

# Postgraduate Certificate Electrical Energy in Organizations



## Postgraduate Certificate Electrical Energy in Organizations

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

Website: [www.techtute.com/pk/school-of-business/postgraduate-certificate/electrical-energy-organizations](http://www.techtute.com/pk/school-of-business/postgraduate-certificate/electrical-energy-organizations)

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# 01 Welcome

Business professionals who wish to develop successfully in environmental and energy management must be aware that they must be able to handle a wide range of expertise in different fields, including electrical energy in organizations, which will enable them to understand the importance of electricity in every business process. For this reason, TECH has designed this program, which establishes the parameters that define electricity, including voltage, current, and the relationships between active, reactive and capacitive powers. Likewise, the energy transformation and distribution processes are clearly explained, as well as the equipment necessary to carry out the transformation and distribution and how these processes affect the final energy consumed, among other fundamental issues to work in this field. Undoubtedly, a high-level academic program that will help business professionals to become great experts in this field, making a difference in the market and providing them with greater employability prospects.



Postgraduate Certificate in Electrical Energy in Organizations.  
TECH Technological University





“

*Specializing in electricity will give you the tools to understand in depth all the particularities of this energy, which are essential for company development”*

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 centre for intensive managerial skills training.



“

*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 combines 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.

**100,000+**

executives trained 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

---

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 method (a postgraduate learning methodology with the highest international rating) with the Case Study. A complex balance between tradition and state-of-the-art, within the context of the most demanding academic 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 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

---

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 studies in the academic community*

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 training of the highest academic level"*

This program will provide students with a multitude of professional and personal advantages, particularly the following:

**01**

### A significant career boost

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 participants achieve positive career development in less than 2 years.*

**02**

### Develop a strategic and global vision of companies

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

*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**

### 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 areas 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

### Be part of an exclusive community

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

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

# 04 Objectives

TECH has designed this program with the main objective of offering its students the most comprehensive specialization in the field of electrical energy in organizations. This way, professionals in the sector will have the opportunity to learn, first hand, the advantages and disadvantages of electrical energy, which will be fundamental for their work as energy advisors. Undoubtedly, a program that will show a before and after in their skills and will place them among the best in the sector.





“

*Achieve your academic goals in the field of electrical energy and take a step further in your career”*

Your goals are our goals.

We work together to help you achieve them.

The Postgraduate Certificate in Electrical Energy in Organizations will enable students to:

01

Gain an in-depth understanding of electrical energy, breaking down the main consuming equipment and its applications

02

Master the most commonly used fuels and fuel consuming equipment

03

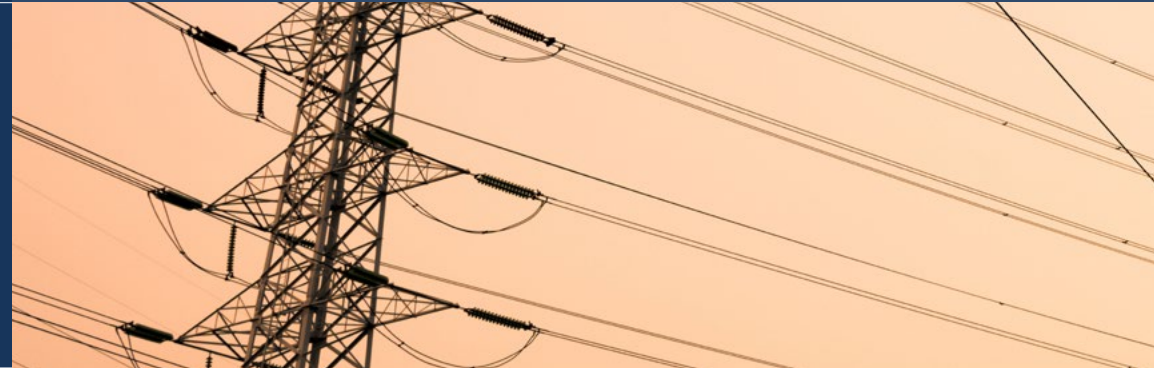
Conduct energy audits

04

Conduct environmental impact assessments

05

Develop and implement environmental and energy improvements



06

Have in-depth knowledge of all aspects related to the generation and consumption of electrical energy

08

Identify the most important aspects of energy billing

09

In-depth breakdown of all aspects related to the generation and consumption of energy generated from combustion

07

Analyze the main characteristics of electrical energy consuming equipment

10

Establish the main characteristics of combustion systems and fuel in detail



05

# Structure and Content

The syllabus of this Postgraduate Certificate in Electrical Energy in Organizations from TECH includes the latest information in this field so that business professionals can carry out a self-managed learning that will be fundamental for their professional development. Therefore, this academic program includes very comprehensive theoretical content that is perfectly complemented by the practical cases presented, which will help students to specialize in a short period of time.



“

*A thorough syllabus that will make  
a difference in your education"*

## Syllabus

This Postgraduate Certificate in Energy Sources in Organizations at TECH Technological University is an intensive program that prepares students to face challenges and business decisions in the field of energy and environmental management. Its content is designed to promote the development of managerial skills that enable more rigorous decision-making in uncertain environments.

Throughout 150 hours of study, students will learn a multitude of practical cases through individual work, which will allow them to acquire the necessary skills to develop successfully in their daily practice. It is, therefore, an authentic immersion in real business situations.

This program deals in-depth with different areas of the company and is designed for managers to learn about electrical energy and its application, from a strategic, international and innovative perspective.

A plan designed especially for students, focused on their professional improvement and preparing them to achieve excellence in the field of energy management. A program that understands your needs and those of your company through innovative content based on the latest trends, and supported by the best educational methodology and an exceptional faculty, which will provide you with the competencies to solve critical situations in a creative and efficient way.

It is a 6-week program distributed in one module:

### Module 1

### Electrical Energy





### Where, when and how is it taught?

TECH offers the possibility of developing this Postgraduate Certificate in Electrical Energy in Organizations completely online. Over the course of 6 weeks, you will be able to access all the contents of this program at any time, allowing you to self-manage your study time.

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

**Module 1. Electrical Energy**

**1.1. Electrical Energy: Voltage, Current, Power and Energy**

- 1.1.1. Voltage and Current
- 1.1.2. Active, Reactive and Apparent Energy
- 1.1.3. Electrical Power: Load Curves

**1.2. Energy Transformation**

- 1.2.1. Power Transformers
- 1.2.2. Electricity Transportation
- 1.2.3. Electricity Distribution

**1.3. Electrical Energy Consuming Systems: Electric Engines**

- 1.3.1. Applications, Pumps, Fans and Compressors
- 1.3.2. Frequency Inverters
- 1.3.3. Motor-Driven Consumer Systems: Heat Pump Air Conditioning

**1.4. Other Electricity Consuming Systems**

- 1.4.1. Joule Effect
- 1.4.2. Lighting
- 1.4.3. Direct Current Powered Systems

**1.5. Electricity Billing**

- 1.5.1. Legislation
- 1.5.2. Electricity Rates
- 1.5.3. Electricity Billing Term

**1.6. Units of Measurement of Fuel Consumption and their Transformation into Energy Units**

- 1.6.1. Energy Produced by Heat of Combustion: HHV and LLV
- 1.6.2. Volumetric Measurements of Combustible Liquids
- 1.6.3. Volumetric Measurements of Combustible Gases: Establishment and Calculation of Normal Conditions

**1.7. Combustion Systems and Fuel Elements**

- 1.7.1. Combustion Efficiency
- 1.7.2. Burners
- 1.7.3. Heat Transfer

**1.8. Boilers**

- 1.8.1. Calculation of Boiler Efficiency by Direct and Indirect Method
- 1.8.2. Types of Heat Transfer Fluids
- 1.8.3. Steam Boilers

**1.9. Other Fuel-Consuming Equipment**

- 1.9.1. Ovens
- 1.9.2. Engines
- 1.9.3. Generating Sets

**1.10. Fuel Billing**

- 1.10.1. Legislation
- 1.10.2. Natural Gas Rates
- 1.10.3. Natural Gas Billing Terms



*A comprehensive syllabus that will help you specialize in electrical energy"*





# 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

The students of this Postgraduate Certificate in Electrical Energy in Organizations by TECH, are business professionals who, for the most part, have years of experience in the sector, and have decided to broaden their skills thanks to this highly academic program. People who understand the importance of keeping up to date with the main developments in the sector and who are committed to online learning as a learning method.







“

*A program aimed at professionals with extensive experience in the sector who wish to improve their qualifications in this field"*

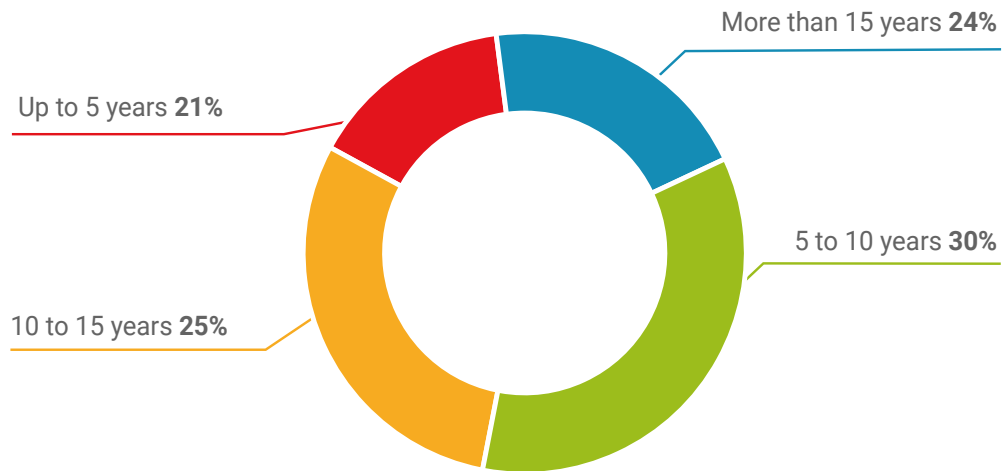
### Average Age

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

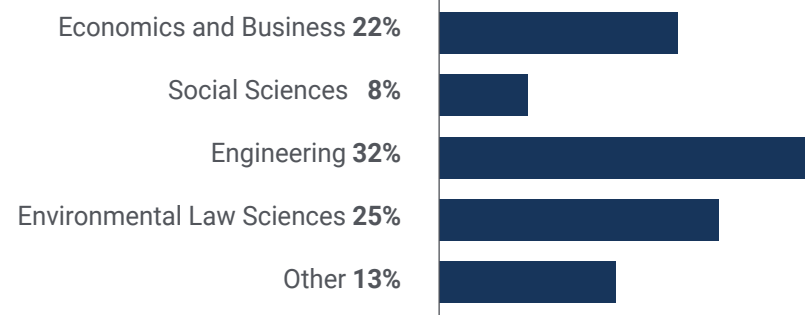
### Years of Experience

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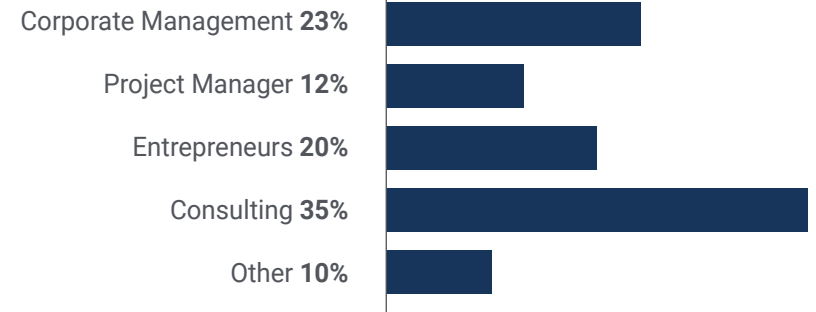
### Training

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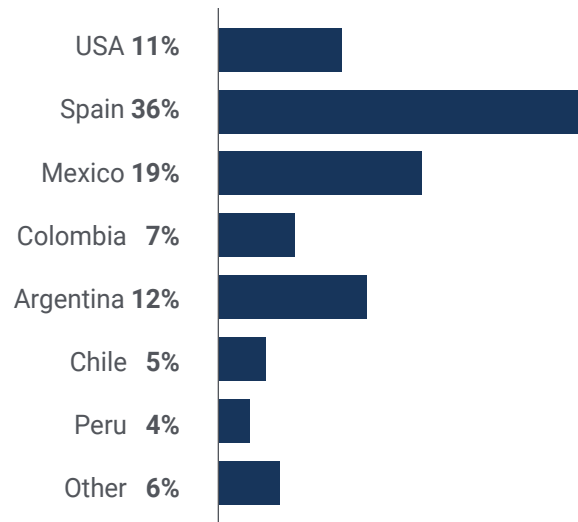
### Academic Profile

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## Geographical Distribution

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## Pablo Menéndez

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Energy Consultant

*"I had been looking for a program that would allow me to get up to date on the main developments in electrical energy in organizations for some time, but I couldn't find one that met all my needs. Fortunately, this Postgraduate Certificate by TECH has been fundamental to improving my qualifications"*

08

# Course Management

The teaching staff of this Postgraduate Certificate in Electrical Energy in Organizations are professionals with extensive experience and prestige in the sector, who have come together in this program with the main objective of offering students the best qualification of its time. Therefore, from this team of experts, students will benefit not only from their knowledge, but also from the support required to understand the most up-to-date concepts in this field.





“

*A high-level teaching staff for professionals seeking excellence”*



## Management



### Mr. Abreu Acosta, Guzmán

- ♦ Technician in the area of Territorial Planning and Management at Gestión y Planeamiento Territorial y Medioambiental de Canarias
- ♦ Degree in Law
- ♦ Occupational Health and Safety Auditor, Specialization in OSHAS 18001
- ♦ Degree in Environmental Sciences. UNIVERSITY OF HUELVA
- ♦ Lawyer in his own law firm, specialized in Urban Development and Environmental Law
- ♦ Freelance consultant specializing in Risk Prevention, Quality and Environment

## Professors

### Mr. Espinosa, César

- ♦ Head of the Environment Service of Arona City Council
- ♦ Degree in Law
- ♦ Recipient of the IV Felipe González Vicent Prize, Faculty of Law ULL
- ♦ UNESCO Global Geopark El Hierro Technical Manager
- ♦ Technical Manager El Hierro World Biosphere Reserve
- ♦ Legal Coordinator of the Department of Rural and Marine Affairs and the Environment of the Island Council of El Hierro
- ♦ Technical Project Manager

### Mr. Palanco, César

- ♦ Director - Manager INTENSA PROMILAB
- ♦ Industrial Engineer. Mechanical Intensification
- ♦ Industrial Technical Engineer. Industrial Electronics Specialty
- ♦ Construction Manager
- ♦ Installation and testing technician
- ♦ Purchasing Manager TOGOGAS Huelva S.L.
- ♦ Installation technician TOGOGAS Huelva S.L.
- ♦ Commercial Delegate TOGOGAS Huelva S.L.

**Mr. Toscano, Manuel**

- ◆ Technical Engineer in Drilling and Mining Prospecting
- ◆ Degree in Geological Sciences from the University of Granada
- ◆ Technical Engineer in Energy, Fuels and Explosives Resources
- ◆ Degree in Mine Exploitation from the University of Huelva
- ◆ Author and/or co-author of more than ninety national and international contributions
- ◆ National and international projects financed by the Andalusia Council, the Spanish government and the European Union

**Mr. Bueno Márquez, Pedro**

- ◆ Technician of the Directorate General of Vocational Training, Ministry of Education and Sports
- ◆ Chemical Engineering, University of Huelva
- ◆ Postgraduate Course on Renewable Energy Management and Development, Catholic University of Avila
- ◆ Technical Teacher of Vocational Training. Department of Education and Sports
- ◆ Andalusian Energy Agency Technician
- ◆ Project Engineer. Aldesa Engineering & Services
- ◆ Project Engineer. Andalusian Studies Group (Grande S.L.)

**Ms. Granell García, Lilia**

- ◆ Manager and Administrator of Recap Canarias Finance Bachelor of Science in Physics, specializing in Fundamental Physics
- ◆ Recap ibérica Financa, ltd
- ◆ Technical and commercial director SOTEC group
- ◆ Technical and commercial director SEIFERMANN
- ◆ CEO of CERCAN

**Mr. Contreras Acuña, Manuel**

- ◆ Contract Researcher Department: Chemistry and Materials Science
- ◆ Doctor in Chemical Sciences Faculty of Experimental Sciences, University of Huelva
- ◆ Master's Degree in Instrumental Techniques in Chemistry, Faculty of Experimental Sciences, University of Huelva
- ◆ Triple Master's Degree in Occupational Health and Safety, Quality and Environmental Management
- ◆ Interim Substitute Professor Department: Chemistry and Materials Science

09

# Impact on Your Career

Today's business professionals must broaden their studies beyond simple business management. Society is changing and, therefore, so must these specialists' knowledge. Completing this Postgraduate Certificate in Electrical Energy in Organizations adds quality to students' qualifications by offering all knowledge that, although it may seem totally removed from their daily work, can be of great use in directing companies towards a more sustainable business model that favors natural resource durability.





“

*If you are looking for a unique opportunity for professional improvement, don't think twice and join TECH"*

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

This Postgraduate Certificate in Electrical Energy in Organizations by TECH Technological University is an intensive and highly valuable program aimed at improving students' professional skills in an area of extensive competition. Undoubtedly, it is a unique opportunity to improve professionally, but also personally, as it involves effort and dedication.

Those who wish to improve themselves, achieve a positive change at a professional level and interact with the best, will find their place at TECH.

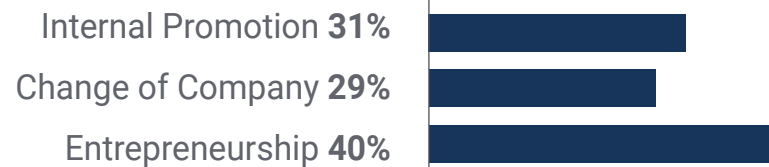
*Achieve the professional change you seek thanks to this Postgraduate Certificate.*

*This Postgraduate Certificate is a unique learning opportunity to improve your knowledge in this field.*

### When the change occurs



### Type of change





### Salary increase

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This program represents a salary increase of more than **25.22%** for our students



10

# Benefits for Your Company

The Postgraduate Certificate Electrical Energy in Organizations, is a high-quality program aimed at improving business professionals' competitiveness to give a boost to their companies and to guide them towards more sustainable models and adapted to the needs of today's society. This way, students will understand the importance of targeting the promotion of environmental policies.





“

*Bring a new business vision to your company thanks to what you have learned in this TECH program"*

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

01

### **Intellectual Capital and Talent Growth**

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 executive and opens new avenues for professional growth within the company.

03

### **Building agents of change**

The professional 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**

Professionals will be work on a current project or develop new projects in the field of R&D or Business Development within their company.

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06

### **Increased competitiveness**

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



11

# Certificate

The Postgraduate Certificate in Electrical Energy in Organizations 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 Electrical Energy in Organizations** contains the most complete and up-to-date program on the market.

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

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

Title: **Postgraduate Certificate in Electrical Energy in Organizations**

Official N° of hours: **150 h.**



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



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