

# Postgraduate Certificate Financial and Actuarial Risk Management



## Postgraduate Certificate Financial and Actuarial Risk Management

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online
- » Target Group: University graduates who have previously completed any of the degrees in the field of Business and Economic Sciences.

Website: [www.techtitute.com/us/school-of-business/postgraduate-certificate/financial-actuarial-risk-management](http://www.techtitute.com/us/school-of-business/postgraduate-certificate/financial-actuarial-risk-management)

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# 01 Welcome

The basis of the banking and insurance business is based on the correct management of financial and actuarial risks. This is one of the most important areas within economic entities, since their profitability and survival depend on it. Therefore, the role of professionals in this sector is vital and they need a broad and comprehensive knowledge to support their decisions. In order to serve as a guide for graduates who want to excel in this field and increase their chances of achieving successful positions within the business industry, TECH and its team of experts have decided to develop a program that gathers all the information on the subject. This is how this comprehensive 100% online program was created, thanks to which, in just 6 weeks, the graduate will be able to adapt their profile to the most demanding specifications of today's actuarial and financial labor market.



Postgraduate Certificate in Financial and Actuarial Risk Management.  
TECH Technological University



“

*TECH introduces this program as a unique opportunity for the graduate to become an expert in international trade through a 100% online qualification in just 6 weeks”*

02

# Why Study at TECH?

TECH is the world's largest 100% online business school. It is an elite business school, with a model based on the highest academic standards. A world-class center for intensive managerial skills education.



“

*TECH is a university at the forefront of technology, and puts all its resources at the student's disposal to help them achieve entrepreneurial success"*

## At TECH Technological University



### Innovation

The university offers an online learning model that balances the latest educational technology with the most rigorous teaching methods. A unique method with the highest international recognition that will provide students with the keys to develop in a rapidly-evolving world, where innovation must be every entrepreneur's focus.

"*Microsoft Europe Success Story*", for integrating the innovative, interactive multi-video system.



### The Highest Standards

Admissions criteria at TECH are not economic. Students don't need to make a large investment to study at this university. However, in order to obtain a qualification from TECH, the student's intelligence and ability will be tested to their limits. The institution's academic standards are exceptionally high...

**95%** | of TECH students successfully complete their studies



### Networking

Professionals from countries all over the world attend TECH, allowing students to establish a large network of contacts that may prove useful to them in the future.

**+100000**

executives prepared each year

**+200**

different nationalities



### Empowerment

Students will grow hand in hand with the best companies and highly regarded and influential professionals. TECH has developed strategic partnerships and a valuable network of contacts with major economic players in 7 continents.

**+500**

collaborative agreements with leading companies



### Talent

This program is a unique initiative to allow students to showcase their talent in the business world. An opportunity that will allow them to voice their concerns and share their business vision.

After completing this program, TECH helps students show the world their talent.



### Multicultural Context

While studying at TECH, students will enjoy a unique experience. Study in a multicultural context. In a program with a global vision, through which students can learn about the operating methods in different parts of the world, and gather the latest information that best adapts to their business idea.

TECH students represent more than 200 different nationalities.





TECH strives for excellence and, to this end, boasts a series of characteristics that make this university unique:



### Analysis

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TECH explores the student's critical side, their ability to question things, their problem-solving skills, as well as their interpersonal skills.



### Academic Excellence

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TECH offers students the best online learning methodology. The university combines the *Relearning* methodology (the most internationally recognized postgraduate learning methodology) with Harvard Business School case studies. A complex balance of traditional and state-of-the-art methods, within the most demanding academic framework.



### Economy of Scale

---

TECH is the world's largest online university. It currently boasts a portfolio of more than 10,000 university postgraduate programs. And in today's new economy, **volume + technology = a groundbreaking price**. This way, TECH ensures that studying is not as expensive for students as it would be at another university.



### Learn with the best

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In the classroom, TECH's teaching staff discuss how they have achieved success in their companies, working in a real, lively, and dynamic context. Teachers who are fully committed to offering a quality specialization that will allow students to advance in their career and stand out in the business world.

Teachers representing 20 different nationalities.



*At TECH, you will have access to the most rigorous and up-to-date case analyses in academia"*

03

# Why Our Program?

Studying this TECH program means increasing the chances of achieving professional success in senior business management.

It is a challenge that demands effort and dedication, but it opens the door to a promising future. Students will learn from the best teaching staff and with the most flexible and innovative educational methodology.



“

*We have highly qualified teachers and the most complete syllabus on the market, which allows us to offer you education of the highest academic level”*

This program will provide you with a multitude of professional and personal advantages, among which we highlight the following:

**01**

### A Strong Boost to Your Career

By studying at TECH, students will be able to take control of their future and develop their full potential. By completing this program, students will acquire the skills required to make a positive change in their career in a short period of time.

*70% of students achieve positive career development in less than 2 years.*

**02**

### Develop a strategic and global vision of the company

TECH offers an in-depth overview of general management to understand how each decision affects each of the company's different functional fields.

*Our global vision of companies will improve your strategic vision.*

**03**

### Consolidate the student's senior management skills

Studying at TECH means opening the doors to a wide range of professional opportunities for students to position themselves as senior executives, with a broad vision of the international environment.

*You will work on more than 100 real senior management cases.*

**04**

### You will take on new responsibilities

The program will cover the latest trends, advances and strategies, so that students can carry out their professional work in a changing environment.

*45% of graduates are promoted internally.*

05

### Access to a powerful network of contacts

TECH connects its students to maximize opportunities. Students with the same concerns and desire to grow. Therefore, partnerships, customers or suppliers can be shared.

*You will find a network of contacts that will be instrumental for professional development.*

06

### Thoroughly develop business projects

Students will acquire a deep strategic vision that will help them develop their own project, taking into account the different fields in companies.

*20% of our students develop their own business idea.*

07

### Improve soft skills and management skills

TECH helps students apply and develop the knowledge they have acquired, while improving their interpersonal skills in order to become leaders who make a difference.

*Improve your communication and leadership skills and enhance your career.*

08

### You will be part of an exclusive community

Students will be part of a community of elite executives, large companies, renowned institutions, and qualified teachers from the most prestigious universities in the world: the TECH Technological University community.

*We give you the opportunity to study with a team of world-renowned teachers.*

# 04 Objectives

Given that the current demand for professionals with a perfect command of risk management and actuarial science is increasing, TECH and its team of experts have decided to launch a program that adapts to the needs of the market, so that graduates interested in this area can enter the labor market in a guaranteed way, as well as be promoted in the companies they are currently part of. For this purpose, it will provide you with the most sophisticated and innovative academic material, as well as the best academic tools to facilitate your specialized training in just 6 weeks.



“

*If your goal is to succeed in the insurance and financial industry, this Postgraduate Certificate is a very good step you can take to achieve it”*

TECH makes the goals of their students their own goals too.  
Working together to achieve them.

The **Postgraduate Certificate in Financial and Actuarial Risk Management** will enable students to:

01

Assess financial and actuarial risks

02

Understand credit models and analyze sovereign  
cash flow and cash risk







03

Offer hedging with diversification in operations

04

Integrate the fundamental concepts associated with the risk process in the insurance activity

05

# Structure and Content

The development of this Postgraduate Certificate has been carried out by a team of experts in the financial sector, who, in addition to selecting the most innovative and comprehensive information, have adapted the content to the demanding quality criteria that define TECH. In addition, its convenient 100% online format brings flexibility to the academic experience, allowing students to connect from wherever they want, without schedules and through any device with Internet connection, whether PC, tablet or cell phone.



“

*In just 6 weeks you will have become  
an outstanding expert in solvency and  
dividend policy”*

## Syllabus

The syllabus of this Postgraduate Certificate has been developed by a team of experts in the area of financial and actuarial risk management in order to provide the graduate with the latest and most comprehensive information related to the best statistical and mathematical models for the insurance industry. Thanks to this, the professional in this sector will be able to specialize in a complex area in which there is a very high level of employability.

This training is distributed over 6 weeks and includes 150 hours of theoretical, practical and additional content, thanks to which the graduate will be able to delve in a personalized way into the different sections of the program, such as credit and operational risk, the fundamental concepts associated with the insurance activity or the premium calculation and technical provisions.

In addition, among the most outstanding features of this program is the resolution of real cases, based on the simulation of complex situations that frequently occur in business activities. Based on this, the graduate will be able to develop their own problem-solving strategies, perfecting their professional management skills and implementing the most effective techniques in their practice to increase the success of the entity of which they are a part.

This Postgraduate Certificate is developed over 6 weeks and is divided into 1 module:

### Module 1

### Financial and Actuarial Risk Management



### Where, When and How is it Taught?

TECH offers you the opportunity to study this Postgraduate Certificate in Financial and Actuarial Risk Management completely online. During the 6 weeks of the specialization, the student will be able to access all the contents of this program at any time, which will allow the students to self-manage their study time.

*A unique, key, and decisive educational experience to boost your professional development and make the definitive leap.*

**Module 1. Financial and Actuarial Risk Management**

**1.1. Control and Management of Financial Risks in the New International Context**

- 1.1.1. Financial Risk and Financial Institution Risk
- 1.1.2. Banking Activity Risks
- 1.1.3. Regulation and Solvency Ratios
- 1.1.4. Financial Risk Management

**1.2. Market Risk I**

- 1.2.1. Types of Market Risk
- 1.2.2. Interest Rate Risk
- 1.2.3. Exchange Rate Risk
- 1.2.4. Price Risk Based on Equities and Commodities
- 1.2.5. Basel II Capital Requirements for Market Risk, Updated
- 1.2.6. Basel II Standardized Valuation of Market Risk, Updated

**1.3. Market Risk II**

- 1.3.1. Concept of Value at Risk (VaR)
- 1.3.2. Market Risk Measurement Requirements
- 1.3.3. Ex-Ante and Ex-Post Risks
- 1.3.4. Parametric and Non-Parametric VaR Models

**1.4. Credit Risk I**

- 1.4.1. Concept
- 1.4.2. Analysis and Measurement Elements
- 1.4.3. Probability of Non-Compliance
- 1.4.4. Credit Exposure
- 1.4.5. Loss Rate or Loss Given Default
- 1.4.6. Rating Systems
- 1.4.7. Credit Risk Valuation Models
- 1.4.8. Credit Risk Hedging through Derivatives

**1.5. Credit Risk II**

- 1.5.1. Introduction
- 1.5.2. Standard method
- 1.5.3. IRB Method
- 1.5.4. Credit Risk Hedging
- 1.5.5. Asset Securitization

**1.6. Operational Risk: Measurement, Control and Management**

- 1.6.1. Introduction Definition and Classification
- 1.6.2. Quantification of Operating Loss
- 1.6.3. Operational Risk Management
- 1.6.4. Solutions and Actions During Operational Risk Management
- 1.6.5. Internal Controls
- 1.6.6. Insurance Contracts
- 1.6.7. Regulatory Framework
- 1.6.8. Basic Indicator Method
- 1.6.9. Standard Method

**1.7. Fundamental Concepts Associated with the Risk Process in the Insurance Activity**

- 1.7.1. Definition of the Different Stages of Risk, from its Generation to Extinction
- 1.7.2. Generic Study of the Total Claims Rate
- 1.7.3. Expectation and Variance
- 1.7.4. Ordinary Moments

**1.8. Premium Calculation and Technical Provisions**

- 1.8.1. Non-Life Insurance Premiums
- 1.8.2. Pure Premium
- 1.8.3. Technical Provisions
- 1.8.4. Practical Calculation of Technical Provisions in Non-Life Insurance
- 1.8.5. Synthesis of the Classical Statistical Methods

**1.9. Reinsurance**

- 1.9.1. Definition and Functions
- 1.9.2. Technical, Financial and Legal Criteria
- 1.9.3. Proportional and Non-Proportional Modalities

**1.10. Solvency**

- 1.10.1. Introduction
- 1.10.2. Actuarial Risk Management Process
- 1.10.3. Probability of Ruin
- 1.10.4. Dividend Policies



“

*You will be able to delve into the fundamental concepts associated with the risk process in the insurance activity, demonstrating your professional value through the definition of strategies until its extinction”*

# 06

# 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"*

## TECH Business School uses the 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”*



*This program prepares you to face business challenges in uncertain environments and achieve business success.*



*Our program prepares you to face new challenges in uncertain environments and achieve success in your career.*

### A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch to present executives with challenges and business decisions at the highest level, whether at the national or international level. 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 business reality is taken into account.

**“** *You will learn, through collaborative activities and real cases, how to solve complex situations in real business environments”*

The case method has been the most widely used learning system among the world's leading business schools for as long as they have existed. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They must integrate all their knowledge, research, 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.

*Our online system will allow you to organize your time and learning pace, adapting it to your schedule. You will be able to access the contents from any device with an internet connection.*

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 online business school is the only one in the world licensed to incorporate 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.

With this methodology we have 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, markets, and financial 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to 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.



### Management Skills Exercises

They will carry out activities to develop specific executive competencies in each thematic area. Practices and dynamics to acquire and develop the skills and abilities that a high-level manager needs to develop in the context of the globalization we live in.



### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





### Case Studies

Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best senior management 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.



07

# Our Students' Profiles

This Postgraduate Certificate is aimed at university graduates and graduates who have previously completed any of the following degrees in the field of economics, business and finances. It also offers tools to understand and be able to manage financial and actuarial risks.

This program uses a multidisciplinary approach as the students have a diverse set of academic profiles and represent multiple nationalities.

Professionals who, being university graduates in any area, have 2 years of work experience in Administrative Management, may also take the Postgraduate Certificate.







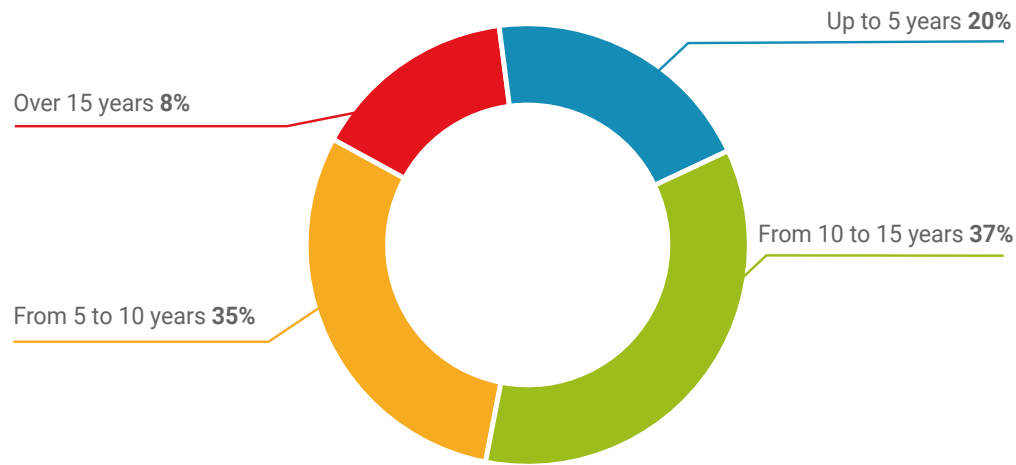
“

*A program designed so that any graduate can reach their professional zenith in a guaranteed way”*

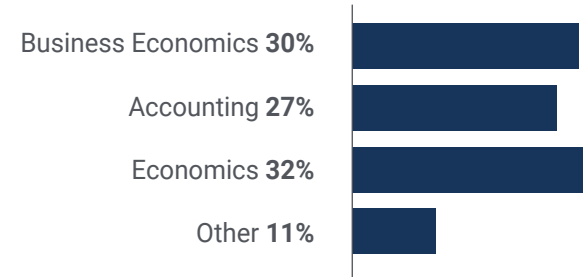
### Average Age

Between **35** and **45** years old

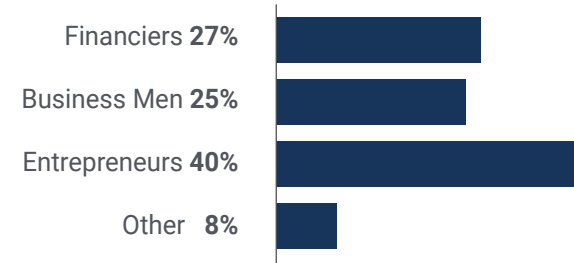
### Years of Experience



### Training

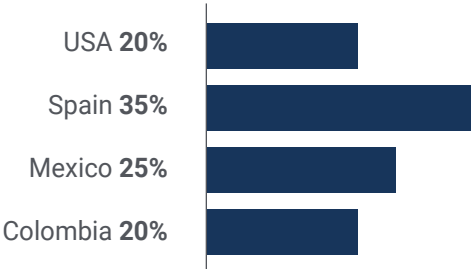


### Educational Profile



### Geographical Distribution

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## Luis Fernando Cabeza

Financial Manager and Specialist in Actuarial Science

*"I have been working in the financial sector for more than 10 years and until now I had not found a program that better suited my professional needs. Thanks to this program, I have been able to implement the best financial risk management and control strategies in my practice, which has been highly appreciated by my superiors. After demonstrating my true potential, I got the promotion I wanted so much, and it was all thanks to TECH and its team of experts"*

08

# Impact on Your Career

Including this program in the graduate's professional resume will serve to differentiate them in any recruitment process. In addition, it will allow them to demonstrate that they possess a unique set of knowledge about financial and actuarial risk management, as well as the professional skills necessary to lead any project related to this field. It is, therefore, a unique academic opportunity to project their career towards a more successful working future.



“

*Knowing in detail the best strategies for premium calculation and technical provisions will be one of the skills that will make the difference in your professional profile”*

*Among the most significant features of TECH programs is the possibility of networking with peers from all over the world with the same professional interests.*

### Are you ready to take the leap? Excellent professional development awaits you.

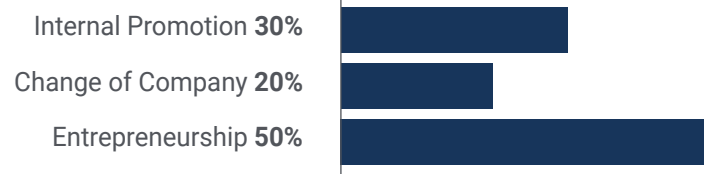
TECH's Postgraduate Certificate in Financial and Actuarial Risk Management is an intensive program that prepares you to face challenges and business decisions in the environment of the organization you are part of. The main objective is to promote your personal and professional growth. Helping you achieve success.

*A program with which you will be able to opt for a significant job promotion that will place you in a prestigious position, according to your professional qualifications.*

### Time of Change



### Type of change



## Salary increase

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The completion of this program represents a salary increase of more than **25.3%** for our students.



09

# Benefits for Your Company

Any graduate of this program will be able to bring to the company of which they are a part a unique set of knowledge that will translate into a reduction of market and credit risk. In addition, the resolution of complex situations will allow the professional to put their skills into practice, implementing the most effective financial and actuarial strategies of today, which will raise the quality of the entity to the top of the economic business sector.







“

*A qualification that will give you the keys to raise the quality and talent of your organization to the top of the financial and actuarial business sector”*

Developing and retaining talent in companies is the best long-term investment.

01

### Growth of talent and intellectual capital

The professional will introduce the company to new concepts, strategies, and perspectives that can bring about significant changes in the organization.

---

02

### Retaining high-potential executives to avoid talent drain

This program strengthens the link between the company and the professional and opens new avenues for professional growth within the company.

03

### Building agents of change

You will be able to make decisions in times of uncertainty and crisis, helping the organization overcome obstacles.

---

04

### Increased international expansion possibilities

Thanks to this program, the company will come into contact with the main markets in the world economy.



05

### **Project Development**

The professional can work on a real project or develop new projects in the field of R & D or business development of your company.

---

06

### **Increased competitiveness**

This program will equip students with the skills to take on new challenges and drive the organization forward.

# 10 Certificate

The Postgraduate Certificate in Financial and Actuarial Risk Management 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 Financial and Actuarial Risk Management** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in Financial and Actuarial Risk Management**

Official N° of Hours: **150 h.**



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



## Postgraduate Certificate Financial and Actuarial Risk Management

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace

# Postgraduate Certificate Financial and Actuarial Risk Management

