



# Postgraduate Certificate Equity Portfolio Optimization with Derivatives

» 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 programs in the field of Financial Economics, Accounting, Business or Social and Legal Sciences.

Website: www.techtitute.com/us/school-of-business/postgraduate-certificate/equity-portfolio-optimization-derivatives

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# 01 **Welcome**

Technological evolution has made it possible to solve different problems at the level of financial merchandise, generating statistical models of automatic learning about large amounts of data. For this reason, currently these asset selection processes are called *Smart Beta*, producing higher profitability with lower costs than active management. Accordingly, this academic program will offer the professional an exclusive first level content to develop specialized skills around the possibilities offered by the combinations between bought options and sold options with different maturities to improve the performance of the portfolio. All this, through a 100% online pedagogical modality and with a didactic material that will provide the most effective and dynamic academic experience at an educational level.









# tech 08 | Why Study at TECH?

### 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

+200

executives prepared each year

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.



### Learn with the best

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"

# Why Study at TECH? | 09 tech

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



### **Analysis**

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



### **Academic Excellence**

TECH offers students the best online learning methodology. The university combines the Relearning method (postgraduate learning methodology with the best international valuation) with the Case Study. Tradition and vanguard in a difficult balance, and in the context of the most demanding educational itinerary.



### **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 ground-breaking price**. This way, TECH ensures that studying is not as expensive for students as it would be at another university.





# tech 12 | Why Our Program?

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



### 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.



# 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.



## 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.



## 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.



### 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.



### 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.



### 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.



### 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.





# tech 16 | Objectives

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

Postgraduate Certificate in Equity Portfolio Optimization with Derivatives will enable the student to:



Analyze the financial derivatives markets, from their origins in forward transactions to the present day, given that millions of transactions take place every day and involve large equivalent amounts of capital



Determine and compare the management of these expectations with combined option figures



Delve into the principles of equity investing, with special emphasis on the two key elements of return and risk



03

Delve deeper into the characteristics of trading platforms and derivative contracts in international markets



Differentiate the risks that are inherent in strategies to exploit bullish versus bearish volatility expectations



Examine the possibilities offered by calendar combinations between bought and sold options with different maturities



Examine the possibilities offered by combinations of put and call options with different maturities to improve portfolio performance



09

Detail the particularities of the most common exotic choices



Analyze and compare the different possibilities of option combinations to progressively improve portfolio performance



Compare the results of each exotic option to improve the return-risk ratio of the equity investment





# tech 20 | Structure and Content

### **Syllabus**

This academic program integrates 6 weeks of intense learning, where TECH will oriented the alumni to the top of their professional career through an education that emphasizes excellence and efficiency. As a result, students will be able to acquire the most desired positions in the financial sector, addressing multiple challenges they will encounter in their jobs. In this sense, this program facilitates a myriad of skills around the risk-return relationship of a partial passive strategy with spreads.

The faculty has designed a curriculum that implements 1 module, with the purpose that the graduate will have expanded their knowledge regarding the optimization strategy of equity portfolios through the use of combos.

On the other hand, the students of this program will be introduced to detailed areas such as the active management of equity portfolios with calendar combos. In this way, professionals will be able to acquire exclusive knowledge oriented to the risks and advantages of a passive protective-put strategy.

Furthermore, TECH takes into account excellence, that is why this program offers a complete and high quality learning, while providing flexibility to study it. Graduates only need a device with an Internet connection to easily access the virtual platform, 24 hours a day and from anywhere in the world.

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

Module 1

**Equity Portfolio Optimization with Derivatives** 



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

TECH offers students the opportunity to take this Postgraduate Certificate in Portfolio Optimization Equities entirely 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.

# tech 22 | Structure and Content

Strategy with Calendar Ratios

1.9.3. Active Equity Portfolio Management

with Calendar Ratios

1.9.2. Reduction of the Maximum Potential Loss

#### **Module 1.** Equity Portfolio Optimization with Derivatives 1.2. Systematic Covered-Call Strategies 1.3. Systematic Protective-Put 1.4. Comparison of Covered-Call and 1.1. Optimized Management in the Context of Equity Portfolios Strategies Protective-Put Strategies 1.2.1. Risks and Advantages of a Passive Covered-Call Strategy 1.1.1. Optimization of the Risk-Return Ratio 1.4.1. Risk-Return Ratio of Each Passive Strategy 1.3.1. Risks and Advantages of a Passive 1.2.2. Active Covered-Call Management (I): 1.1.2. Minimization of the Maximum Potential Protective-Put Strategy 1.4.2. Risk-Return Ratio of Each Active Strategy Determination when It Is Performed 1.4.3. Management of the Maximum Potential Loss Loss. Money management 1.3.2. Active Protective-Put Management (I): and when It Is not Performed 1.1.3. Ease of Managing a Strategy in both a Profit Determination of when to Do It in Each Strategy 1.2.3. Active Covered-Call Management (II): and when Not to Do It and Loss Environment Additional Determination of the Number of 1.3.3. ActiveProtective-PutManagement (II): Positions to Be Activated at any Given Time Additional Determination of the Number of Positions to Be Activated at any Given Time 1.5. Equity Portfolio Optimization **Equity Portfolio Optimization Equity Portfolio Optimization** 1.8. Optimization Strategies for Equity Strategy Using Spreads Strategy Using Long Maturity Ratios Strategy Using Combos Portfolios with Calendar Spreads 1.5.1. Risk-Return Relationship of a Partial Passive 1.6.1. Risk-Return Ratio of a Partial Passive 1.7.1. Risk-Return Relationship of a Partial Passive 1.8.1. Risk-Return Ratio of a Partial Passive Strategy with Spreads Strategy with Spreads Strategy with Calendar Spreads Strategy with Ratios 1.5.2. Reduction of the Maximum Potential Loss 1.6.2. Reduction of the Maximum Potential Loss 1.7.2. Reduction of the Maximum Potential Loss Reduction of the Maximum Potential Loss 1.5.3. Active Equity Portfolio Management 1.6.3. Active Equity Portfolio Management 1.7.3. Active Equity Portfolio Management 1.8.3. Active Equity Portfolio Management with Spreads with Ratios with Spreads with Calendar Spreads 1.9. Optimization Strategies for Equity 1.10. Equity Portfolio Optimization Portfolios with Calendar Ratios Strategies with Calendar Combos 1.9.1. Risk-Return Ratio of a Passive Partial 1.10.1. Risk-Return Ratio of a Partial Passive

Strategy with Calendar Combos

1.10.3. Active Equity Portfolio Management

with Calendar Combos

1.10.2. Reduction of the Maximum Potential Loss





This university program provides you with a theoretical and practical perspective on the comparison of covered-call and protective-put strategies"



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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# tech 26 | Methodology

# 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.





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.

# tech 28 | Methodology

### 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.



# Methodology | 29 **tech**

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.



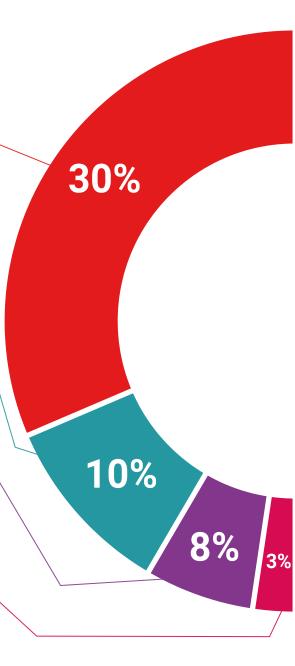
### **Management Skills Exercises**

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.





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.

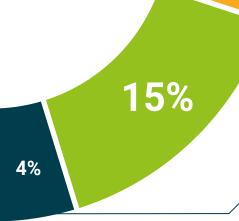


This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

### **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.



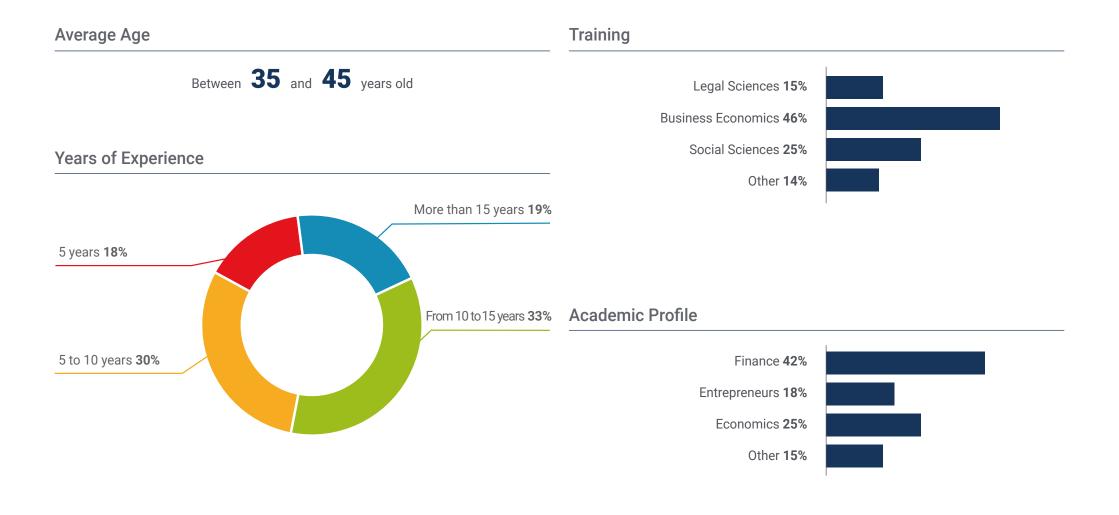


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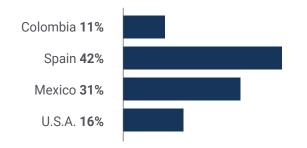




# tech 34 | Our Students' Profiles



## **Geographical Distribution**





# Diego Téllez

### Private banking manager

"The completion of this academic program achieved a relevant advancement in my professional career. It allowed me to diversify my investments more effectively, where I incorporated derivatives reducing portfolio risk"





## Management



#### Dr. Sarto Marzal, José Luis

- Portfolio manager in organized derivatives markets
- Chief Financial Officer at Celulosa Fabril
- Teacher in Graduate Degree in Finance and Accounting at the University of Zaragoza
- Doctorate in Economics and Business Administration with Cum Laude mention from the University of Zaragoza
- Degree in Economics and Business Administration with a major in Finance from the University of Zaragoza

#### **Professors**

#### Dr. Andreu Sánchez, Laura

- Accounting and Finance Expert
- Researcher in projects supported by the Ministry of Science and Innovation and the Government of Aragon
- Teacher in Masters, Diplomas and Degrees at the University of Zaragoza
- Doctorate in Accounting and Finance with distinction Cum Laude from the University of Zaragoza
- Degree in Business Administration and Management from the University of Zaragoza
- Postgraduate Certificate of Specialization in Financial Advisory and Wealth Management from the University of Zaragoza

#### Dr. Gimeno Losilla, Ruth

- Accounting and Finance Expert
- Teacher in the Accounting and Finance Department of the University of Zaragoza
- Researcher in projects for the Ministry of L+O+I, the Government of Aragon and the Ibercaja Banking Foundation
- Researcher in innovative teaching projects
- PhD in Accounting and Finance from the University of Zaragoza



# Course Management | 39 tech

#### Dr. Serrano Cored, Miguel

- Expert in Accounting and Finance
- Outbound Advisor (Work Force Management WFM) at Majorel SP Solutions
- Team Leader of Collection Agents at Majorel SP Solutions
- Collections Agent at Majorel SP Solutions
- Administrative at Ibercaja
- D. in Accounting and Finance
- Degree in Business Administration and Management with a major in Finance from the University of Zaragoza
- Postgraduate Certificate in Business Science
- Master's Degree in Accounting and Finance from the University of Zaragoza



A unique, key, and decisive educational experience to boost your professional development"





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

TECH's Postgraduate Certificate in Equity Portfolio Optimization with Derivatives is an intensive program that prepares you to face challenges and business decisions in the field of finance. The main objective is to promote your personal and professional growth. Helping you achieve success.

With this highly flexible program, you only need an electronic device with an Internet connection to access the virtual platform 24 hours a day.

This program will provide you with innovative teaching material on the limits of Maximum Potential Loss.

### When the change occurs

During the program

12%

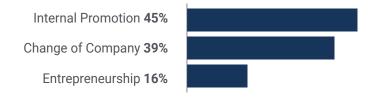
During the first year

65%

After 2 years

26%

### Type of change



# Salary increase

This program represents a salary increase of more than 26,24% for our students

Salary before

68,000 €

A salary increase of

26,24%

Salary after

75,744 €





# tech 46 | Benefits for Your Company

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



### 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.



# 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.



# **Building agents of change**

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



# Increased international expansion possibilities

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





# **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.



## Increased competitiveness

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







# tech 50 | Certificate

This **Postgraduate Certificate in Equity Portfolio Optimization with Derivatives** 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 Equity Portfolio Optimization with Derivatives
Official N° of Hours: **150 h**.



<sup>\*</sup>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.



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