

# Postgraduate Diploma Onshore and Offshore Wind Technology



## Postgraduate Diploma Onshore and Offshore Wind Technology

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

Website: [www.techtitude.com/us/engineering/postgraduate-diploma/postgraduate-diploma-onshore-offshore-wind-technology](http://www.techtitude.com/us/engineering/postgraduate-diploma/postgraduate-diploma-onshore-offshore-wind-technology)

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# 01

# Introduction to the Program

The global capacity for Wind Energy has reached approximately 1,026 GW, with a notable increase in offshore installations, which accounted for 20% of the new wind capacity in the past year. Offshore wind turbines, thanks to their higher efficiency and lower operational costs, are leading this trend, with projects like the Hornsea 2 wind farm in the United Kingdom, currently the largest in the world with a capacity of 1.4 GW. In this context, TECH Global University has launched a fully online program, requiring only an electronic device with an internet connection to access all educational resources. Additionally, it is based on the cutting-edge Relearning methodology, a pioneering learning technique at this institution.





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*With this 100% online program, you will access specialized technical training that covers wind turbine technology, as well as the development and construction of wind farms”*

Wind Energy technology, both onshore and offshore, is booming in Spain, with a notable growth in installed capacity and significant government support. In fact, the installed capacity of onshore Wind Energy exceeds 30,000 MW, and it is projected to double by 2030, in line with the National Integrated Energy and Climate Plan.

This program was created to address the mechanical and electrical components of both Onshore and Offshore Wind Technology, allowing professionals to identify the function of each element and how they interact to optimize energy generation. This knowledge will be essential to ensuring efficiency and performance in the design and operation of wind farms.

Furthermore, the program will analyze the development and construction process of wind farms, including a detailed evaluation of the main aspects involved in promoting these projects. Engineers will learn to differentiate critical stages and required procedures, enabling them to efficiently manage the implementation of wind projects.

Finally, the program will examine the factors influencing site selection for offshore wind farms, considering critical geographical and environmental aspects. The current opportunities and limitations of the sector, as well as technological advancements that could transform the viability of these installations, will also be discussed. This knowledge will equip experts to contribute to the expansion of offshore wind energy, an area with significant potential for energy sustainability in the future.

TECH Global University has developed a comprehensive, 100% online, and flexible program, allowing graduates to avoid issues such as commuting to a physical location or adhering to strict schedules. Additionally, students will benefit from the revolutionary Relearning methodology, which consists of the repetition of key concepts to ensure optimal and natural understanding of the content.

This **Postgraduate Diploma in Onshore and Offshore Wind Technology** contains the most complete and up-to-date program on the market. The most important features include:

- ♦ The development of practical cases presented by experts in engineering focused on Wind Energy
- ♦ The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable 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
- ♦ The availability of access to the contents from any fixed or portable device with an Internet connection



*You will be able to identify and seize emerging opportunities in Offshore Wind Energy, an area with significant potential to contribute to the global energy transition. What are you waiting for to enroll?"*

“

*You will delve into the key processes involved in the promotion and development of wind farms, from initial planning to execution, using the best educational materials at the forefront of technology and academia”*

The program's teaching staff includes professionals from the sector who contribute their work experience to this specializing program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned experts.

*You will analyze the technological differences between offshore and onshore wind installations, as well as the current challenges and limitations these projects face. With all the quality guarantees offered by TECH!*

*You will examine in detail the function of each wind turbine component, appreciating how the interaction between these systems optimizes energy production, supported by an extensive multimedia resource library.*



02

# Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it relies on an enormous faculty of more than 6,000 professors of the highest international renown.



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*Study at the world's largest online university  
and guarantee your professional success.  
The future starts at TECH”*

**The world's best online university, according to FORBES**

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

**The best top international faculty**

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

**The world's largest online university**

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.



**The most complete syllabuses on the university scene**

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

**A unique learning method**

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

#### The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

#### Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.



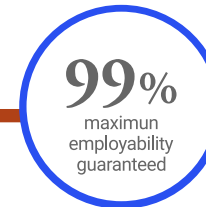
#### Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.



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

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.



# 03 Syllabus

The content has been designed to provide engineers with comprehensive knowledge of various crucial aspects of Wind Energy. In this sense, the program will address the systems and components that make up wind turbines, exploring their functionality and efficiency in energy production. The processes necessary for the development and construction of wind farms will also be analyzed, from planning to implementation. Furthermore, the program will delve into the specifics of Offshore Wind Energy, considering geographical and environmental factors that influence site selection for installation.

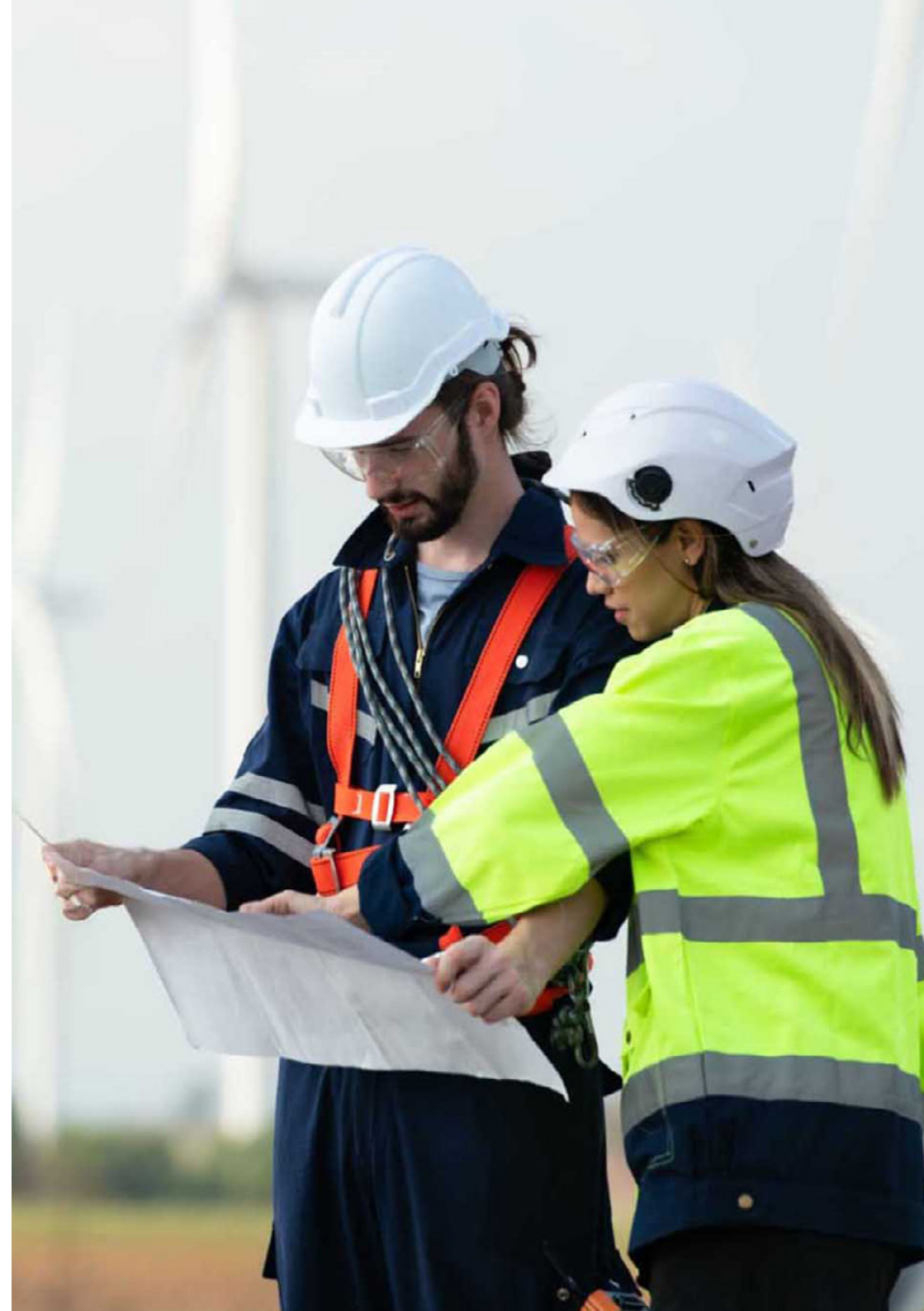


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*This multidimensional approach will equip you with both practical and theoretical skills essential for facing the challenges in the Renewable Energy industry, always supported by the Relearning methodology”*

## Module 1. Wind Technology: The Wind Turbine

- 1.1. Types of Wind Turbines
  - 1.1.1. Generation Capacity
  - 1.1.2. Rotor Axis Arrangement
  - 1.1.3. Equipment Positioning Relative to the Wind
  - 1.1.4. Number of Blades
    - 1.1.4.1. Based on Electric Generator Type
    - 1.1.4.2. Type of Control and Regulation System
    - 1.1.4.3. Based on Wind Type
- 1.2. Wind Turbine Components
  - 1.2.1. Main Components of the Darrieus Wind Turbine
  - 1.2.2. Main Components of the Savonius Wind Turbine
  - 1.2.3. Main Components of the Horizontal Axis Wind Turbine
- 1.3. Wind Turbine Tower
  - 1.3.1. Tower and Its Types
  - 1.3.2. Design Criteria
  - 1.3.3. Foundation
- 1.4. Wind Turbine Power Train
  - 1.4.1. Low-Speed Rotor Shaft
  - 1.4.2. Gearbox and Its Components
  - 1.4.3. High-Speed Shaft and Flexible Coupling
- 1.5. Wind Turbine Generator
  - 1.5.1. Types of Generators in Wind Turbines
  - 1.5.2. Power Converter
  - 1.5.3. Electrical Protection Systems



- 1.6. Wind Turbine Blades
  - 1.6.1. Hub and Blade Components
  - 1.6.2. Pitch System
  - 1.6.3. Blade Bearing
- 1.7. Wind Turbine Orientation System
  - 1.7.1. Vane System
  - 1.7.2. Yaw System
  - 1.7.3. Hydraulic Group and Brake System
- 1.8. Wind Turbine Transformer
  - 1.8.1. Transformer Station
  - 1.8.2. Collector System
  - 1.8.3. Sectioning Cell
- 1.9. Anemometers of the Wind Turbine
  - 1.9.1. Wind Measurement
  - 1.9.2. Types of Anemometers
  - 1.9.3. Anemometer Calibration
- 1.10. Wind Turbine Obstruction Lights
  - 1.10.1. Lighting Type
  - 1.10.2. Air Safety Standards
  - 1.10.3. Grouping of Wind Turbines

## Module 2. Development and Construction of Wind Farms

- 2.1. Wind Farm Site Selection: A Complex and Multidisciplinary Decision
  - 2.1.1. Energy Resource
  - 2.1.2. Land Ownership
  - 2.1.3. Interconnection Capacity
- 2.2. Wind Resource for Project Development
  - 2.2.1. Wind Speed and Direction
  - 2.2.2. Vertical Profile and Temporal Variability
  - 2.2.3. Turbulence
- 2.3. Terrain Complexity
  - 2.3.1. Access Roads
  - 2.3.2. Geographic Surroundings
  - 2.3.3. Site Orography
- 2.4. Social Considerations in Wind Farm Development
  - 2.4.1. Local Communities
  - 2.4.2. Positive Impacts
  - 2.4.3. Negative Impacts
- 2.5. Wind Farm Interconnection
  - 2.5.1. Step-Up Substation
  - 2.5.2. Interconnection Substation
  - 2.5.3. High Voltage Transmission Line (HVTL)
- 2.6. Technical-Economic Considerations in the Promotion and Development of Wind Farms
  - 2.6.1. Budget for Studies
  - 2.6.2. Budget for Administrative Procedures
  - 2.6.3. Total Budget
- 2.7. Scheduling and Planning for the Development and Promotion of Wind Farms
  - 2.7.1. Study Scheduling
  - 2.7.2. Administrative Procedure Scheduling
  - 2.7.3. Overall Timeline

### Module 3. Offshore Wind Farms

- 3.1. Offshore Wind Energy
  - 3.1.1. Offshore Wind Energy
  - 3.1.2. Differences Between Offshore and Onshore Wind Energy
  - 3.1.3. Current Market and International Agreements
- 3.2. Criteria for Offshore Wind Farm Installation
  - 3.2.1. Aspects Related to Platform Ownership
  - 3.2.2. Aspects Related to Wind Availability
  - 3.2.3. Aspects Related to the Seabed
- 3.3. Advanced Offshore Technologies. Differences with Onshore
  - 3.3.1. Offshore Wind Turbines
  - 3.3.2. Machine Segments: Functions
  - 3.3.3. Complementary Aspects of Offshore Wind Energy
- 3.4. Offshore Machines
  - 3.4.1. Main Segments of the Nacelle
  - 3.4.2. Main Segments of the Tower
  - 3.4.3. Key Aspects of the Foundation
- 3.5. Offshore Wind Farms Worldwide: Contribution to the Energy Mix
  - 3.5.1. Renewable Energy and Wind Energy Share in the Global Energy Mix
  - 3.5.2. Offshore Wind Energy Share in the Global Energy Mix
  - 3.5.3. Analysis of Projections and Possible Scenarios for this Technology
- 3.6. Potential Offshore Wind Projects: Future Projections
  - 3.6.1. Existing Projects: Geographical Distribution and Context Analysis
  - 3.6.2. Potential Offshore Wind Projects: Geographical Distribution and Context Analysis
  - 3.6.3. Floating Wind Energy Projects
- 3.7. Logistics, Construction, and Maintenance of Offshore Wind Farms
  - 3.7.1. Industrial Facility Location, Analysis of Existing Projects
  - 3.7.2. Construction of Offshore Wind Farms
  - 3.7.3. Maintenance and Operation of an Offshore Wind Farm



- 3.8. Safety and Environment in Offshore Wind Energy
  - 3.8.1. International Safety Standards Applicable in the Offshore Industry
  - 3.8.2. International Environmental Standards Applicable in the Offshore Industry
  - 3.8.3. Safety and Environmental Management in an Offshore Wind Farm
- 3.9. Safety and Environmental Management in an Offshore Wind Turbine
  - 3.9.1. Sustainability and Environmental Management Tools
  - 3.9.2. Safety and Environmental Management Tools
  - 3.9.3. Impact Studies in Offshore Wind Farms
- 3.10. Current Challenges in Offshore Wind Energy
  - 3.10.1. Challenges Related to Economic-Financial Aspects
  - 3.10.2. Challenges Related to Product Quality
  - 3.10.3. Challenges Related to the Global Political-Economic Context

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*This program will not only enhance your employability in an increasingly competitive job market but will also enable you to play a key role in environmental sustainability”*

04

# Teaching Objectives

The main objective of the university program is to equip engineers with the necessary skills to tackle the current challenges in the wind energy sector. In this regard, the program will aim for a comprehensive understanding of the systems that make up wind turbines and their functioning, as well as the processes involved in the development and construction of wind farms. Additionally, it will seek to prepare professionals to analyze the specifics of offshore wind technology, including the geographical and environmental factors that influence site selection for installation.



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*Choose TECH! You will be prepared to contribute effectively to the design, optimization, and management of Wind Energy projects, supporting the transition to a more sustainable energy model”*



### General Objectives

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- ♦ Examine energy transformation through the components of the wind turbine
- ♦ Describe the types, components, advantages, and disadvantages of all wind turbine configurations in relation to their control and regulation systems
- ♦ Define the stages of promotion and development, as well as their importance for the execution of wind farms
- ♦ Review the laws and international regulations that govern the processes, stages, and procedures involved in the promotion and development of wind farms
- ♦ Analyze the technological characteristics of the offshore wind industry
- ♦ Determine the decisive aspects regarding the feasibility of offshore wind farms, current challenges, and the potential of the industry



*You will acquire advanced technical knowledge on the specifics of offshore wind farms, opening doors to new career opportunities in a market that increasingly seeks experts in Renewable Energy”*





## Specific Objectives

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### Module 1. Wind Technology: The Wind Turbine

- ♦ Examine the systems that make up a wind turbine
- ♦ Describe the function of each component of a wind turbine

### Module 2. Development and Construction of Wind Farms

- ♦ Describe the main items involved in the promotion and development of a Wind Farm
- ♦ Differentiate the order of importance of the stages and procedures required for promotion and development

### Module 3. Offshore Wind Farms

- ♦ Determine the technological characteristics of offshore wind energy compared to onshore technology
- ♦ Examine current constraints and limitations, as well as the main opportunities available
- ♦ Analyze the characteristics that currently influence the selection of a site for the installation of an offshore wind farm, including geographical and environmental requirements
- ♦ Identify potential technological changes that could alter the current situation: distinguish the main characteristics that would determine the viability of an offshore wind farm



# 05

## Career Opportunities

Professionals will have access to key roles in companies that develop, design, operate, and maintain wind farms, both on land and at sea, participating in resource evaluation, energy production optimization, and project planning. They will also be able to work in consulting firms specialized in the technical and economic feasibility analysis of wind projects, as well as in the research and development of new technologies aimed at improving the efficiency and sustainability of wind installations. They will also have the opportunity to collaborate with governmental institutions and international organizations in the formulation of energy policies, contributing to the advancement of the energy transition.



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*The Postgraduate Diploma in Onshore and Offshore Wind Technology will offer engineers a wide range of career opportunities in the Wind Energy sector, both onshore and offshore”*

### Graduate Profile

The graduate of this Postgraduate Diploma in Onshore and Offshore Wind Technology will be a highly specialized professional in the design, installation, and operation of wind farms, both onshore and offshore. With a technical and practical approach, they will be equipped to assess wind resources in various locations, optimize turbine performance, and manage wind projects through their different phases. Additionally, their training will enable them to understand and address the specific challenges of offshore technology, such as extreme environmental conditions, and apply innovative solutions to maximize energy efficiency.

*You will manage sustainability aspects, environmental regulations, and the integration of wind energy into electrical grids, contributing to the advancement of renewable energy on a global scale.*

- ♦ **Project Management:** Plan, coordinate, and manage wind projects from conception to execution, ensuring adherence to timelines, budgets, and quality standards
- ♦ **Multidisciplinary Teamwork:** Collaborate with professionals from various fields (Civil Engineering, Electrical Engineering, Environmental Engineering, etc.), optimizing interactions to address the challenges of the wind energy sector in an integrated and efficient manner
- ♦ **Innovation and Problem-Solving:** Identify opportunities for improvement, propose innovative solutions, and tackle complex technical and operational challenges in the development and maintenance of wind facilities
- ♦ **Communication and Leadership:** Communicate effectively in both technical presentations and negotiations with stakeholders, and lead teams in wind projects, facilitating decision-making and the implementation of strategies





After completing the program, you will be able to use your knowledge and skills in the following positions:

- 1. Wind Farm Design Engineer:** Responsible for the technical design and planning of wind farms, both onshore and offshore, considering aspects such as turbine layout, required infrastructure, and energy production optimization.
- 2. Offshore Wind Energy Specialist:** Develops and manages offshore wind farm projects with in-depth knowledge of the technologies and specific challenges of the maritime environment, such as offshore turbine installation and grid integration.
- 3. Wind Farm Operations and Maintenance Engineer:** Oversees the operational supervision and preventive maintenance of wind farms, both onshore and offshore, ensuring maximum performance and the repair of equipment in case of failure.
- 4. Wind Energy Project Manager (Onshore and Offshore):** Leads the development of wind farm projects, coordinating the different phases of the project, managing resources and timelines, and ensuring projects are executed according to set goals.
- 5. Wind Energy Consultant:** Provides advisory services to companies, governments, and international organizations on the feasibility and optimization of wind projects, providing technical, financial, and environmental studies for both onshore and offshore farms.
- 6. Wind Resource Analyst:** Specializes in measuring and analyzing wind resources, using modeling tools to evaluate the feasibility of installing turbines on land or at sea, and maximizing project efficiency.
- 7. Environmental Impact Technician for Wind Projects:** Assesses the environmental impacts of wind projects, conducting environmental impact studies for both land-based and offshore projects, ensuring compliance with environmental regulations.
- 8. Wind Technology Innovation and Development Engineer:** Works on the research and development of new technologies aimed at improving the efficiency of wind farms, both onshore and offshore.

06

# 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.

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*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.

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*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.

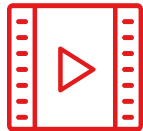
The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

*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

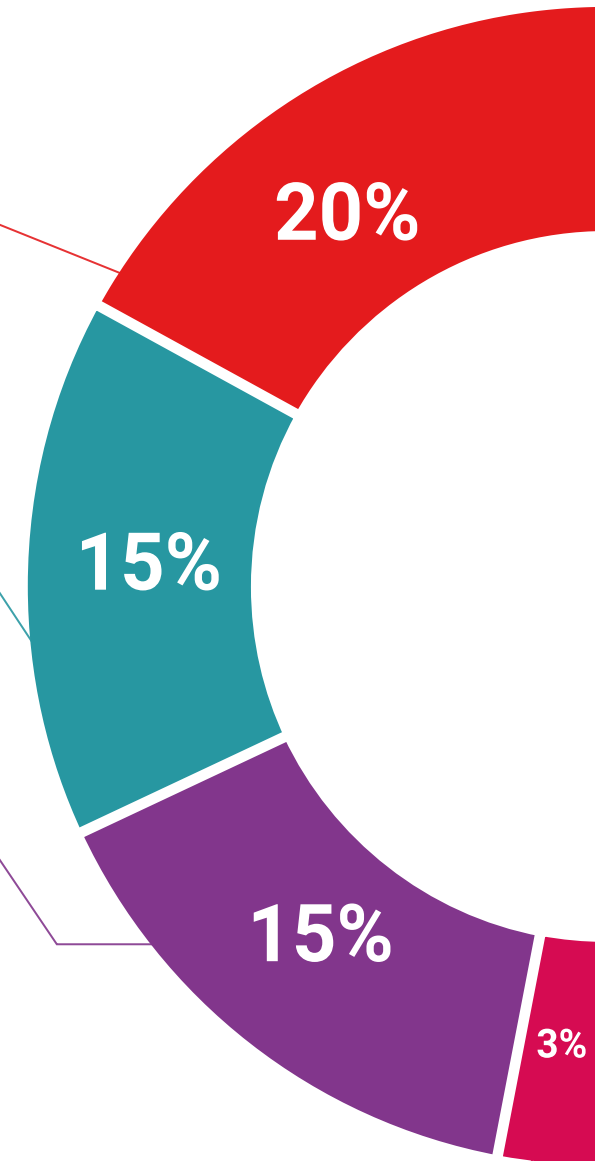
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

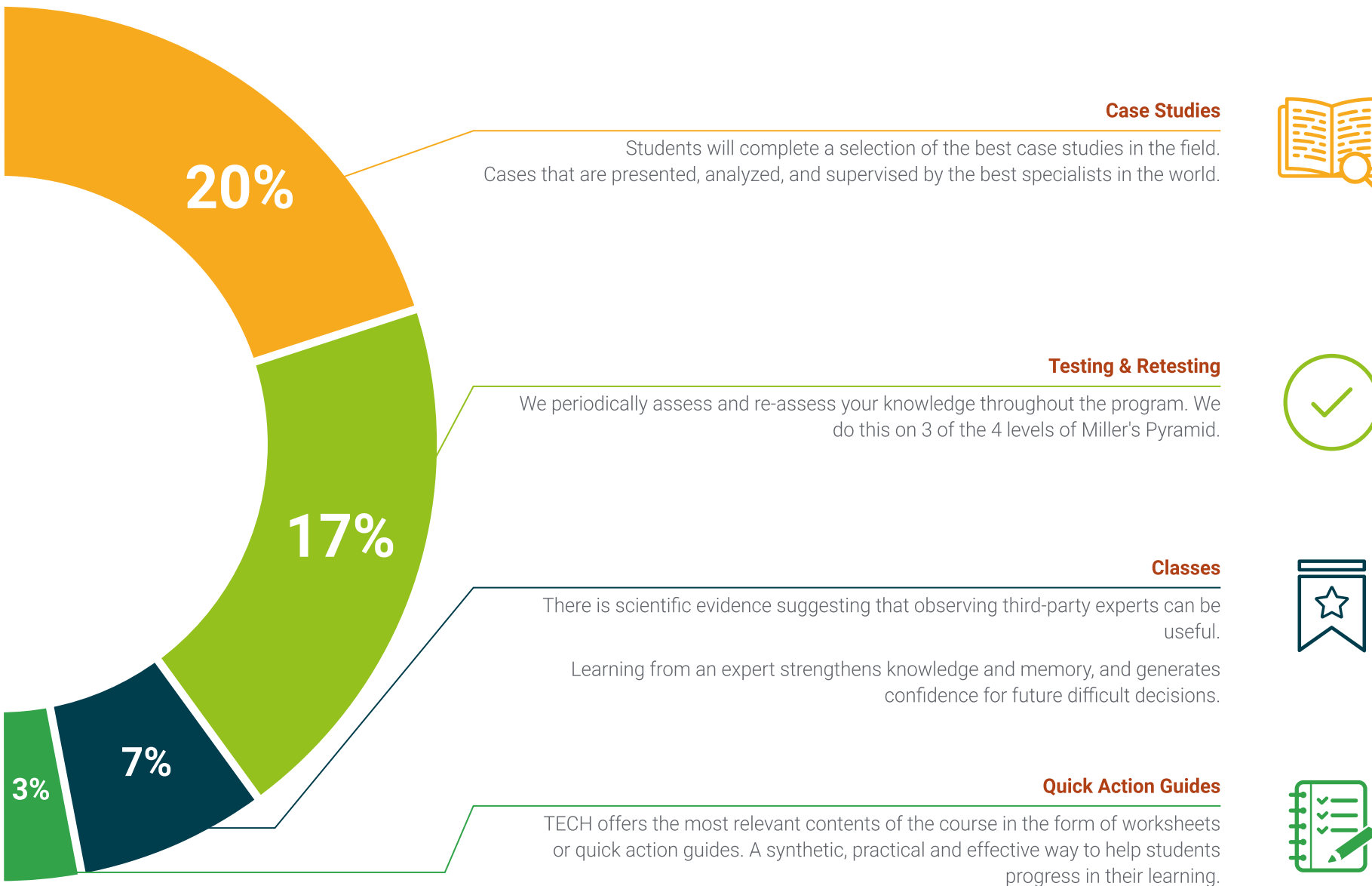
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### Additional Reading

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





07

# Teaching Staff

The teaching team is composed of highly qualified professionals with extensive experience in the field of Renewable Energy. In fact, it includes engineers specialized in Wind Energy, academic researchers, and industry experts who have been at the forefront of the development and implementation of wind technologies. Furthermore, they have participated in research and development projects, which will allow them to offer up-to-date training aligned with the latest trends and technological advancements in Wind Energy, both onshore and offshore.



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*Thanks to the comprehensive approach of the teaching staff, you will not only acquire theoretical knowledge but also benefit from the practical application of these concepts in a real-world context”*

## Management



### Mr. Melero Camarero, Jorge

- ♦ Deputy Director of Construction at Eney, Vienna
- ♦ Country Manager for Spain at Ezzing Solar
- ♦ General Manager of Environmental and Social Consulting at Natura Medioambiente
- ♦ Deputy Director of the Renewable Energy Division at Alatec Ingenieros Consultores y Arquitectos
- ♦ Director of the Renewable Energy Department at Gestionna Soluciones Energéticas
- ♦ Renewable Energy Project Director at ABO Wind Spain
- ♦ Master's Degree in Business Administration (MBA)
- ♦ Master's Degree in Renewable Energy Consulting
- ♦ Bachelor's Degree in Industrial Engineering from the Polytechnic University of Valencia

## Teachers

### Mr. Rettori Canali, Ignacio Esteban

- ♦ Product Safety Engineer at GE Vernova
- ♦ Sustainability Consultant at ALG-INDRA
- ♦ Product Safety Engineer at Alten
- ♦ HSE Data Analyst at MARS
- ♦ Logistics Shift Manager at Repsol YPF
- ♦ Environmental Analyst at Repsol YPF
- ♦ Environmental Specialist at the National Ministry of Environment
- ♦ Specialist in Energy Economics at the Polytechnic University of Catalonia
- ♦ Specialist in Renewable Energies and Electric Mobility, Polytechnic University of Catalonia
- ♦ Specialist in Energy Management from the National Technological University
- ♦ Specialist in Project Management, Liberty Foundation
- ♦ Specialist in Safety and Environment from the Catholic University of Argentina
- ♦ Degree in Environmental Engineering from the National University of Litoral

### Mr. López Ramos, Alejandro

- ♦ Site Construction Director at Ferrovial Construcción
- ♦ Construction Leader at Anabática Renovables
- ♦ Project Director at SEAL
- ♦ Project Director at Artech
- ♦ Country Manager Mexico at Ventus Energía
- ♦ Director of Engineering and Construction at Acciona Energía
- ♦ Site Coordinator (Site Manager) at Enel Green Power
- ♦ Quality, Environment, and Occupational Safety Coordinator at Abengoa
- ♦ Specialization in Construction from the University of Veracruz
- ♦ Bachelor's Degree in Civil Engineering from the University of Veracruz



*Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"*

# 08 Certificate

This Postgraduate Diploma in Onshore and Offshore Wind Technology guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the Postgraduate Diploma issued by TECH Global University.



“

*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 diploma for the **Postgraduate Diploma in Onshore and Offshore Wind Technology** 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 Onshore and Offshore Wind Technology**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**





## Postgraduate Diploma Onshore and Offshore Wind Technology

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

# Postgraduate Diploma Onshore and Offshore Wind Technology

## GENERATOR.01

- Model ID : DF320 IMS
- Status : Normal
- Power : 2.3 MW
- Temperature : 56 C
- Temperature : 76 C
- Produced : 0.4 MW
- Produced : 2.4 MW
- Target : 0.5 MW
- Target : 2.4 MW

## Performance

