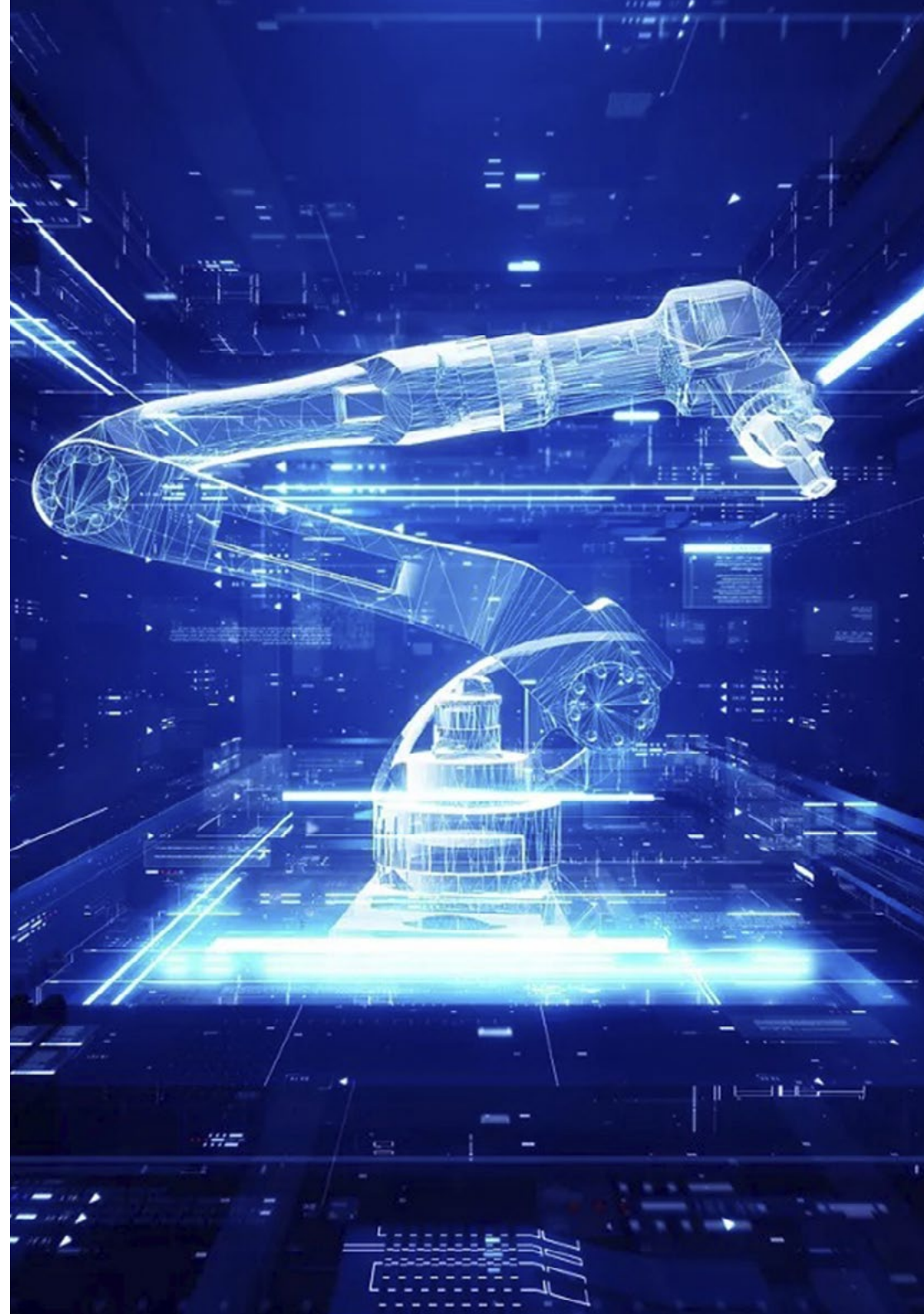


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*A complete syllabus that incorporates all the knowledge you need to take a step towards maximum IT quality”*

## Module 1. Software Development Productivity Improvement with AI

- 1.1. Preparing a Suitable Development Environment
  - 1.1.1. Essential Tool Selection for AI Development
  - 1.1.2. Configuration of the Selected Tools
  - 1.1.3. Implementation of CI/CD Pipelines Adapted to AI Projects
  - 1.1.4. Efficient Management of Dependencies and Versions in Development Environments
- 1.2. Essential AI Extensions for Visual Studio Code
  - 1.2.1. Exploring and Selecting AI Extensions for Visual Studio Code
  - 1.2.2. Integrating Static and Dynamic Analysis Tools into the Integrated Development Environment (IDE)
  - 1.2.3. Automation of Repetitive Tasks with Specific Extensions
  - 1.2.4. Customization of the Development Environment to Improve Efficiency
- 1.3. No-Code Design of User Interfaces with AI Elements
  - 1.3.1. No-Code Design Principles and their Application to User Interfaces
  - 1.3.2. Incorporation of AI Elements in Visual Interface Design
  - 1.3.3. Tools and Platforms for the No-Code Creation of Intelligent Interfaces
  - 1.3.4. Evaluation and Continuous Improvement of No-code Interfaces with AI
- 1.4. Code Optimization Using ChatGPT
  - 1.4.1. Duplicate Code Detection
  - 1.4.2. Refactor
  - 1.4.3. Create Readable Code
  - 1.4.4. Understanding What Code Does
  - 1.4.5. Improving Variable and Function Naming
  - 1.4.6. Creating Automatic Documentation
- 1.5. Repository Management with AI
  - 1.5.1. Automation of Version Control Processes with AI Techniques
  - 1.5.2. Conflict Detection and Automatic Resolution in Collaborative Environments
  - 1.5.3. Predictive Analysis of Changes and Trends in Code Repositories
  - 1.5.4. Improvements in the Organization and Categorization of Repositories using AI



- 1.6. Integration of AI in Database Management
  - 1.6.1. Optimization of Queries and Performance Using AI Techniques
  - 1.6.2. Predictive Analysis of Database Access Patterns
  - 1.6.3. Implementation of Recommender Systems to Optimize Database Structure
  - 1.6.4. Proactive Monitoring and Detection of Potential Database Problems
- 1.7. Fault Detection and Creation of Unit Tests with AI ChatGPT
  - 1.7.1. Automatic Generation of Test Cases using AI Techniques
  - 1.7.2. Early Detection of Vulnerabilities and Bugs using Static Analysis with AI
  - 1.7.3. Improving Test Coverage by Identifying Critical Areas by AI
- 1.8. Pair Programming with GitHub Copilot
  - 1.8.1. Integration and Effective Use of GitHub Copilot in Pair Programming Sessions
  - 1.8.2. Integration Improvements in Communication and Collaboration among Developers with GitHub Copilot
  - 1.8.3. Integration Strategies to Maximize the Use of GitHub Copilot-Generated Code suggestions
  - 1.8.4. Integration Case Studies and Best Practices in AI-Assisted Pair Programming
- 1.9. Automatic Translation between Programming Languages Using ChatGPT
  - 1.9.1. Specific Machine Translation Tools and Services for Programming Languages
  - 1.9.2. Adaptation of Machine Translation Algorithms to Development Contexts
  - 1.9.3. Improvement of Interoperability between Different Languages by Machine Translation
  - 1.9.4. Assessment and Mitigation of Potential Challenges and Limitations in Machine Translation
- 1.10. Recommended AI Tools to Improve Productivity
  - 1.10.1. Comparative Analysis of AI Tools for Software Development
  - 1.10.2. Integration of AI Tools in Workflows
  - 1.10.3. Automation of Routine Tasks with AI Tools
  - 1.10.4. Evaluation and Selection of Tools Based on Project Context and Requirements

## Module 2. Software Architecture with AI

- 2.1. Optimization and Performance Management in AI Tools with the Help of ChatGPT
  - 2.1.1. Performance Analysis and Profiling in AI Tools
  - 2.1.2. Algorithm Optimization Strategies and AI Models
  - 2.1.3. Implementation of Caching and Parallelization Techniques to Improve Performance
  - 2.1.4. Tools and Methodologies for Continuous Real-Time Performance Monitoring
- 2.2. Scalability in AI Applications Using ChatGPT
  - 2.2.1. Scalable Architectures Design for AI Applications
  - 2.2.2. Implementation of Partitioning and Load Sharing Techniques
  - 2.2.3. Workflow and Workload Management in Scalable Systems
  - 2.2.4. Strategies for Horizontal and Vertical Expansion in Variable Demand Environments
- 2.3. Maintainability of AI Applications Using ChatGPT
  - 2.3.1. Design Principles to Facilitate Maintainability in IA Projects
  - 2.3.2. Specific Documentation Strategies for AI Models and Algorithms
  - 2.3.3. Implementation of Unit and Integration Tests to Facilitate Maintainability
  - 2.3.4. Methods for Refactoring and Continuous Improvement in Systems with AI Components
- 2.4. Large-Scale System Design
  - 2.4.1. Architectural Principles for Large-Scale System Design
  - 2.4.2. Decomposition of Complex Systems into Microservices
  - 2.4.3. Implementation of Specific Design Patterns for Distributed Systems
  - 2.4.4. Strategies for Complexity Management in Large-Scale Architectures with AI Components
- 2.5. Large-Scale Data Warehousing for AI Tools
  - 2.5.1. Selection of Scalable Data Storage Technologies
  - 2.5.2. Design of Database Schemas for Efficient Handling of Large Data Volumes
  - 2.5.3. Partitioning and Replication Strategies in Massive Data Storage Environments
  - 2.5.4. Implementation of Data Management Systems to Ensure Integrity and Availability in AI Projects
- 2.6. Data Structures with AI Using ChatGPT
  - 2.6.1. Adaptation of Classical Data Structures for Use with AI Algorithms
  - 2.6.2. Design and Optimization of Specific Data Structures with ChatGPT
  - 2.6.3. Integration of Efficient Data Structures in Data Intensive Systems
  - 2.6.4. Strategies for Real-Time Data Manipulation and Storage in AI Data Structures

- 2.7. Programming Algorithms for AI Products
  - 2.7.1. Development and Implementation of Application-Specific Algorithms for AI Applications
  - 2.7.2. Algorithm Selection Strategies according to Problem Type and Product Requirements
  - 2.7.3. Adaptation of Classical Algorithms for Integration into AI Systems
  - 2.7.4. Evaluation and Performance Comparison between Different Algorithms in Development Contexts with AI
- 2.8. Design Patterns for AI Development
  - 2.8.1. Identification and Application of Common Design Patterns in Projects with AI Components
  - 2.8.2. Development of Specific Patterns for the Integration of Models and Algorithms into Existing Systems
  - 2.8.3. Strategies for the Implementation of Patterns to Improve Reusability and Maintainability in AI Projects
  - 2.8.4. Case Studies and Best Practices in the Application of Design Patterns in AI Architectures
- 2.9. Implementation of Clean Architecture using ChatGPT
  - 2.9.1. Fundamental Principles and Concepts of Clean Architecture
  - 2.9.2. Adaptation of Clean Architecture to Projects with AI Components
  - 2.9.3. Implementation of Layers and Dependencies in Systems with Clean Architecture
  - 2.9.4. Benefits and Challenges of Implementing Clean Architecture in Software Development with AI
- 2.10. Secure Software Development in Web Applications with DeepCode
  - 2.10.1. Principles of Security in the Development of Software with AI Components
  - 2.10.2. Identification and Mitigation of Potential Vulnerabilities in AI Models and Algorithms
  - 2.10.3. Implementation of Secure Development Practices in Web Applications with Artificial Intelligence Functionalities
  - 2.10.4. Strategies for the Protection of Sensitive Data and Prevention of Attacks in AI Projects

## Module 3. AI for QA Testing

- 3.1. Software Testing Life Cycle
  - 3.1.1. Description and Understanding of the Testing Life Cycle in Software Development
  - 3.1.2. Phases of the Testing Life Cycle and Its Importance in Quality Assurance
  - 3.1.3. Integration of Artificial Intelligence in Different Stages of the Testing Life Cycle
  - 3.1.4. Strategies for Continuous Improvement of the Testing Life Cycle using AI
- 3.2. Test Cases and Bug Detection with the Help of ChatGPT
  - 3.2.1. Effective Test Case Design and Writing in the Context of QA Testing
  - 3.2.2. Identification of Bugs and Errors during Test Case Execution
  - 3.2.3. Application of Early Bug Detection Techniques Using Static Analysis
  - 3.2.4. Use of Artificial Intelligence Tools for the Automatic Identification of Bugs in Test Cases
- 3.3. Types of Testing
  - 3.3.1. Exploration of Different Types of Testing in the QA Environment
  - 3.3.2. Unit, Integration, Functional, and Acceptance Testing: Characteristics and Applications
  - 3.3.3. Strategies for the Selection and Appropriate Combination of Testing Types in Projects with ChatGPT
  - 3.3.4. Adaptation of Conventional Testing Types to Projects with ChatGPT
- 3.4. Creation of a Testing Plan Using ChatGPT
  - 3.4.1. Design and Structure of a Comprehensive Testing Plan
  - 3.4.2. Identification of Requirements and Test Scenarios in AI Projects
  - 3.4.3. Strategies for Manual and Automated Test Planning
  - 3.4.4. Continuous Evaluation and Adjustment of the Testing Plan as the Project Develops
- 3.5. AI Bug Detection and Reporting
  - 3.5.1. Implementation of Automatic Bug Detection Techniques Using Machine Learning Algorithms
  - 3.5.2. Use of ChatGPT for Dynamic Code Analysis to Search for Possible Bugs
  - 3.5.3. Strategies for Automatic Generation of Detailed Reports on Bugs Detected Using ChatGPT
  - 3.5.4. Effective Collaboration between Development and QA Teams in the Management of AI-Detected Bugs

- 3.6. Creation of Automated Testing with AI
  - 3.6.1. Development of Automated Test Scripts for Projects Using ChatGPT
  - 3.6.2. Integration of AI-Based Test Automation Tools
  - 3.6.3. Using ChatGPT for Dynamic Generation of Automated Test Cases
  - 3.6.4. Strategies for Efficient Execution and Maintenance of Automated Test Cases in AI Projects
- 3.7. API Testing
  - 3.7.1. Fundamental Concepts of API Testing and Its Importance in QA
  - 3.7.2. Development of Tests for the Verification of APIs in Environments Using ChatGPT
  - 3.7.3. Strategies for Data and Results Validation in API Testing with ChatGPT
  - 3.7.4. Use of Specific Tools for API Testing in Projects with Artificial Intelligence
- 3.8. AI Tools for Web Testing
  - 3.8.1. Exploration of Artificial Intelligence Tools for Test Automation in Web Environments
  - 3.8.2. Integration of Element Recognition and Visual Analysis Technologies in Web Testing
  - 3.8.3. Strategies for Automatic Detection of Changes and Performance Problems in Web Applications Using ChatGPT
  - 3.8.4. Evaluation of Specific Tools for Improving Efficiency in Web Testing with AI
- 3.9. Mobile Testing Using AI
  - 3.9.1. Development of Testing Strategies for Mobile Applications with AI Components
  - 3.9.2. Integration of Specific Testing Tools for AI-Based Mobile Platforms
  - 3.9.3. Use of ChatGPT for Detecting Performance Problems in Mobile Applications
  - 3.9.4. Strategies for the Validation of Interfaces and Specific Functions of Mobile Applications by AI
- 3.10. QA Tools with AI
  - 3.10.1. Exploration of QA Tools and Platforms that Incorporate Artificial Intelligence Functionality
  - 3.10.2. Evaluation of Tools for Efficient Test Management and Test Execution in AI Projects
  - 3.10.3. Using ChatGPT for the Generation and Optimization of Test Cases
  - 3.10.4. Strategies for Effective Selection and Adoption of QA Tools with AI Capabilities



*TECH provides you with a high-quality and flexible Professional Master's Degree. Access conveniently from your computer, mobile or tablet!"*

# 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.

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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 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.



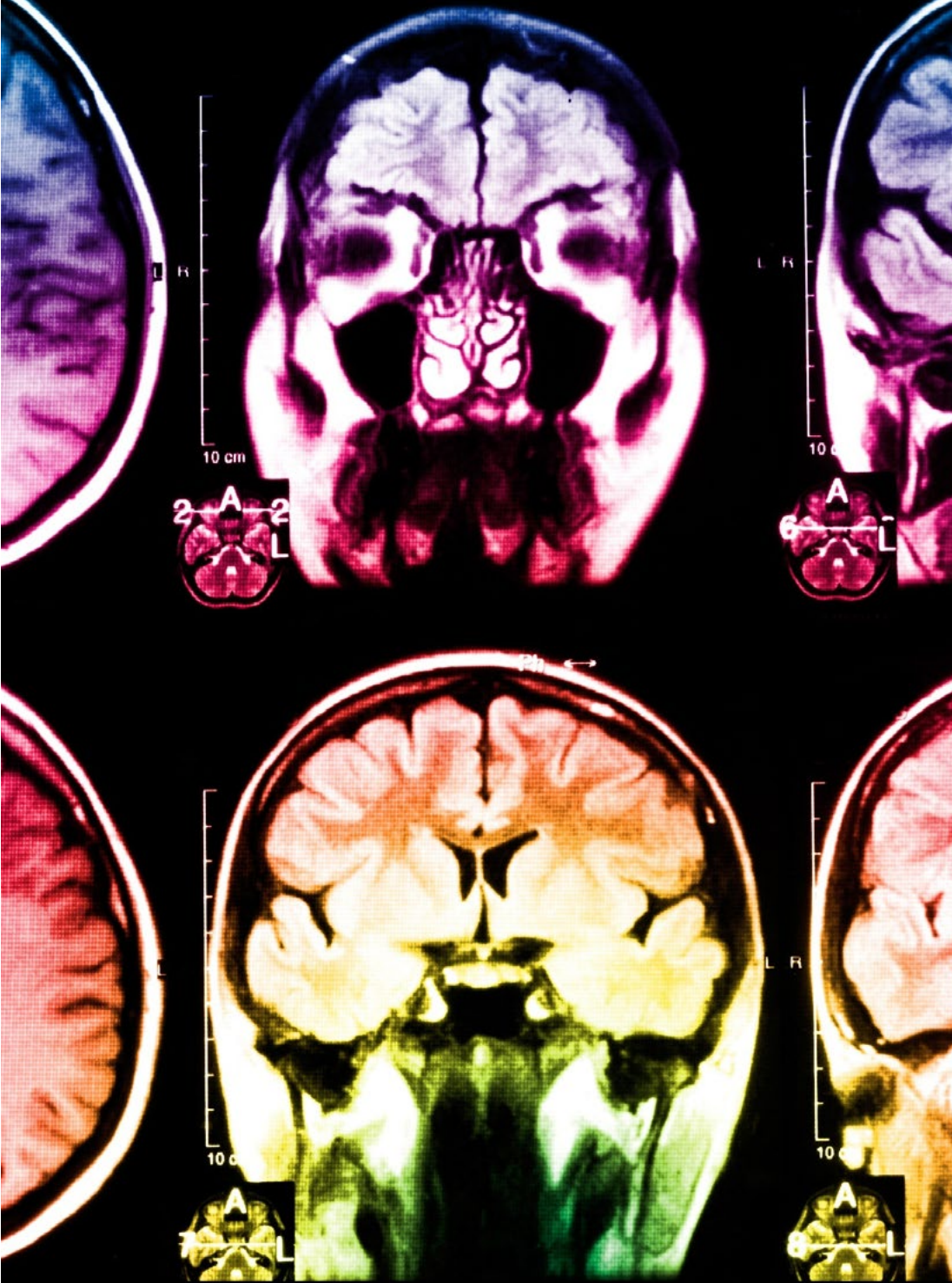
In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

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.



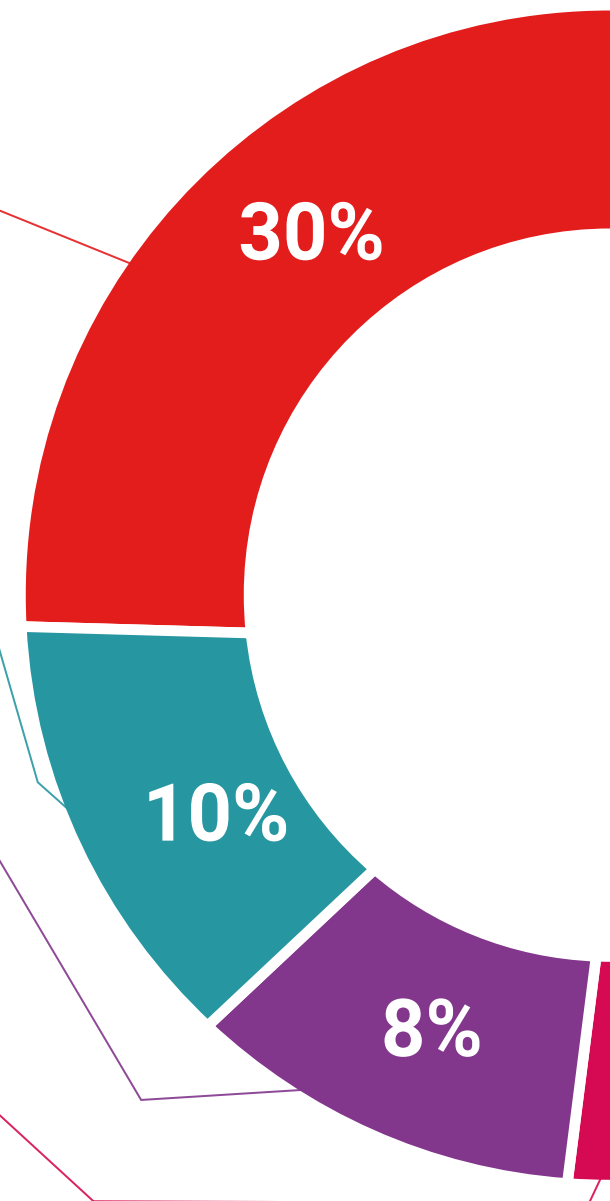
### Practising Skills and Abilities

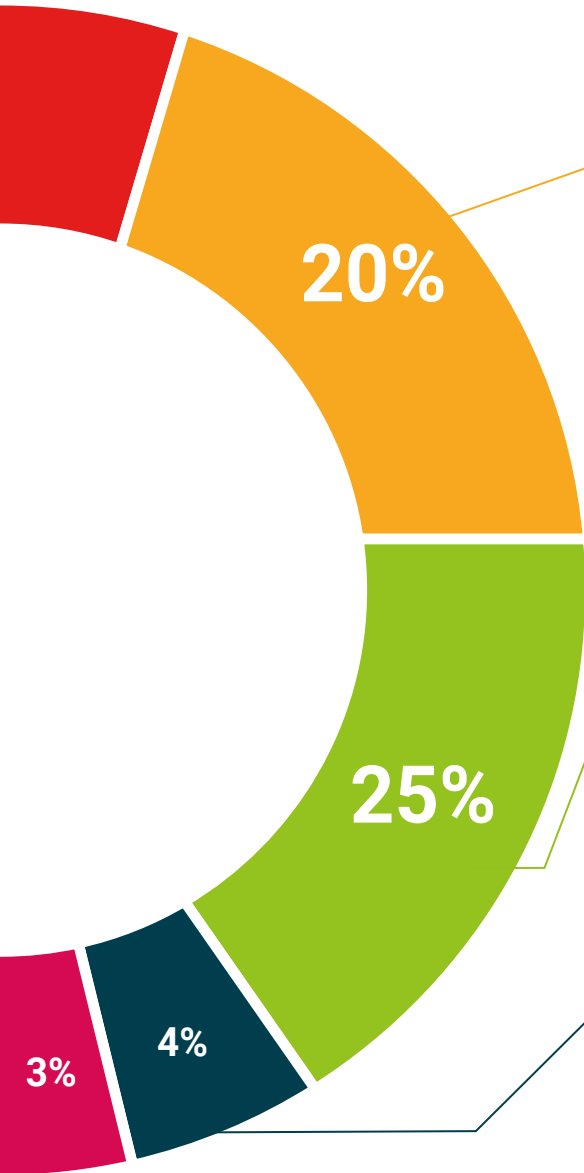
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



### 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.



06

# Certificate

This Postgraduate Diploma in Application of Artificial Intelligence Techniques in the Life Cycle of Software Projects guarantees, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.



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*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 Diploma in Application of Artificial Intelligence Techniques in the Life Cycle of Software Projects** 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.

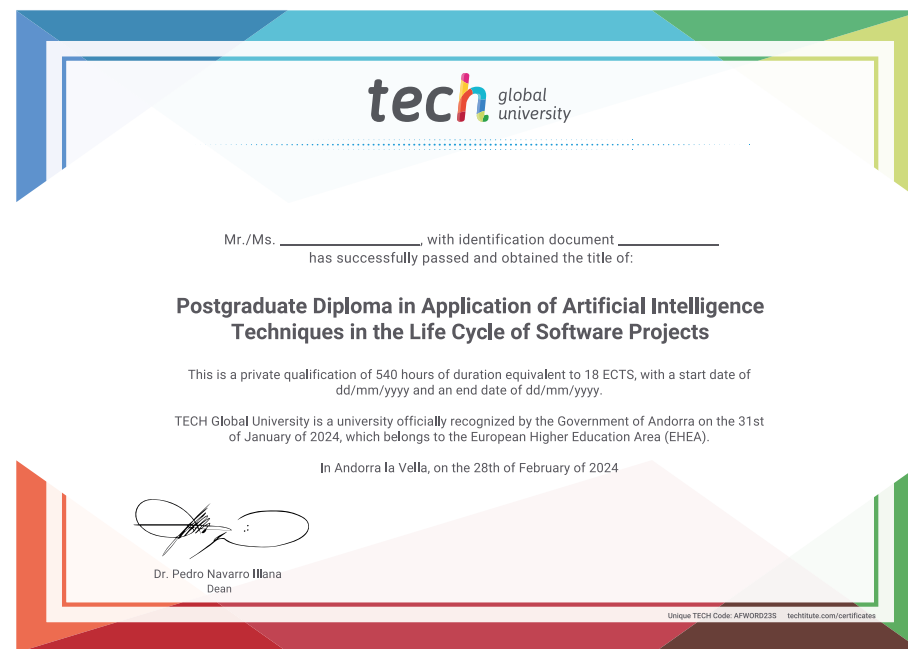
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Application of Artificial Intelligence Techniques in the Life Cycle of Software Projects**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**



\*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.



future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning



## Postgraduate Diploma

Application of Artificial Intelligence  
Techniques in the Life Cycle of  
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- » Modality: Online
- » Duration: 6 months.
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- » Schedule: at your own pace
- » Exams: online

# Postgraduate Diploma

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