

# Postgraduate Diploma Industrial Safety and Environmental Management



## Postgraduate Diploma Industrial Safety and Environmental Management

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Accreditation: 24 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitude.com/us/engineering/postgraduate-diploma/postgraduate-diploma-industrial-safety-environmental-management](http://www.techtitude.com/us/engineering/postgraduate-diploma/postgraduate-diploma-industrial-safety-environmental-management)

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# 01

# Introduction to the Program

Industrial Safety and Environment are key areas within modern business management, whose focus encompasses prevention, risk management and regulatory compliance, in addition to minimizing the environmental impact of industrial activities. As globalization advances and environmental regulations become more stringent, organizations must adopt proactive management practices that integrate safety and sustainability into their operations. For this reason, TECH has developed a program that provides engineers with the necessary skills to lead the transformation of industries towards more sustainable, safe and responsible models. All this through a 100% online academic itinerary and the most innovative methodology: Relearning.







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*A 100% online program with which you will acquire the necessary skills to lead Industrial Safety and Environment projects, standing out in a highly competitive and international environment”*

Industrial safety covers all measures, procedures and techniques aimed at preventing accidents, reducing risks and protecting the health and safety of workers in their working environment. In parallel, environmental management refers to the implementation of practices and policies aimed at minimizing the environmental impact of industrial activities, favoring sustainability, the responsible use of resources and the reduction of the ecological footprint.

The convergence of these two fields responds to the need for industries to adapt to new international standards that require compliance with more stringent regulations in terms of occupational safety and environmental protection. The integration of both approaches - industrial safety and environmental management - allows organizations to mitigate risks for both people and the environment, while optimizing processes and resources in an increasingly demanding global context.

Against this backdrop, TECH presents this Postgraduate Diploma in Industrial Safety and Environmental Management, an academic program specially designed to provide professionals with the necessary skills to face the current and future challenges of the sector. In this way, and through a comprehensive approach, the postgraduate program addresses various areas of knowledge, including risk management, international regulations, occupational health monitoring, and sustainable management of natural resources.

This program, taught 100% online, is structured in theoretical modules that allow engineers to acquire a deep understanding of the most relevant techniques, tools and regulations in the field of Safety and Environment. Moreover, thanks to the Relearning methodology and access to a virtual platform available 24 hours a day, 7 days a week, specialists will be able to graduate in a short time, assimilating the most relevant concepts of the sector through repetition and the use of innovative pedagogical content.

This **Postgraduate Diploma in Industrial Safety and Environmental Management** contains the most comprehensive and up-to-date educational program on the market.

Its most notable features are:

- ♦ The development of case studies presented by highly qualified experts in the field of industrial safety, environmental management and international regulations
- ♦ The graphic, schematic and eminently practical content of the book provides scientific and practical information on those disciplines that are essential for professional practice
- ♦ Practical exercises where the process of self-assessment can be used 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



*You will address international regulations and best practices to ensure occupational health protection in various industrial sectors"*

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*You will become a reference in the implementation of sustainable strategies, aligning industry needs with environmental protection and occupational health standards”*

The program's teaching staff includes professionals from the field who contribute their work experience to this educational 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 master the most innovative tools and techniques in safety management, with a specific focus on risk reduction and optimization of industrial processes.*

*You will have access to cutting-edge educational content, thanks to the Relearning methodology, which will allow you to consolidate your knowledge effectively and at your own pace.*





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 has a huge faculty of more than 6,000 professors of the highest international prestige.





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*Study at the largest online university in the world and ensure your professional success. The future begins 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".

**Forbes**

The best online university in the world

The most complete  
**syllabus**

**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.

**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.

**↑  
TOP**  
international faculty

**⚙️**  
The most effective methodology

**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 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.

**World's No.1**  
The World's largest online university

#### 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.



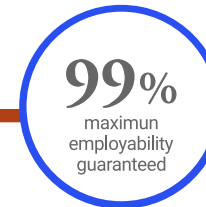
#### Google Premier Partner

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 curriculum of this TECH Postgraduate Diploma offers a comprehensive and up-to-date approach to the main challenges and solutions in the industrial environment. Throughout the program, you will explore everything from risk identification and assessment to the implementation of effective sustainability and compliance strategies. In addition, you will delve into the management of natural resources and the promotion of occupational health, all in a context of innovation and adaptation to the latest international regulations.





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*You will learn about the latest trends in technologies applied to Safety and Environment, expanding your capabilities to integrate innovations in industrial processes”*

## Module 1. International Regulatory Framework for Industrial Safety and the Environment

- 1.1. International Regulatory Framework for Industrial Safety and the Environment
  - 1.1.1. Key International Organizations. ILO, ISO, WHO, UNEP, UNEP
  - 1.1.2. Principles and Objectives of International Standards
  - 1.1.3. Outline and Classification of Relevant Regulations: Conventions, Recommendations, Standards
- 1.2. Comparative Safety and Environmental Law
  - 1.2.1. Case Studies of Different Countries
  - 1.2.2. Identification of Similarities and Differences in International Regulatory Approaches
  - 1.2.3. Factors that Influence Diversity of Legal Systems
- 1.3. Legal Aspects of Industrial and Environmental Safety at the International Level
  - 1.3.1. Civil and Criminal Liability at the International Level: Fault, Negligence and Risk
  - 1.3.2. Compensation for Damages at the International Level
  - 1.3.3. Jurisprudence. Compensation for Damages at the International Level
- 1.4. Ethical Aspects of Industrial and Environmental Safety
  - 1.4.1. Ethical Values and Principles in the Labor and Environmental Sphere
  - 1.4.2. Conflicts of Interest and Ethical Dilemmas
  - 1.4.3. Sustainable Development and Its Relationship to Safety and the Environment
- 1.5. Key International Standards
  - 1.5.1. ISO 45001 and 14001 Standards: Integrated Management Systems
  - 1.5.2. Structure and Requirements of the Standards
  - 1.5.3. Implementation and Certification
- 1.6. Other Relevant International Standards. GHS, IEC, EMAS
  - 1.6.1. Information Security Management Systems
  - 1.6.2. Electrical Safety. Associated Risks
  - 1.6.3. Harmonization of International Norms and Standards
- 1.7. Prevention, Analysis and Evaluation of Environmental Risks and Accidents
  - 1.7.1. Identification and Risk Assessment
    - 1.7.1.1. Methods and Tools for Risk Assessment
  - 1.7.2. Hazard Analysis and Assessment. HAZOP, FMEA
  - 1.7.3. Risk Ranking



- 1.8. Control and Prevention Measures
  - 1.8.1. Prevention Measures
  - 1.8.2. Analysis of the Different Types of Monitoring
  - 1.8.3. Accident and Incident Investigations
- 1.9. Prevention of Waste Contamination and Management
  - 1.9.1. Product Life Cycle. Manufacturer's Responsibility
  - 1.9.2. Hazardous Waste Management
  - 1.9.3. Mitigation of Climate Change
- 1.10. Future Trends and Challenges in Industrial and Environmental Safety
  - 1.10.1. Impact of New Technologies on Safety and Environmental Management
    - 1.10.1.1. Industry 4.0 and Safety
  - 1.10.2. Artificial Intelligence and Robotics in Industrial and Environmental Safety
  - 1.10.3. Telecommuting and Teleworking

## Module 2. Safety Management in Industry

- 2.1. Safety Management in Industry
  - 2.1.1. Industrial Safety Management
  - 2.1.2. International Industrial Safety Standards
  - 2.1.3. Importance of Safety Management in Industry
- 2.2. Identification and Assessment of Risks in Industry
  - 2.2.1. Risk Identification Methods. MAT, FMEA
  - 2.2.2. Risk Analysis and Assessment
  - 2.2.3. Risk Prioritization and Development of Mitigation Plans
- 2.3. Design of Safety Management Systems in Industry
  - 2.3.1. Safety Policy and Objectives
  - 2.3.2. Organizational Structure and Responsibilities
  - 2.3.3. Security Procedures and Protocols
- 2.4. Emergency Management and Incident Response in Industry
  - 2.4.1. Emergency Planning and Incident Response
  - 2.4.2. Evacuation and Rescue Procedures
  - 2.4.3. Communication in Emergency Situations
- 2.5. Safety of Industrial Processes
  - 2.5.1. Risk Analysis in Industrial Processes
  - 2.5.2. Risk Control in Industrial Operations
  - 2.5.3. Process Change Management

- 2.6. Incident Investigation and Analysis Techniques
  - 2.6.1. Incident Investigation Techniques
  - 2.6.2. Root Cause Analysis
  - 2.6.3. Incident Logging to Generate Databases
- 2.7. Lessons Learned and Training in Industrial Safety
  - 2.7.1. Preparation of Lessons Learned and Dissemination
  - 2.7.2. Safety Committees
  - 2.7.3. Training and Awareness Plan
- 2.8. Safety Management Audits and Assessment
  - 2.8.1. Types of Audits and Management Assessments
  - 2.8.2. Security Management Audit and Assessment Methodologies
  - 2.8.3. Reports and Recommendations
- 2.9. Security Technologies and Tools
  - 2.9.1. Statistical Analysis Tools
  - 2.9.2. Fire Protection Technologies
  - 2.9.3. Surveillance Systems and the Use of Artificial Intelligence
- 2.10. Management of Continuous Improvement in Security Management
  - 2.10.1. Evaluation of Results and Comparison with Objectives
  - 2.10.2. Design of Corrective Actions to Adjust Safety Management
  - 2.10.3. Updating Objectives and Procedures Based on Historical Statistical Data

## Module 3. Environmental Management in Industry

- 3.1. Environmental Management in Industry
  - 3.1.1. Environmental Management in Industry
  - 3.1.2. Importance of Environmental Management in Industry: Benefits and Responsibilities
  - 3.1.3. Preventive vs. Corrective Approach in Environmental Management: Advantages and Limitations
- 3.2. Identification and Evaluation of Environmental Aspects and Impacts
  - 3.2.1. Methods for Identification of Environmental Aspects and Impacts: Tools and Techniques
  - 3.2.2. Evaluation of the Significance of Impacts: Matrices and Evaluation Criteria
  - 3.2.3. Types of Environmental Impact Studies: Structure and Objectives
  - 3.2.4. Strategies to Mitigate Negative Environmental Impacts: Best Practices and Technologies



- 3.3. Environmental Management Systems (EMS)
  - 3.3.1. Environmental Policies and Objectives in Companies
  - 3.3.2. Environmental Management Systems (EMS): Structure, Objectives and Benefits
  - 3.3.3. Environmental Procedures and Protocols in Companies
- 3.4. Implementation of an Environmental Management System (EMS) in Industry
  - 3.4.1. Planning and Implementation of an EMS: Scope and Environmental Policies
  - 3.4.2. Matrices of Aspects and Impacts and Their Relevance within the EMS
  - 3.4.3. Documentation and Process Control in the EMS: Manuals, Procedures and Records
- 3.5. Integration of an Environmental Management System (EMS) with Other Management Systems
  - 3.5.1. ISO001 (Quality) and OHSAS 18001/ISO 45001 (Occupational Health and Safety): Benefits of Integration
  - 3.5.2. Synergies between Environmental Management and Energy Efficiency (ISO 50001)
  - 3.5.3. Examples of Successful Integration of Management Systems in Industry: Case Studies
- 3.6. Environmental Performance Assessment
  - 3.6.1. Environmental Key Performance Indicators (KPIs): Definition, Tracking and Reporting
  - 3.6.2. Performance Monitoring and Measurement Tools: Software and Emerging Technologies
  - 3.6.3. Conformity Assessment and Management Review: Alignment with Strategic Objectives
- 3.7. Waste and Effluent Management and Resources in the Framework of an Environmental Management System (EMS)
  - 3.7.1. Waste and Effluent Minimization and Management Strategies: Implementation of Best Practices
  - 3.7.2. Efficient Water and Energy Management within the EMS: Consumption Reduction and Optimization
  - 3.7.3. Circular Economy and Its Integration into the EMS: Cleaner Production and Recycling
- 3.8. Environmental Emergency Management in Industry
  - 3.8.1. Environmental Emergency Response Planning
  - 3.8.2. Environmental Emergency Response Procedure
  - 3.8.3. Internal and External Communication of Environmental Emergencies





- 3.9. Corporate Social Responsibility (CSR)
  - 3.9.1. Staff Training and Environmental Awareness: Ongoing Training Programs
  - 3.9.2. Internal and External Communication of Environmental Performance: Sustainability and Transparency Reports
  - 3.9.3. Stakeholder Engagement and Corporate Social Responsibility (CSR)
  - 3.9.4. Environmental Management as Part of CSR. Integration into Corporate Strategy
  - 3.9.5. Communication and Sustainability Reporting. Transparency and Stakeholder Relations
    - 3.9.5.1. Success Stories in Industry. Examples of Companies with Good Practices in Environmental Management and CSR
- 3.10. Future of Environmental Management and Environmental Management Systems (EMS)
  - 3.10.1. Emerging Trends in Sustainability and Environmental Management: Innovations and Future Challenges
  - 3.10.2. Evolution of Standards and Regulations: Expected Changes in ISO 14001 and Others
  - 3.10.3. The Role of Digitalization in Environmental Management: Industry 4.0 and Sustainability

#### Module 4. Integrated Safety and Environmental Management Systems

- 4.1. Safety and Environment Integrated Management Systems (IMS)
  - 4.1.1. Integrated Management Systems (IMS)
  - 4.1.2. Integrated Management. Advantages and Disadvantages
  - 4.1.3. Importance of Senior Management's Commitment to the IMS
- 4.2. Conceptual Framework ISO 45001
  - 4.2.1. ISO 45001 Standard
  - 4.2.2. Benefits of Implementation
  - 4.2.3. Legal Requirements
- 4.3. Planning and Preparation for ISO 45001
  - 4.3.1. Organizational Culture Analysis. Identification of the Organization's Needs and Expectations
  - 4.3.2. Development of the Occupational Health and Safety Policy. Establishment of Objectives and Goals
  - 4.3.3. Development of Procedures, Instructions and Records
- 4.4. Implementation and Maintenance of ISO 45001
  - 4.4.1. Risk Assessment and Implementation of Control Measures
  - 4.4.2. Training and Awareness Plan
  - 4.4.3. Identification of Improvement Opportunities
- 4.5. Conceptual Framework of ISO 14001
  - 4.5.1. ISO 14001 Standard
  - 4.5.2. Benefits of Implementation
  - 4.5.3. Legal Requirements
- 4.6. Planning and Preparation for ISO 14001
  - 4.6.1. Initial Assessment of the Environmental Management System. Establishment of Environmental Policy
  - 4.6.2. Establishment of Environmental Objectives and Targets
  - 4.6.3. Development of Procedures, Instructions and Records
- 4.7. Implementation and Maintenance of ISO 14001
  - 4.7.1. Identification of Significant Environmental Aspects and Assessment of Environmental Impacts
  - 4.7.2. Establishment of Environmental Performance Indicators
  - 4.7.3. Implementation of Control Measures for Significant Environmental Aspects
- 4.8. Integrated Management System (IMS)
  - 4.8.1. Integration of Safety and Environmental Management Systems
  - 4.8.2. Development of an Integrated Management System
  - 4.8.3. Implementation and Maintenance of an IMS
- 4.9. Continuous Improvement Process in the Integrated Management System (IMS)
  - 4.9.1. Continuous Improvement Framework
  - 4.9.2. Development of Continuous Improvement Plans
  - 4.9.3. Continuous Improvement Framework
- 4.10. Safety and Environmental Audits and Reviews
  - 4.10.1. Planning and Execution of Internal Audits
  - 4.10.2. Review and Evaluation of IMS Effectiveness
  - 4.10.3. Development of Corrective Action Plans

04

# Teaching Objectives

This TECH program provides engineers with the necessary skills to effectively manage occupational and environmental risks in the industrial environment. Throughout this comprehensive postgraduate program, they will not only acquire a thorough mastery of international regulations, but also the most advanced tools and knowledge for the development of accident prevention strategies, and the promotion of an organizational culture based on safety and sustainability. You will also be encouraged to analyze and implement innovative practices to optimize the use of resources and improve the quality of the work environment.





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*You will develop advanced skills in industrial risk management and environmental sustainability, preparing you to lead key projects in the field of Industrial Safety”*





## General Objectives

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- ♦ Develop effective strategies for the management of occupational risks in industrial environments, ensuring the safety of workers
- ♦ Apply international industrial safety and environmental regulations, ensuring compliance with the most demanding standards
- ♦ Promote an organizational culture of safety and sustainability, incorporating practices that favor labor welfare and respect for the environment
- ♦ Implement procedures for the identification and mitigation of environmental risks in industrial processes, contributing to sustainability
- ♦ Integrate management systems that optimize occupational safety and environmental protection, aligning industrial processes with global standards
- ♦ Manage natural resources efficiently, driving the reduction of the ecological footprint in industrial operations
- ♦ Evaluate the occupational health of workers, proposing preventive and corrective measures to minimize risks and work-related illnesses
- ♦ Develop environmental policies that promote corporate social responsibility, ensuring minimal impact on the natural environment
- ♦ Implement audit and risk control systems that allow continuous monitoring of occupational and environmental safety conditions
- ♦ Ensure compliance with local and international legislation and regulations related to industrial safety and environmental management, promoting responsible practices in the industry







## Specific Objectives

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### Module 1. International Regulatory Framework for Industrial Safety and the Environment

- ♦ Have an in-depth knowledge of ISO 45001 and 14001 standards, as well as other relevant standards in specific sectors (GHS, IEC, EMAS, among others)
- ♦ Develop the ability to assess an organization's compliance with legal and regulatory requirements in safety and environmental matters
- ♦ Identify, evaluate and control occupational and environmental risks, implementing effective prevention measures
- ♦ Promote a culture of continuous improvement in organizations, proposing innovative solutions to improve safety and environmental performance

### Module 2. Safety Management in Industry

- ♦ Identify and assess the risks associated with industrial processes in order to prioritize them and make efficient use of resources for mitigation
- ♦ Apply risk assessment methods such as FMEA Develop mitigation and control plans for the main risks
- ♦ Develop procedures for the identification, evaluation and control of risks
- ♦ Design a system for recording and follow-up of incidents and accidents

### Module 3. Environmental Management in Industry

- ♦ Present the different tools that can be used to implement, maintain and strengthen the environmental management system
- ♦ Understand the complexity of environmental phenomena that imply the need for integrated, intelligent and coordinated efforts from different actors of the companies
- ♦ Incorporate a methodology to define a matrix of environmental aspects and impacts as a tool
- ♦ Identify the different procedures to mitigate negative effects and maximize positive ones

### Module 4. Integrated Safety and Environmental Management Systems

- ♦ Analyze the benefits of integrated management
- ♦ Develop an integrated management system
- ♦ Implement and maintain an Integrated Management System (IMS)
- ♦ Design and prepare internal audits to evaluate the performance of the implemented system

05

# Career Opportunities

This Postgraduate Diploma opens up a range of professional opportunities in various industrial sectors, where safety management and environmental protection are fundamental. Through the cutting-edge contents of this program, graduates will be able to work in key areas such as auditing and supervision of integrated safety and environmental management systems, as well as in the implementation of sustainability and occupational health policies.





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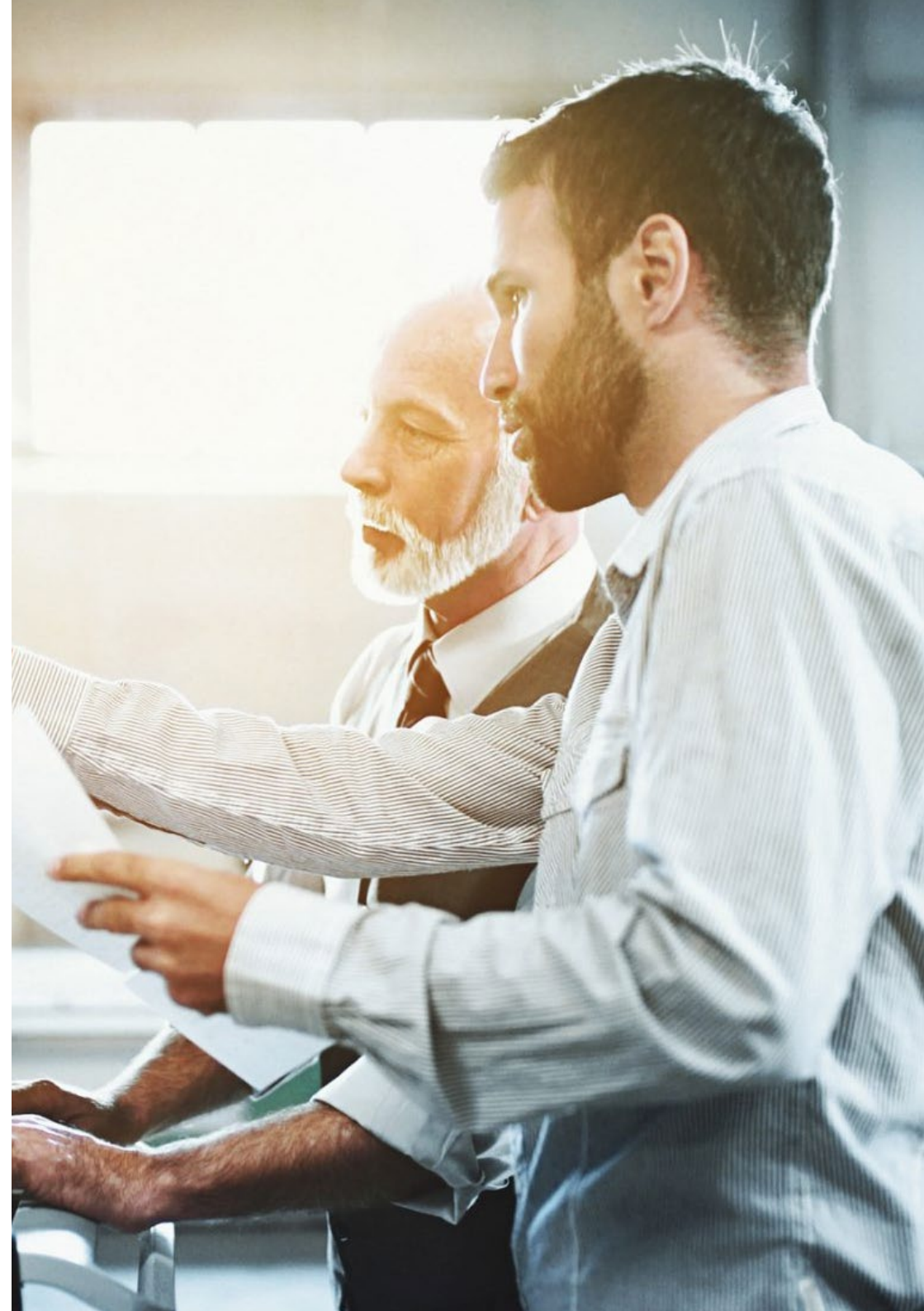
*You will be able to assume key roles in government agencies or NGOs, working in the creation of public policies that favor occupational safety and environmental sustainability”*

### Graduate Profile

Graduates of this Postgraduate Diploma will be highly trained professionals in the management of Industrial Safety and Environmental Protection, with a comprehensive approach that encompasses both occupational risk prevention and environmental sustainability. With in-depth knowledge of international regulations and management tools, they will be able to implement effective solutions to mitigate risks and optimize resources in various industrial contexts. Their profile will enable you to lead continuous improvement projects, ensure compliance with current regulations and contribute to the development of safe and sustainable work environments.

*You will strengthen your professional profile to become an expert in crisis management and industrial emergencies, handling high-risk situations effectively and safely.*

- ♦ **Risk Management and Industrial Safety:** Ability to identify, evaluate and manage occupational risks, implementing preventive strategies to ensure safety in the work environment
- ♦ **Regulatory and Legal Compliance:** Knowledge and application of national and international regulations on industrial safety and environmental protection, ensuring compliance with standards and regulations in force
- ♦ **Sustainable Resource Management:** Ability to develop and implement sustainable practices that minimize the environmental impact of industrial activities, promoting the responsible use of resources and the reduction of the environmental footprint
- ♦ **Industrial Sustainability Leadership:** Competence to lead initiatives that promote sustainable practices, energy efficiency and corporate social responsibility in organizations





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

- 1. Consultant in Industrial Safety and Environmental Management:** Responsible for advising companies on how to implement and optimize occupational safety strategies and environmental practices, ensuring compliance with international regulations.
- 2. Industrial Safety and Environmental Manager:** Manages and supervises safety and environmental activities within an organization, implementing protection and sustainability measures.
- 3. Industrial Safety and Environment Project Manager:** Leads projects related to the improvement of safety and sustainability in industries, always seeking to optimize resources and reduce risks.
- 4. Industrial Safety and Environment Auditor:** Performs internal and external audits to assess compliance with safety and environmental regulations in companies and industries.
- 5. Coordinator of Occupational Risk Prevention and Environment:** Supervises preventive and corrective activities in the field of industrial safety and environmental management within an organization.
- 6. Specialist in Integrated Safety and Environmental Management Systems:** Responsible for developing and implementing integrated systems covering both occupational safety and environmental management in industries.
- 7. Industrial Sustainability Consultant:** Advises companies on how to improve their environmental practices, optimizing the use of resources and minimizing their ecological impact.
- 8. Safety and Environmental Technician in Construction:** Responsible for supervising and ensuring compliance with safety and environmental regulations in construction projects and industrial works.



*Join now this academic itinerary that TECH has designed to broaden your skills as an engineer and offer you access to the best professional opportunities in Industrial Safety"*

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.

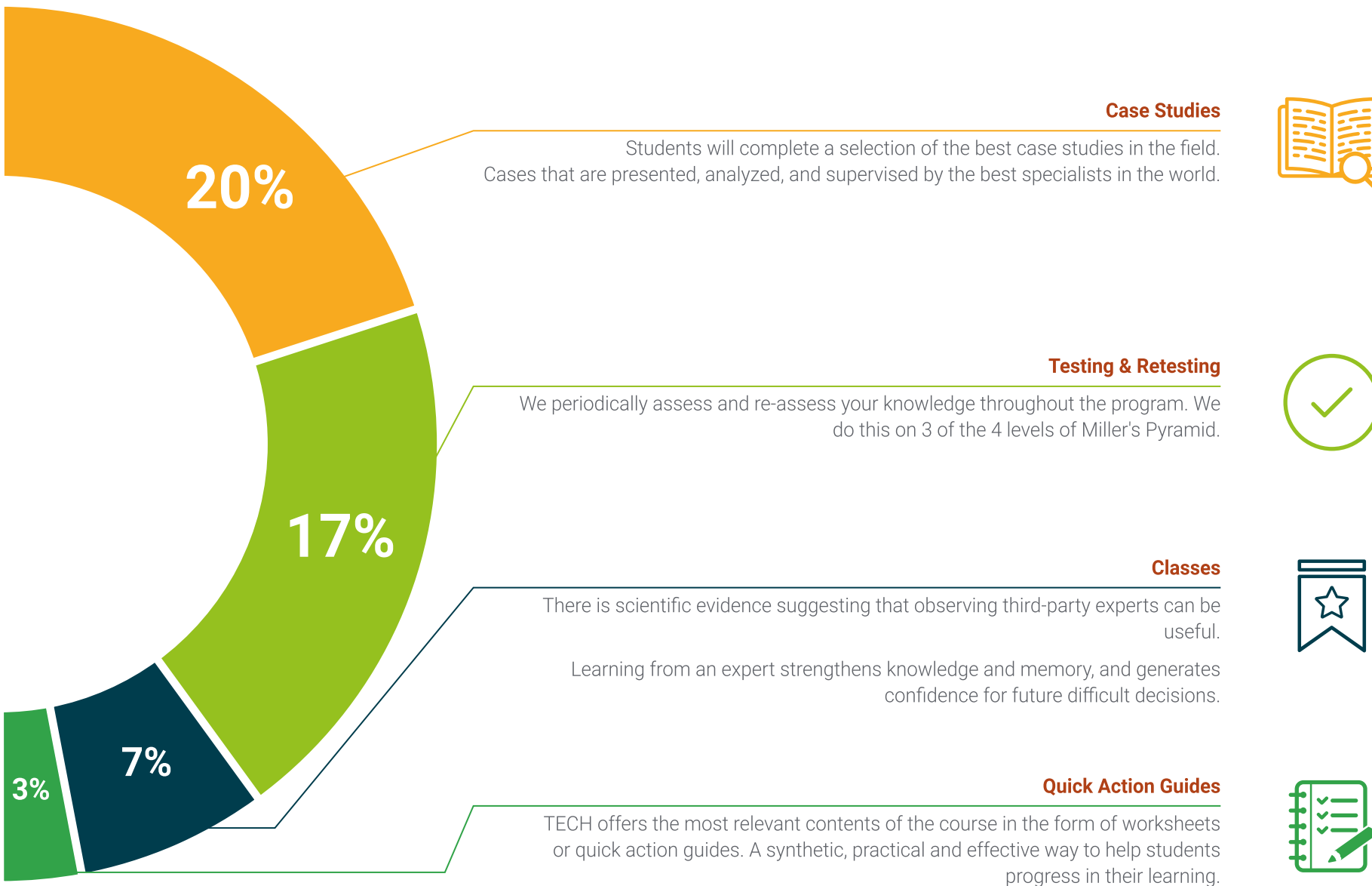
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### 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 faculty of this program is made up of highly qualified professionals with extensive experience in the field of Industrial Safety and Environmental Management. Their experience in the application of international regulations, risk management and sustainability in industrial environments, allows engineers to access the most updated contents. These professionals combine their educational work with real projects, providing a comprehensive and applied perspective that ensures the quality and relevance of learning.





“

*You will be guided by experts in international regulations and in the integral management of occupational risks, who will train you to face the challenges of the global industry with a practical vision”*

## Management



### 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

## Professors

### Mr. Barboza, Martín

- ♦ Environmental Field Supervisor at Trace Group
- ♦ Environmental Management and Training Coordinator at Techint Ingeniería y Construcción
- ♦ Environmental Supervisor at Tecpetrol S.A.
- ♦ Project Leader at Centro Ambiental y Derrames
- ♦ Degree in Environmental Engineering from the National University of Litoral
- ♦ Certified in Introduction to the ISO14001 Standard
- ♦ Expert in Environmental Impact Assessment

### Mr. Martínez Ochoa, Silvio

- ♦ Specialist in Environmental Services Contracting at YPF
- ♦ Environmental Analyst at YPF
- ♦ Process Safety and Industrial Hygiene Analyst in YPF
- ♦ Quality Incident Analyst at Renault, Argentina
- ♦ Production Quality Manager at Motos Keller
- ♦ Specialist in Quality Engineering
- ♦ Specialist in Environmental Engineering
- ♦ Degree in Industrial Engineering from the National Technological University of Cordoba
- ♦ Degree in Labor Engineering from the National Technological University of La Plata

### Mr. Larrocca Ruiz, Marcelo

- ♦ Responsible for the Sustainability Area of the Argentine Soccer Association
- ♦ Legal Advisor at Fundación Ambiente y Recursos Naturales
- ♦ Legal advisor on environmental regulations and sustainable development plans for Argentine municipalities
- ♦ Head of the agreements section of the Environmental Protection Directorate of the Argentine Naval Prefecture
- ♦ Specialist in Environmental Law from the University of Belgrano
- ♦ Law Degree from the National University of Litoral



*All teachers in this program accumulate extensive experience, offering you an innovative perspective on the main advances in this field of study"*



08

# Certificate

This Postgraduate Diploma in Industrial Safety and Environmental Management guarantees, in addition to the most rigorous and up-to-date program, access to an Postgraduate Diploma 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 Industrial Safety and Environmental Management** 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 Industrial Safety and Environmental Management**

Modality: **online**

Duration: **6 months**

Accreditation: **24 ECTS**







## Postgraduate Diploma Industrial Safety and Environmental Management

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Accreditation: 24 ECTS
- » Schedule: at your own pace
- » Exams: online

# Postgraduate Diploma

## Industrial Safety and Environmental Management