

Postgraduate Certificate Automation of Financial Department Processes with Artificial Intelligence



Postgraduate Certificate Automation of Financial Department Processes with Artificial Intelligence

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

Website: www.techtute.com/us/artificial-intelligence/postgraduate-certificate/automation-financial-department-processes-artificial-intelligence

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01

Introduction

In an increasingly competitive business environment, the Automation of Financial Department Processes with Artificial Intelligence is a valuable tool to position companies in the market. This approach not only focuses on optimizing routine tasks, but also provides detailed real-time analytics that improve companies' strategic decision making. Faced with this reality, professionals need to manage these technological solutions to optimize financial resources and significantly reduce costs. For this reason, TECH presents a cutting-edge university program focused on the Automation of Financial Department Processes with Artificial Intelligence. In addition, it is taught in a convenient 100% online mode.



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Through this 100% online Postgraduate Certificate, you will use Artificial Intelligence to identify unusual patterns in transactions that could indicate financial risks or fraud”

A recent report by the World Economic Forum predicts that Artificial Intelligence could increase productivity in the financial sector by 40% in the coming years. In this sense, the implementation of automated solutions significantly improves the quality of financial analysis, allowing companies to adapt quickly to a constantly changing economic environment. Faced with this situation, professionals need to adopt Artificial Intelligence as a tool to help them to improve the quality of their financial analysis.

In this context, TECH launches a pioneering program in Automation of Financial Department Processes with Artificial Intelligence. Conceived by references in this field, the academic itinerary will delve into aspects ranging from the automatic processing of invoices with Kofax or the use of predictive models for efficient cash management to inventory automation with Predictive Analytics. The agenda will also analyze the keys to integrating chatbots in Customer Relationship Management platforms, which will allow students to offer immediate customer service to improve their satisfaction.

It is worth noting that this university program becomes more dynamic thanks to the multimedia pills and the wide variety of didactic resources offered by TECH (such as specialized readings, interactive summaries or case studies). It also employs its revolutionary Relearning methodology so that students enjoy progressive and natural learning. In this sense, the only thing graduates will need is an electronic device with Internet access to enter the Virtual Campus and enjoy the most complete didactic materials on the academic market. Undoubtedly, an immersive experience that will allow experts to broaden their professional horizons significantly.

This **Postgraduate Certificate in Automation of Financial Department Processes with Artificial Intelligence** contains 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
- ♦ The graphic, schematic, and practical contents with which they are created, provide practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where 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



You will have all the support of TECH, the largest online academic institution in the world with the latest educational technology at your disposal"

“

You will dive into the creation of automated financial reports with Power BI”

The program’s teaching staff includes professionals from the field who contribute their work experience to this educational 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.

Are you looking to use Deep Learning models to simulate different economic scenarios? Achieve it through this university program in just 6 weeks.

You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.



02

Objectives

Through this Postgraduate Certificate, professionals will have a comprehensive understanding of the Automation of Financial Department Processes with Artificial Intelligence. At the same time, graduates will develop advanced competencies to handle Deep Learning and Machine Learning models to make strategic financial decisions based on data. In this sense, experts will be highly qualified to design and implement automated systems that improve financial processes such as risk management, accounting and even treasury.



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You will be able to manage automated systems that optimize financial processes such as accounting, treasury and risk management”



General Objectives

- ♦ Apply Artificial Intelligence techniques in financial decision making
- ♦ Develop predictive models for financial risk management
- ♦ Optimize the allocation of financial resources using AI algorithms
- ♦ Automate routine financial processes using machine learning
- ♦ Implement natural language processing tools for the analysis of financial data
- ♦ Design recommender systems for the financial sector
- ♦ Analyze large volumes of financial data using Big Data techniques
- ♦ Evaluate the impact of Artificial Intelligence on companies' profitability
- ♦ Improve financial fraud detection with the use of AI
- ♦ Create financial asset valuation models using Artificial Intelligence
- ♦ Develop financial simulation tools based on AI algorithms
- ♦ Apply data mining techniques to identify financial patterns
- ♦ Develop optimization models for financial planning
- ♦ Use neural networks to improve prediction of market trends
- ♦ Develop AI-based solutions for financial product personalization
- ♦ Implement AI systems for automated investment decisions
- ♦ Develop analytical capabilities for interpreting the results of financial AI models
- ♦ Investigate the use of Artificial Intelligence in financial regulation and compliance
- ♦ Develop AI solutions to reduce costs in financial processes
- ♦ Identify opportunities for innovation in the financial sector through AI





Specific Objectives

- Master the automation of financial processes using Robotic Process Automation to optimize accuracy in tasks such as invoice processing
- Apply Deep Learning techniques to improve liquidity and working capital
- Create automated financial reports through Power Bi, increasing the speed of report writing
- Implement systems that minimize human error in the processing of economic data, increasing the reliability of financial information



You will have at your fingertips a variety of multimedia support resources such as interactive summaries, explanatory videos or specialized readings”

03

Course Management

Loyal to its commitment to provide the most complete and updated university programs in the academic panorama, TECH carries out a meticulous process to form its teaching staff. As a result of this effort, the present Postgraduate Certificate has the participation of prestigious specialists in Automation of Financial Department Processes with Artificial Intelligence. These professionals have an extensive work background, where they have been part of renowned companies to implement Artificial Intelligence solutions in financial procedures. Undoubtedly, an immersive experience that will allow graduates to experience a significant leap in quality in their careers.



“

The teaching team, made up of experts in Artificial Intelligence, has designed hours of additional content for you to expand each section of the syllabus in a personalized way”

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
- 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



Professors

Dr. Carrasco Aguilar, Álvaro

- ♦ Sales & Marketing Coordinator at LionLingo
- ♦ Researcher in Information Technology Management
- ♦ PhD in Social and Health Research: Technical and Economic Evaluation of Technologies, Interventions and Policies Applied to Health Improvement from the University of Castilla La Mancha
- ♦ Master's Degree in Social and Health Research from the University of Castilla - La Mancha
- ♦ Degree in Political Science and Administration at the University of Granada
- ♦ Award for "Best Scientific Article for Technological Innovation for the Efficiency of Health Expenditure"
- ♦ Regular speaker at international scientific congresses

04

Structure and Content

The didactic materials that make up this program have been designed by experts in Automation of Financial Department Processes with Artificial Intelligence. The syllabus will delve into issues such as the robotization of financial processes, the application of Machine Learning techniques for the classification of invoices or the implementation of automatic payment systems with Stripe Radar. At the same time, the syllabus will provide students with the keys to carry out cash flow management with Deep Learning and TensorFlow. Therefore, students will acquire advanced skills to lead automation projects in the financial sector.





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You will use predictive models and data analysis to significantly optimize strategic decision making in the Finance Department”

Module 1. Automation of Financial Department Processes with Artificial Intelligence

- 1.1. Automation of Financial Processes with AI Intelligence and Robotic Process Automation (RPA)
 - 1.1.1. AI and RPA for Process Automation and Robotization
 - 1.1.2. RPA Platforms for Financial Processes: UiPath, Blue Prism, and Automation Anywhere
 - 1.1.3. Evaluation of RPA Use Cases in Finance and Expected ROI
- 1.2. Automated Invoice Processing with AI with Kofax
 - 1.2.1. Configuration of AI Solutions for Invoice Processing with Kofax
 - 1.2.2. Application of Machine Learning Techniques for Invoice Classification
 - 1.2.3. Automation of the Accounts Payable Cycle with AI Technologies
- 1.3. Payment Automation with AI Platforms
 - 1.3.1. Implementing Automated Payment Systems with Stripe Radar and AI
 - 1.3.2. Use of Predictive AI Models for Efficient Cash Management
 - 1.3.3. Security in Automated Payment Systems: Fraud Prevention with AI
- 1.4. Bank Reconciliation with AI and Machine Learning
 - 1.4.1. Automation of Bank Reconciliation Using AI with Platforms Such as Xero
 - 1.4.2. Implementation of Machine Learning Algorithms to Improve Accuracy
 - 1.4.3. Case Studies: Efficiency Improvements and Error Reduction
- 1.5. Cash Flow Management with Deep Learning and TensorFlow
 - 1.5.1. Predictive Cash Flow Modeling with LSTM Networks Using TensorFlow
 - 1.5.2. Implementation of LSTM Models in Python for Financial Forecasting
 - 1.5.3. Integration of Predictive Models in Financial Planning Tools
- 1.6. Inventory Automation with Predictive Analytics
 - 1.6.1. Use of Predictive Techniques to Optimize Inventory Management
 - 1.6.2. Apply Predictive Models with Microsoft Azure Machine Learning
 - 1.6.3. Integration of Inventory Management Systems with ERP





- 1.7. Creation of Automated Financial Reports with Power BI
 - 1.7.1. Automation of Financial Reporting using Power BI
 - 1.7.2. Developing Dynamic Dashboards for Real-Time Financial Analysis
 - 1.7.3. Case Studies of Improvements in Financial Decision Making with Automated Reports
- 1.8. Purchasing Optimization with IBM Watson
 - 1.8.1. Predictive Analytics for Purchasing Optimization with IBM Watson
 - 1.8.2. AI Models for Negotiations and Pricing
 - 1.8.3. Integration of AI Recommendations in Purchasing Platforms
- 1.9. Customer Support with Financial Chatbots and Google DialogFlow
 - 1.9.1. Implementing Financial Chatbots with Google Dialogflow
 - 1.9.2. Integration of Chatbots in CRM Platforms for Financial Support
 - 1.9.3. Continuous Improvement of Chatbots Based on User Feedback
- 1.10. AI-Assisted Financial Auditing
 - 1.10.1. IA Applications in Internal Audits: Transaction Analysis
 - 1.10.2. Implementation of IA for Compliance Auditing and Discrepancy Detection
 - 1.10.3. Improvement of Audit Efficiency with IA Technologies

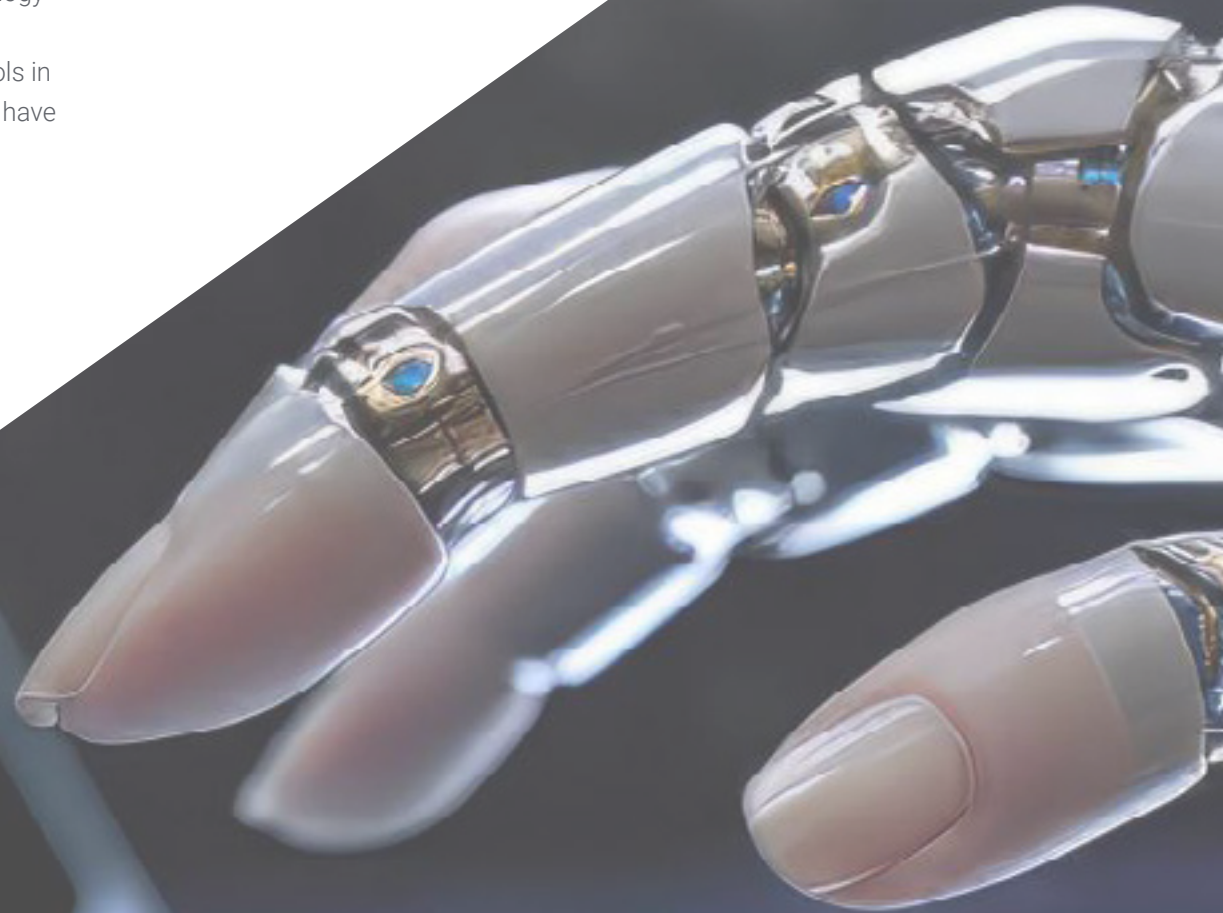
“ You will have unrestricted access to all the contents of the Virtual Campus and you will be able to download them to consult them whenever you want. Enroll now!”

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.





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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"

Relearning Methodology

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

The Postgraduate Certificate in Automation of Financial Department Processes with Artificial Intelligence guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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 Certificate in Automation of Financial Department Processes with Artificial Intelligence** 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 Automation of Financial Department Processes with Artificial Intelligence**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

tech global
university

personalized service innovation

knowledge present
online training

development language

virtual classroom

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