

# Postgraduate Diploma Production and Generation of Conventional Electricity



## Postgraduate Diploma Production and Generation of Conventional Electricity

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

Website: [www.techtute.com/us/engineering/postgraduate-diploma/postgraduate-diploma-production-generation-conventional-electricity](http://www.techtute.com/us/engineering/postgraduate-diploma/postgraduate-diploma-production-generation-conventional-electricity)

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# 01

# Introduction

Due to the large number of fuels that can be used, this program discusses their influence on the different thermodynamic cycles and how the planning of each of them affects the generation activity, analyzing in detail the fundamentals of electricity production. It goes deeper into the different elements that are part of a conventional thermal power plant. It pays special attention to the environmental impact of steam generating plants and the treatment to which the fumes produced must be subjected before being emitted into the atmosphere. On the other hand, the fundamental concepts of nuclear energy, its potential and stability, as well as the types of nuclear energy that exist, are analyzed.







“

*Master all aspects of conventional electricity production and generation and delve into the safety of its facilities and the operation of associated components, such as nuclear reactors"*

This program in Production and Generation of Conventional Electricity will cover the characteristics of conventional energy sources and how they influence the different processes to which they can be subjected to optimize electricity generation, breaking down the operation of steam generators or nuclear reagents.

Since steam generators are dangerous machines, it considers how to operate them safely and the different types of control to which they are subjected, as well as the components used to perform them. At the same time, it proposes a detailed approach to the characteristics of water and the physical-chemical procedure to which it must be subjected in order to obtain a quality steam in the production process, together with the negative effects that a bad water treatment can have. It addresses the requirements to be met by steam generators and the demands to which manufacturers, boilers, users and operators are subjected. It also covers new trends in conventional power plants, studying biomass plants, urban waste and geothermal energy.

In addition, as this is a 100% online Postgraduate Diploma, it provides students with the ease of being able to study it comfortably, wherever and whenever they want. All they need is a device with an Internet connection to take their career one step further. A modality in line with the current times with all the guarantees to position the professional in a highly demanded area in continuous change, in line with the SDGs promoted by the UN.

In addition, graduates will have exclusive access to complementary Masterclasses, of high academic level, designed by a prestigious and renowned international expert in Sustainability Solutions. In this way, they will be able to perfect their skills in this highly demanded field in the area of Engineering.

This **Postgraduate Diploma in Production and Generation of Conventional Electricity** contains the most complete and up-to-date program on the market. The most important features include:

- ◆ Case studies presented by experts in Electrical Engineering
- ◆ In-depth study of Energy Resources Management
- ◆ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ◆ Practical exercises where the self-assessment process can be carried out to improve learning
- ◆ Its special emphasis on innovative methodologies
- ◆ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



*Achieve your specialization with TECH! You will get access to unique and additional Masterclasses, taught by an outstanding teacher of great international repercussion in Sustainability Solutions"*

“

*Address the analysis and study of thermodynamic processes that occur during the operation of industrial electricity generation processes successfully thanks to TECH”*

The program includes, in its teaching staff, professionals from the sector who bring to this program their work experience, in addition to recognized specialists from prestigious reference societies and universities.

Its multimedia content, developed with the latest educational technology, will enable the professional a contextual and situated learning, i.e. a simulated environment that will provide immersive learning programmed to prepare 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, professionals will be assisted by an innovative interactive video system created by renowned and experienced experts.

*You will learn how to correctly size the flue gas treatment and purification system to minimize environmental impact and comply with new environmental regulations and legislation.*

*Thanks to this program you will learn how to optimize the performance of thermodynamic processes in nuclear power plants.*





# 02

# Objectives

The Postgraduate Diploma in Production and Generation of Conventional Electricity is aimed at the student acquiring the necessary skills to undertake various functions oriented to the generation of electricity with conventional energy, entering into its uses and operation to successfully qualify them for the management and maintenance of the associated energy production plants. In this way, we propose a specific and complete syllabus with quality content that, together with expert guidance, will enable the professional to achieve the following objectives.







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*The content of this Postgraduate Diploma will guide you to correctly interpret the concepts of energy and heat involved in the production of electricity, together with the different fuels involved in the process”*



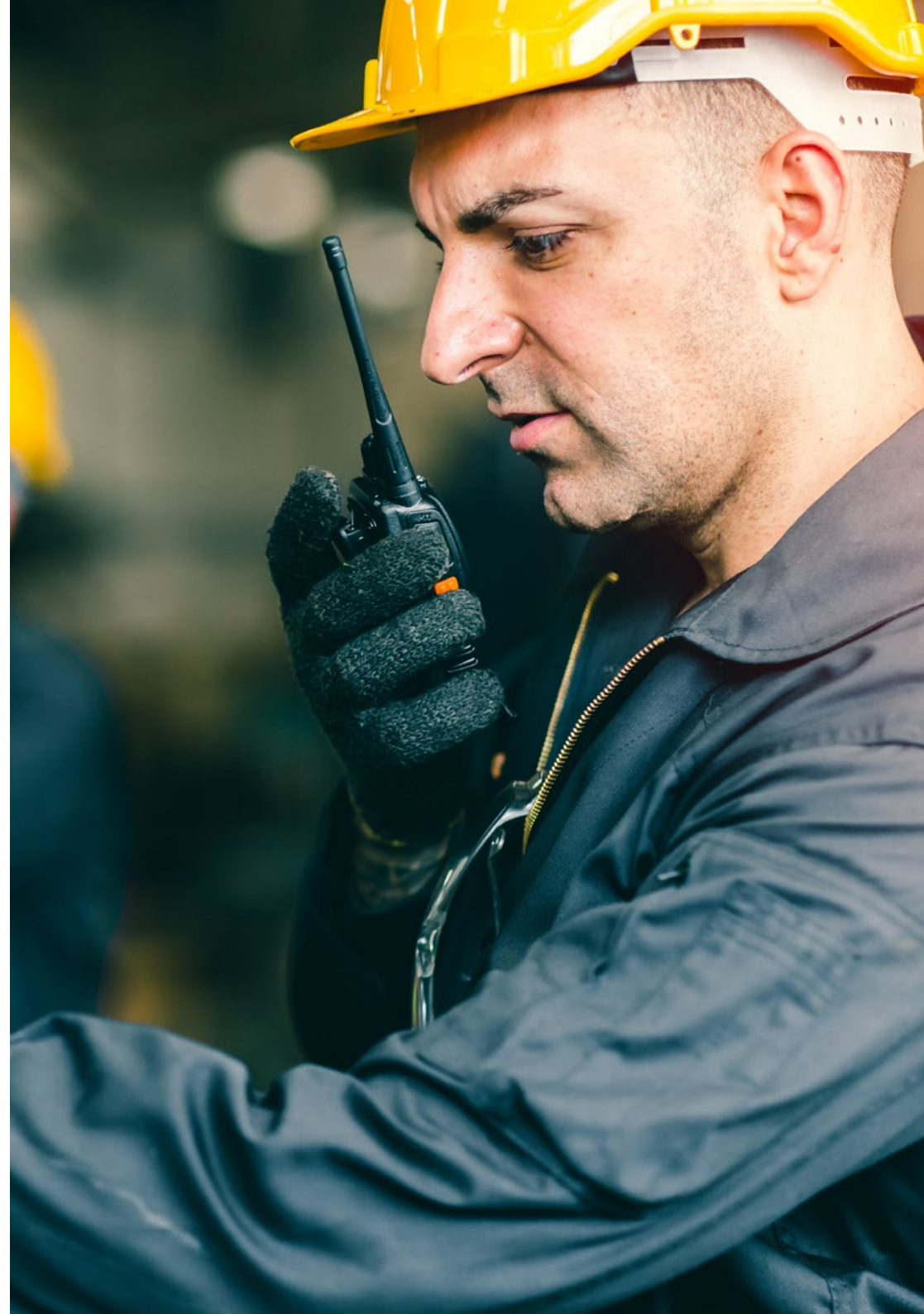
## General Objectives

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- ◆ Interpret the investments and feasibility of power generation plants
- ◆ Discover the potential business opportunities offered by power generation infrastructures
- ◆ Delve into the latest, technological and technical trends in electricity generation
- ◆ Identify the components necessary for the correct functionality and operation of the facilities that make up the electric power plants
- ◆ Establish preventive maintenance plans, that ensure and guarantee the proper operation of power plants, taking into account human and material resources, the environment and the most rigorous quality standards
- ◆ Successfully manage maintenance plans for power generation plants.
- ◆ Analyze the different productivity techniques existing in power generation plants, taking into account the particular characteristics of each facility.
- ◆ Select the most appropriate contracting model according to the characteristics of the power generation plant to be built.

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*In this program you will learn in detail the treatment associated with the waste produced in nuclear power plants, together with the decommissioning and dismantling of a nuclear power plant”*





## Specific Objectives

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### Module 1. Industrial Boilers for Electrical Energy Production and Generation

- ◆ Interpret the concepts of energy and heat involved in the production of electrical energy, together with the different fuels involved in the process
- ◆ Approach the analysis and study of the thermodynamic processes that occur during the operation of the industrial processes of electrical energy generation
- ◆ Break down the components and equipment that make up the steam generators used in the production of electrical energy
- ◆ Acquire knowledge of the operation of the systems that are part of steam generators
- ◆ Analyze the operating procedures of steam generators for safe functionality
- ◆ Correctly manage the different controls to which steam generators used for electrical energy generation must be subjected

### Module 2. Conventional Thermal Power Plants

- ◆ Interpret the production process of conventional thermal power plants together with the different systems involved in it
- ◆ Address the start-up and planned shutdowns in this type of power plant
- ◆ Know in detail the composition of power generation equipment and its auxiliary systems
- ◆ Acquire the necessary knowledge to optimize the operation of turbogenerators, turbines and auxiliary systems that are part of the power generation process in a conventional power plant
- ◆ Correct management of the physical-chemical treatment of water to be converted into steam for energy production, together with the failures caused by poor treatment
- ◆ Correct sizing of the flue gas treatment and purification system to minimize the environmental impact of this type of power plant and comply with new environmental regulations and legislation

- ◆ Prepare documentation related to the safety and design of steam generators in conventional thermal power plants
- ◆ Analyze alternatives to traditional fuels and the modifications to be made to a conventional plant to adapt it to renewable fuels

### Module 3. Nuclear Power Plants

- ◆ Analyze the fundamentals of nuclear energy and its potential for energy generation
- ◆ Evaluate the parameters involved in nuclear reactions
- ◆ Identify the components, equipment and functionality of the systems of a nuclear power plant
- ◆ Delve into the operation of the different types of reactors currently operating in nuclear power plants
- ◆ Optimize the performance of thermodynamic processes in nuclear power plants
- ◆ Establish operational and operating guidelines for safety in this type of plants
- ◆ Know in detail the treatment associated with the waste produced in nuclear power plants, together with the decommissioning and dismantling of a nuclear power plant
- ◆ Delve into the knowledge of the evolution of nuclear power plants and the new generation of plants that will be built soon
- ◆ Evaluate the potential of SMR small modular reactors



# 03

# Course Management

In its commitment to offer an elite education for all, TECH counts on renowned professionals so that the student acquires a solid knowledge in the production and generation of conventional electricity. Therefore, this program has a highly qualified teacher with extensive experience in the field, whose trajectory has positioned him as a great manager in the sector. In this way, he will offer the best tools to students in the development of their skills during the program, with the guarantees required to specialize in a sector undergoing constant updating and innovation, so that they will reflect on the different energy sources with accuracy and precision.



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*Acquire the skills you need within the energy industry thanks to the expert faculty you have in this program, make the most of the opportunity!"*

## International Guest Director

Adrien Couton is a prominent international leader in sustainability, known for his optimistic approach towards transitions to zero net emissions. As such, with extensive consulting and executive management experience in strategy and sustainability, he has established himself as a truly creative problem solver and strategist focused on building high-performing organizations and teams that contribute to keeping global warming below 1.5°C.

As such, he has served as Vice President of Sustainability Solutions at ENGIE Impact, where he has helped large public and private entities plan and execute their transitions to sustainability and zero carbon. Notably, he has also led strategic partnerships and the commercial deployment of digital and advisory solutions to help clients achieve these goals. He has also been Director of Firefly, Paris, an independent sustainability consultancy.

Adrien Couton's career has also developed at the convergence of private sector initiatives and sustainability. Indeed, he has worked as Engagement Manager at McKinsey & Company, supporting European utilities, and as Partner and Sustainability Practice Director at Dalberg, a consulting firm focused on emerging markets. He has also been Managing Director of India's largest decentralized water systems operator, JVNaandi Danone, and has held the position of Private Equity Analyst at BNP Paribas.

To this must be added his time as Global Portfolio Manager at Acumen Fund, New York, where he has developed two investment portfolios (Water and Agriculture) in a pioneering social impact investment fund, applying a VC approach to sustainability. In this regard, Adrien Couton has proven to be a dynamic, creative and innovative leader, committed to the fight against climate change.





## Mr. Couton, Adrien

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- Vice President of Sustainability Solutions at ENGIE Impact, San Francisco, United States
- Director at Firefly, Paris
- Partner and Head of Sustainability Practice at Dalberg, India
- Executive Director at Naandi Danone JV, India
- Global Portfolio Manager, Water and Agriculture Portfolios at Acumen Fund, New York
- Engagement Manager at McKinsey & Company, Paris
- Consultant at The World Bank, India
- Private Equity Analyst at BNP Paribas, Paris
- Master's Degree in Public Administration at Harvard University
- Master's Degree in Political Science, Sorbonne University, Paris
- Master's Degree in Business Administration, Ecole d'Etudes Supérieures de Commerce (HECH) Paris

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*Thanks to TECH you will be able to learn with the best professionals in the world”*

## Management



### Mr. Palomino Bustos, Raúl

- ♦ International Consultant in Engineering, Construction and Maintenance of Energy Production Plants for the company RENOVETEC
- ♦ Expert Engineer accredited by the Official Council of Industrial Engineering of Spain (COGITI) through the DPC Engineers Accreditation System
- ♦ Director at the Institute for Technical Training and Innovation
- ♦ Head of the Automation and Electricity Department of Engineering and Consulting at RRJ
- ♦ Industrial Engineer, Carlos III University in Madrid
- ♦ Industrial Technical Engineer from the Toledo University School of Industrial Technical Engineering (EUITI)
- ♦ Master's Degree in Occupational Risk Prevention from the Francisco de Vitoria University
- ♦ Master's Degree in Public Health and Health Technology by the Castilla-La Mancha Health Service
- ♦ Master's Degree in Quality and Environment by the Spanish Quality Association
- ♦ Master's Degree in European Quality Organization by the Spanish Association for Quality





# 04

# Structure and Content

The structure of the contents of this program has been designed by industrial engineering professionals focused on the production and generation of conventional electricity, so that they have poured their knowledge and experience into a complete and up-to-date syllabus. The program consists of three blocks dedicated to industrial boilers, thermal power plants and nuclear power plants, and analyzes all their pros and cons in the 21st century. Therefore, this syllabus is essential to move towards a more sustainable industry, covering all the knowledge that the professional needs to be competent in their daily work in this field.





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*You will learn about the different conventional power generating systems, analyze their functions and get to know their fundamental principles in depth”*

## Module 1. Industrial Boilers for Electrical Energy Production and Generation

- 1.1. Energy and Heat
  - 1.1.1. Fuels
  - 1.1.2. Energy
  - 1.1.3. Thermal Power Generation Process
- 1.2. Steam Power Cycles
  - 1.2.1. Carnot Power Cycle
  - 1.2.2. Simple *Rankine* Cycle
  - 1.2.3. Overheating *Rankine* Cycle
  - 1.2.4. Effects of Pressure and Temperature on the *Rankine* Cycle
  - 1.2.5. Ideal Cycle vs. Actual Cycle
  - 1.2.6. Ideal Reheat *Rankine* Cycle
- 1.3. Steam Thermodynamics
  - 1.3.1. Steam
  - 1.3.2. Types of Steam
  - 1.3.3. Thermodynamic Processes
- 1.4. The Steam Generator
  - 1.4.1. Functional Analysis
  - 1.4.2. Parts of a Steam Generator
  - 1.4.3. Steam Generator Equipment
- 1.5. Water-Tube Boilers for Electricity Generation
  - 1.5.1. Natural Circulation
  - 1.5.2. Forced Circulation
  - 1.5.3. Water-Steam Circuit
- 1.6. Steam Generator Systems I
  - 1.6.1. Fuel System
  - 1.6.2. Combustion Air System
  - 1.6.3. Water Treatment System
- 1.7. Steam Generator Systems II
  - 1.7.1. Water Preheating System
  - 1.7.2. Flue Gas System
  - 1.7.3. Blower Systems

- 1.8. Safety in Steam Generator Operation
  - 1.8.1. Safety Standards
  - 1.8.2. BMS for Steam Generators
  - 1.8.3. Functional Requirements
- 1.9. Control System
  - 1.9.1. Fundamental Principles
  - 1.9.2. Control Mode
  - 1.9.3. Basic Operations
- 1.10. Steam Generator Control
  - 1.10.1. Basic Controls
  - 1.10.2. Combustion Control
  - 1.10.3. Other Variables to be Controlled

## Module 2. Conventional Thermal Power Plants

- 2.1. Process in Conventional Thermal Power Plants
  - 2.1.1. Steam Generator
  - 2.1.2. Steam Turbine
  - 2.1.3. Condensate System
  - 2.1.4. Feed Water System
- 2.2. Start-up and Shutdown
  - 2.2.1. Start-up Process
  - 2.2.2. Turbine Wheel
  - 2.2.3. Synchronization of the Unit
  - 2.2.4. Unit Charging Socket
  - 2.2.5. Stop
- 2.3. Electricity Generation Equipment
  - 2.3.1. Electric Turbogenerator
  - 2.3.2. Steam Turbine
  - 2.3.3. Turbine Parts
  - 2.3.4. Turbine Auxiliary System
  - 2.3.5. Lubrication and Control System





- 2.4. Electric Generator
  - 2.4.1. Synchronous Generator
  - 2.4.2. Parts of the Synchronous Generator
  - 2.4.3. Generator Excitation
  - 2.4.4. Voltage Regulator
  - 2.4.5. Generator Cooling
  - 2.4.6. Generator Protections
- 2.5. Water Treatment
  - 2.5.1. Water for Steam Generation
  - 2.5.2. External Water Treatment
  - 2.5.3. Internal Water Treatment
  - 2.5.4. Effects of Fouling
  - 2.5.5. Corrosion Effects
- 2.6. Efficiency
  - 2.6.1. Mass and Energy Balance
  - 2.6.2. Combustion
  - 2.6.3. Steam Generator Efficiency
  - 2.6.4. Heat Losses
- 2.7. Environmental Impact
  - 2.7.1. Environmental Protection
  - 2.7.2. Environmental Impact of Thermal Power Plants
  - 2.7.3. Sustainable Development
  - 2.7.4. Smoke Treatment
- 2.8. Conformity Assessment
  - 2.8.1. Requirements
  - 2.8.2. Manufacturer Requirements
  - 2.8.3. Boiler Requirements
  - 2.8.4. User Requirements
  - 2.8.5. Operator Requirements
- 2.9. Security
  - 2.9.1. Fundamental Principles
  - 2.9.2. Design
  - 2.9.3. Fabrication
  - 2.9.4. Materials



- 2.10. New Trends in Conventional Power Plants
  - 2.10.1. Biomass
  - 2.10.2. Waste
  - 2.10.3. Geothermal Energy

### Module 3. Nuclear Power Plants

- 3.1. Theoretical Basis
  - 3.1.1. Fundamentals
  - 3.1.2. Binding Energy
  - 3.1.3. Nuclear Stability
- 3.2. Nuclear Reaction
  - 3.2.1. Fission
  - 3.2.2. Fusion
  - 3.2.3. Other Reactions
- 3.3. Nuclear Reactor Components
  - 3.3.1. Fuels
  - 3.3.2. Moderator
  - 3.3.3. Biological Barrier
  - 3.3.4. Control Rods
  - 3.3.5. Reflector
  - 3.3.6. Reactor Shell
  - 3.3.7. Coolant
- 3.4. Most Common Reactor Types
  - 3.4.1. Reactor Types
  - 3.4.2. Pressurized Water Reactor
  - 3.4.3. Boiling Water Reactor
- 3.5. Other Types of Reactors
  - 3.5.1. Heavy Water Reactors
  - 3.5.2. Gas-Cooled Reactor
  - 3.5.3. Channel Type Reactor
  - 3.5.4. Fast Breeder Reactor
- 3.6. Rankine Cycle in Nuclear Power Plants
  - 3.6.1. Differences Between Thermal and Nuclear Power Plant Cycles
  - 3.6.2. Rankine Cycle in Boiling Water Power Plants
  - 3.6.3. Rankine Cycle in Heavy Water Power Plants
  - 3.6.4. Rankine Cycle in Pressurized Water Power Plants



- 3.7. Nuclear Power Plant Safety
  - 3.7.1. Safety in Design and Construction
  - 3.7.2. Safety Through Barriers Against the Release of Fission Products
  - 3.7.3. Security Through Systems
  - 3.7.4. Redundancy, Single Failure and Physical Separation Criteria
  - 3.7.5. Operational Safety
- 3.8. Radioactive Waste, Dismantling and Closure of Facilities
  - 3.8.1. Radioactive Waste
  - 3.8.2. Dismantling
  - 3.8.3. Closure
- 3.9. Future Tendencies Generation IV
  - 3.9.1. Gas-Cooled Fast Reactor
  - 3.9.2. Lead-Cooled Fast Reactor
  - 3.9.3. Molten Salt Fast Reactor
  - 3.9.4. Supercritical Water-Cooled Reactor
  - 3.9.5. Sodium-Cooled Fast Reactor
  - 3.9.6. Very High Temperature Reactor
  - 3.9.7. Evaluation Methodology
  - 3.9.8. Risk of Explosion Evaluation.
- 3.10. Small Modular Reactors SMR
  - 3.10.1. SMR
  - 3.10.2. Advantages and Disadvantages
  - 3.10.3. Types of SMR



*With this TECH specialization you will stand out professionally, boosting your career path towards excellence in the energy sector”*



05

# Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



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*TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”*

### The student: the priority of all TECH programs

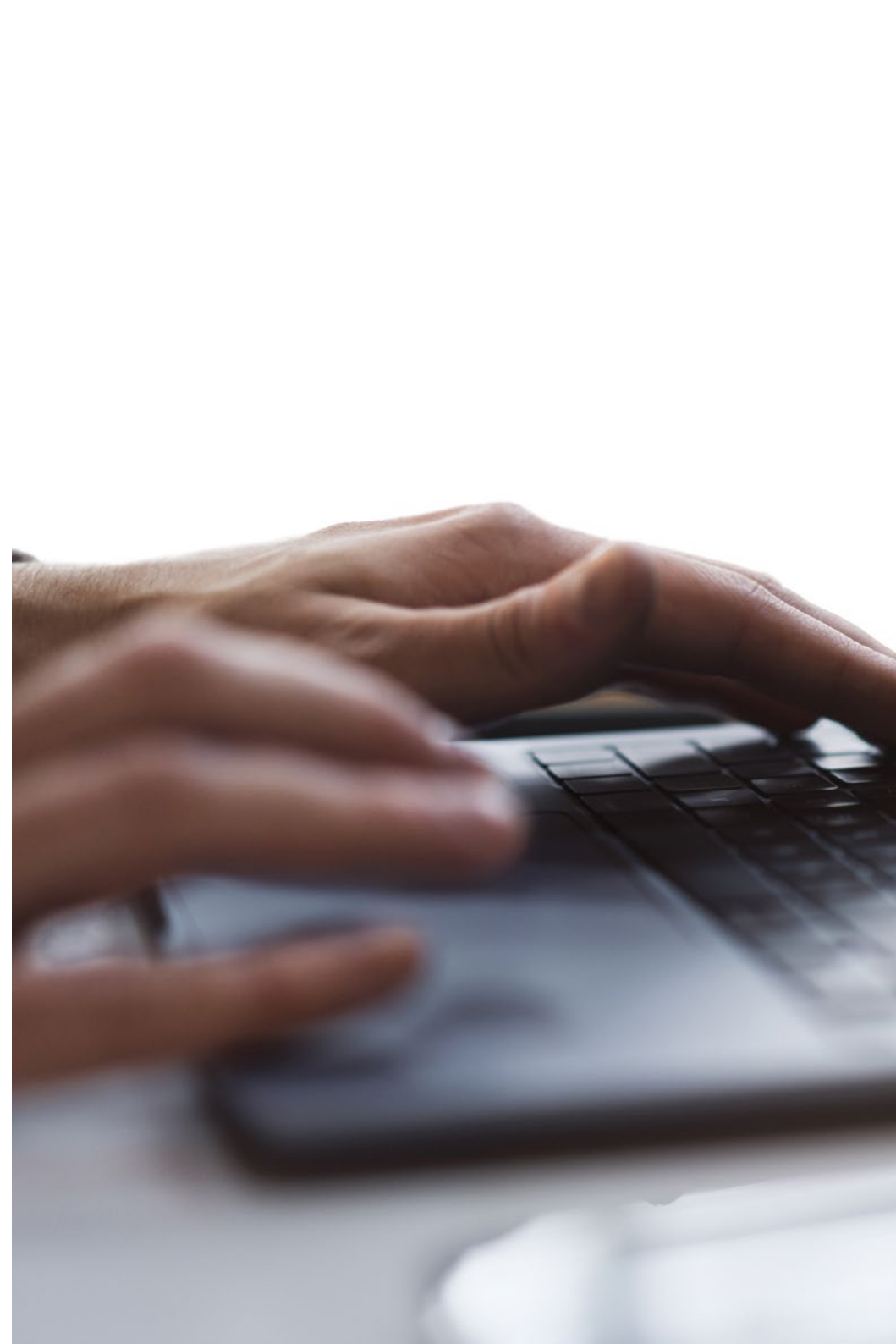
In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

“

*At TECH you will NOT have live classes  
(which you might not be able to attend)”*





### The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

“*TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want*”

## Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



## Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

*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.*





## A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



*The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule”*

### The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

### The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the quality of teaching, quality of materials, course structure and objectives is excellent. Not surprisingly, the institution became the best rated university by its students on the Trustpilot review platform, obtaining a 4.9 out of 5.

*Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.*

*You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.*



As such, the best educational materials, thoroughly prepared, will be available in this program:



#### 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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



#### Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



#### Interactive Summaries

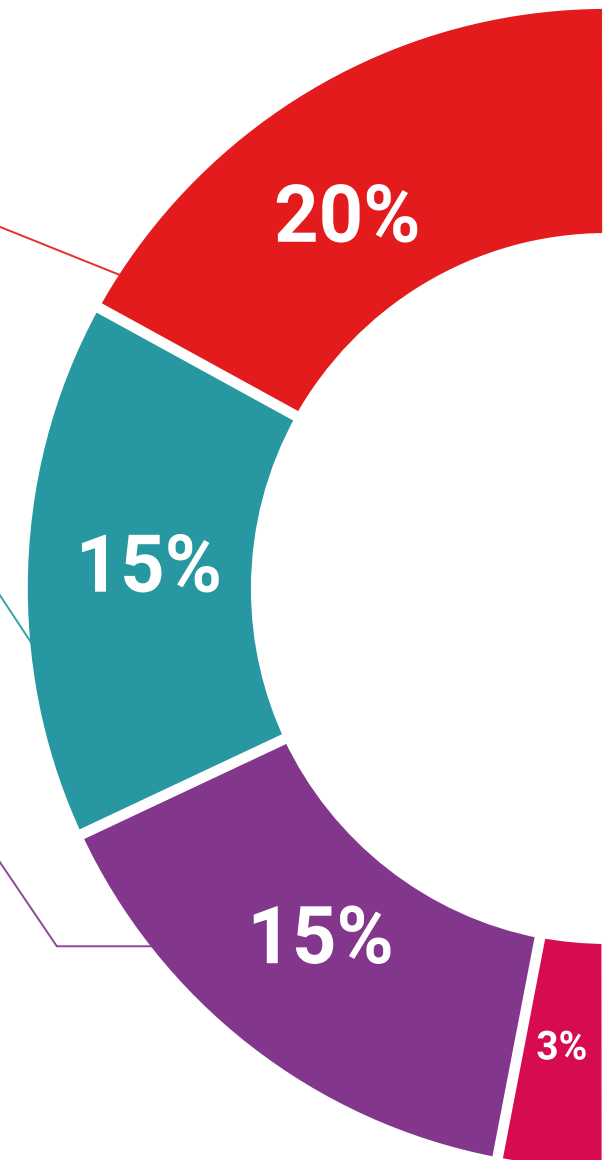
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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



#### Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.







**Case Studies**

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.



**Testing & Retesting**

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.



**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 for future difficult decisions.



**Quick Action Guides**

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.



06

# Certificate

The Postgraduate Diploma in Production and Generation of Conventional Electricity guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.



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*Successfully complete this program  
and receive your university qualification  
without having to travel or fill out  
laborious paperwork”*



This private qualification will allow you to obtain a **Postgraduate Diploma in Production and Generation of Conventional Electricity** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

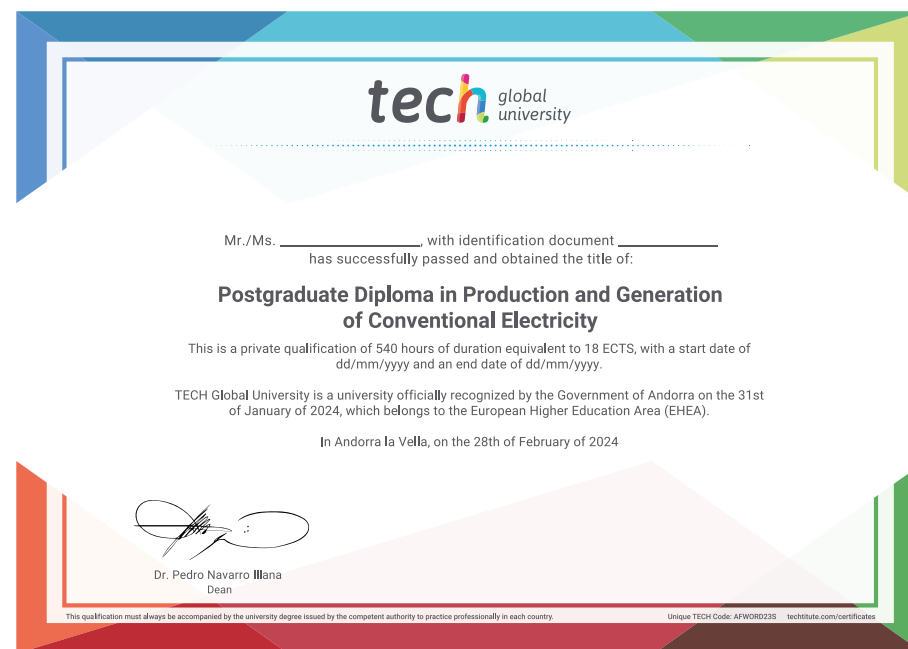
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Production and Generation of Conventional Electricity**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**





## Postgraduate Diploma Production and Generation of Conventional Electricity

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