



Postgraduate Certificate Key Indicators in Industrial Safety and Environmental Management

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Accreditation: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/engineering/postgraduate-certificate/key-indicators-industrial-safety-environmental-management

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Introduction to the Program With the increase of international regulations, such as ISO 14001 and ISO 45001, organizations face the challenge of implementing sustainable practices and ensuring safe working environments, reducing their environmental impact and operational risks. Key Indicators are fundamental tools in this context, allowing to measure, control and optimize processes to meet these objectives. In this context, TECH presents an innovative program that offers engineers a comprehensive view on the design, implementation and management of Key

Indicators, enabling them to play strategic roles in the improvement of Industrial Safety and Environmental Sustainability of their organizations. All this, through a 100% online modality that will avoid them uncomfortable displacements.



tech 06 | Introduction

The management of Key Indicators in Industrial Safety and Environment is an essential area to ensure sustainability and well-being in industrial and business operations. These indicators are quantitative and qualitative tools for measuring performance, identifying risks, optimizing resources and ensuring compliance with international standards. This approach combines the protection of the working environment with the preservation of the environment, two fundamental pillars of modern business strategies. For this reason, the ability to monitor and improve aspects such as workplace safety, CO2 emissions, resource consumption and waste management has become a strategic priority for organizations seeking to adapt to the demands of today's global market.

Against this backdrop, TECH has designed this innovative program that integrates the most relevant concepts and tools for the effective management of Key Indicators in industrial environments. Throughout this program, engineers will address key topics such as the selection of relevant indicators, the design of effective dashboards, data analysis using advanced technological tools such as Big Data and Power BI, as well as the integration of KPIs in daily operational management. They will also delve into the use of international standards such as ISO 14001 and ISO 45001, the measurement of proactive and reactive indicators, and the application of these standards.

This educational itinerary is accompanied by an innovative 100% online methodology where the exclusive Relearning teaching system stands out. The latter promotes the rapid and flexible assimilation of concepts and competencies through the gradual reiteration of key concepts during each of the topics addressed. On the other hand, this study is not subject to pre-established schedules or rigid evaluation schedules. As a result, professionals will be able to establish their study routines in accordance with their other personal and/or work obligations.

This Postgraduate Certificate in Key Indicators 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 experts with a deep knowledge of international regulations, analysis of indicators and the most advanced monitoring and sustainability technologies
- 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
- Content that is accessible from any fixed or portable device with an Internet connection



You will specialize in the implementation of high impact indicators that drive continuous improvement and optimization of industrial processes"



You will implement advanced tools, from dashboards to specialized software, to optimize data collection and presentation"

The program's teaching staff includes professionals from the industry who contribute their work experience to this 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.

Thanks to the Relearning methodology, of which TECH is a pioneer, you will reduce the long hours of study and acquire effective learning in less time.

You will be immersed in advanced data analysis, using the most cuttingedge tools that enhance efficiency and accuracy in your projects.







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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 syllabus





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

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.

maximun

employability

guaranteed



The top-rated university by its students

Students have positioned TECH as the world's toprated 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.

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.

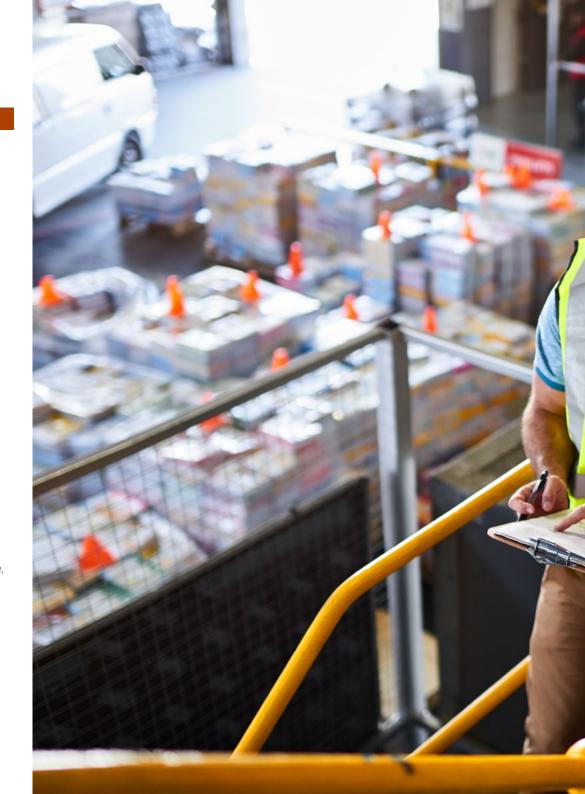


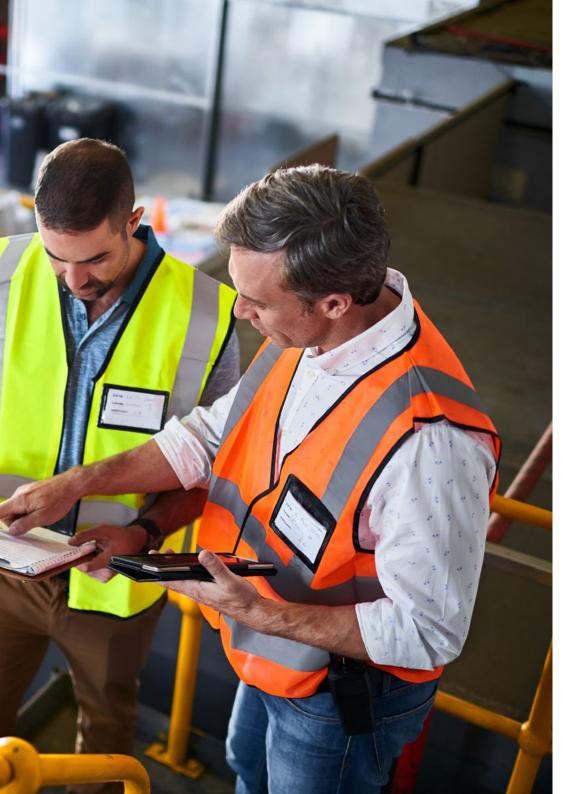


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Module 1. Indicators in Safety and Environmental Management

- 1.1. Safety and Environmental Indicators. Conceptual Framework
 - 1.1.1. Definition and Objectives of Safety and Environmental Indicators
 - 1.1.2. Types of Indicators: Quantitative, Qualitative, Leading and Lagging Indicators
 - 1.1.3. Regulatory Framework and Applicable Standards: International Norms and Standards ISO 14001, ISO 45001
- 1.2. Selection of Key Performance Indicators (KPIs)
 - 1.2.1. KPIs: Identification and Importance
 - 1.2.2. Criteria for Selecting KPIs: Relevance, Measurability, Achievability, Timing
 - 1.2.3. Examples of KPIs in Safety and Environment: Occupational Accidents, CO2 Emissions, Resource Consumption
- 1.3. Design of Effective Safety and Environment Indicators
 - 1.3.1. Characteristics of a Good Indicator: Accuracy, Clarity, Relevance
 - 1.3.2. Establishment of Targets and Thresholds: Definition of Clear Objectives for Indicators
 - 1.3.3. Designing Dashboards and Reports: How to Present Data Effectively
- 1.4. Industrial Safety Indicators
 - 1.4.1. Reactive Indicators (Lagging Indicators): Accidents, Incidents and Occupational Diseases
 - 1.4.2. Leading Indicators: Inspections, Training and Safety Audits
 - 1.4.3. Trends and Root Cause Analysis: Identifying Patterns and Preventing Accidents
- 1.5. Environmental Indicators in Industry
 - 1.5.1. Emission Indicators: Measurement of Greenhouse Gases, Particulate Contaminants, and Others
 - 1.5.2. Resource Consumption Indicators: Water, Energy, Raw Materials
 - 1.5.3. Waste Management Indicators: Recycling Rate, Generation of Hazardous Waste, among Others
 - 1.5.4. Sustainability Indicators
- 1.6. Data Sources and Information Collection
 - 1.6.1. Internal and External Data Sources: Management Systems, Regulatory Reports, Audits, etc.
 - 1.6.2. Data Collection Methods: Digital Tools, Surveys, Manual Records
 - 1.6.3. Data Validation and Consistency: How to Ensure the Quality and Reliability of Information

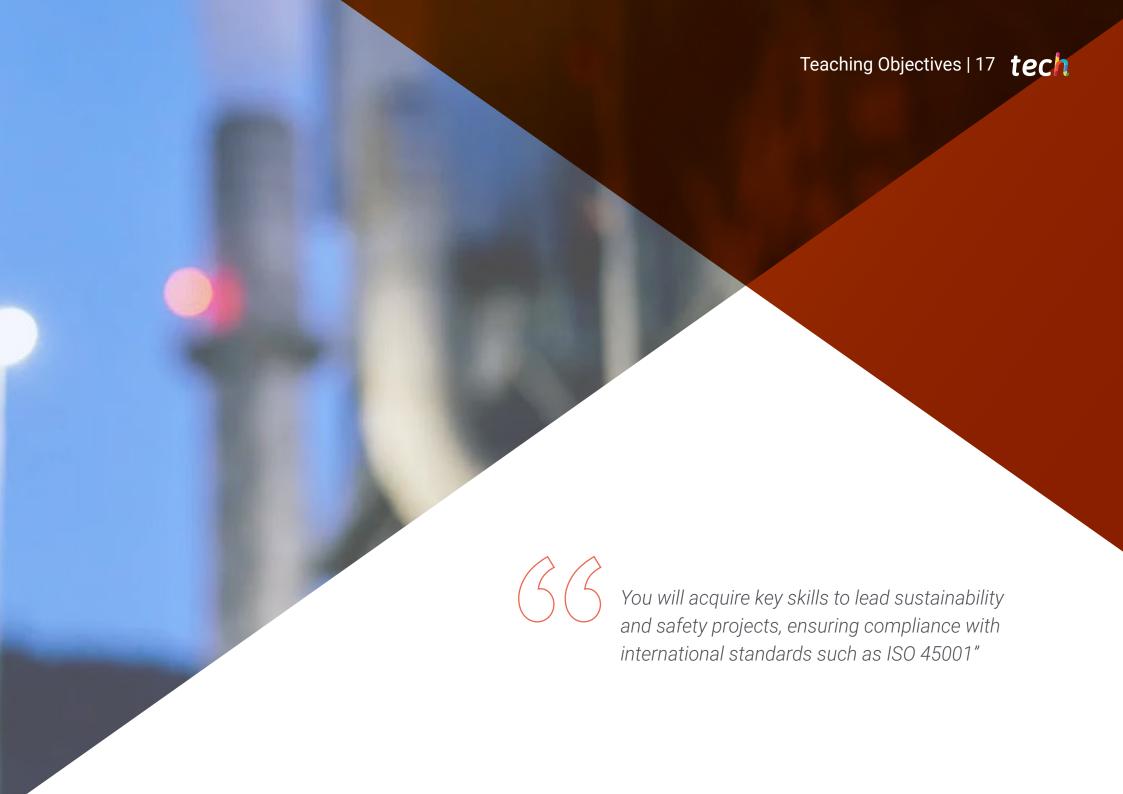




Syllabus | 15 tech

- 1.7. Analysis and Interpretation of Indicators in Industry
 - 1.7.1. Methods of Analysis: Analysis of Trends, Variability, Comparison of Indicators
 - 1.7.2. Use of Software for Indicator Analysis: Excel, Power BI, Specialized Tools
 - 1.7.3. Interpretation of Results: Translation of Data into Strategic Decisions and Actions
- 1.8. Implementation of Indicators in Industry
 - 1.8.1. Integration of Indicators in Operational Management: Incorporation of KPIs into Daily Processes
 - 1.8.2. Internal Communication of Results: Communication of Results with the Team and Management
 - 1.8.3. Adjustment and Optimization of Indicators: Adaptation of Indicators according to the Evolution of the Company
- 1.9. Indicators as Tools for Continuous Improvement in Industry
 - 1.9.1. Periodic Evaluation of Indicators: Audits and Periodic Reviews of KPIs
 - 1.9.2. Indicators for Improvement and Evolution: Use of Results to Promote Continuous Improvement
 - 1.9.3. Lessons Learned and Adjustments: Use of Indicators to Adjust Policies and Procedures
- 1.10. Future of Indicators in Safety and Environment
 - 1.10.1. New Technologies and Automation: Use of Big Data, IoT and AI in Data Collection and Analysis
 - 1.10.2. Sustainability and Circular Economy: Support of Indicators in the Transition to Sustainable Models
 - 1.10.3. Innovations and Global Trends: Contribution of Indicators in a Context of Increasing Regulation and Environmental Demands





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General Objectives

- Identify and analyze the different types of Key Performance Indicators in industrial safety and environment, according to their characteristics, classification and strategic objectives
- Understand the applicable regulatory framework, including international standards such as ISO 14001 and ISO 45001, and their relationship with indicator management
- Design effective indicators to measure and monitor performance in critical areas of safety and industrial sustainability
- Apply selection criteria for Key Indicators, ensuring their relevance, measurability and alignment with operational and strategic objectives
- Integrate advanced technological tools, such as dashboards and analytical software, for data collection, presentation and interpretation
- Establish indicator analysis methods that facilitate the detection of trends, variations and opportunities for continuous improvement
- Incorporate Indicators in the operational and strategic management of organizations, promoting decision making based on reliable data
- Explore global trends in the use of Indicators, including automation, predictive analytics and sustainability, to anticipate and address future industry challenges





Teaching Objectives | 19 tech



Specific Objectives

- Consolidate the concept of Safety and Environment indicators, their different classifications, their importance and the characteristics they should have
- Define powerful safety and environmental indicators, selecting appropriately those that add value and are relevant
- Identify and establish the necessary steps to implement a proper monitoring system
- Define key indicators in safety and environmental management and use them as a tool in an effective monitoring system to support the continuous improvement process



You will be prepared to lead initiatives that reduce risks, optimize resources and promote safer work environments. And in as little as 6 weeks!"





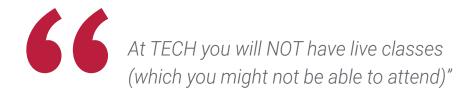
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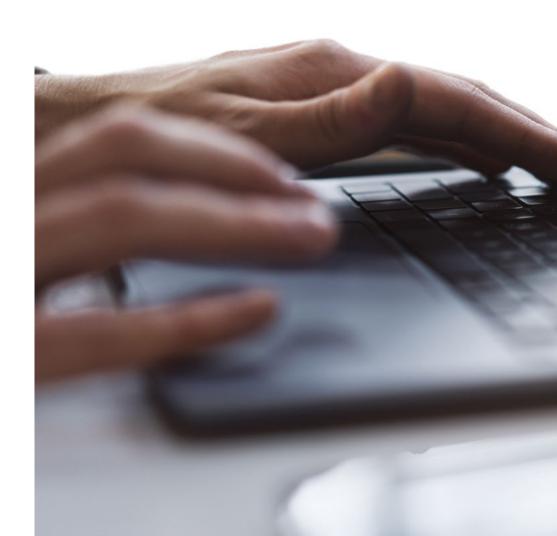
The student: the priority of all TECH programs

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.







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"

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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.



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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.

Study Methodology | 27 tech

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.

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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

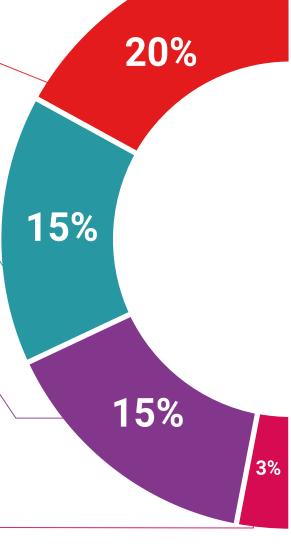
You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



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

the field. he world.

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



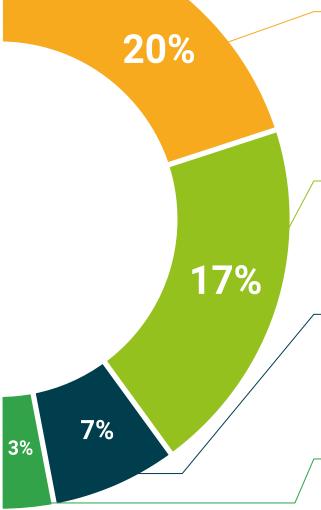
There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an expert strengthens knowledge and memory, and generates confidence for future difficult decisions.

Quick Action Guides

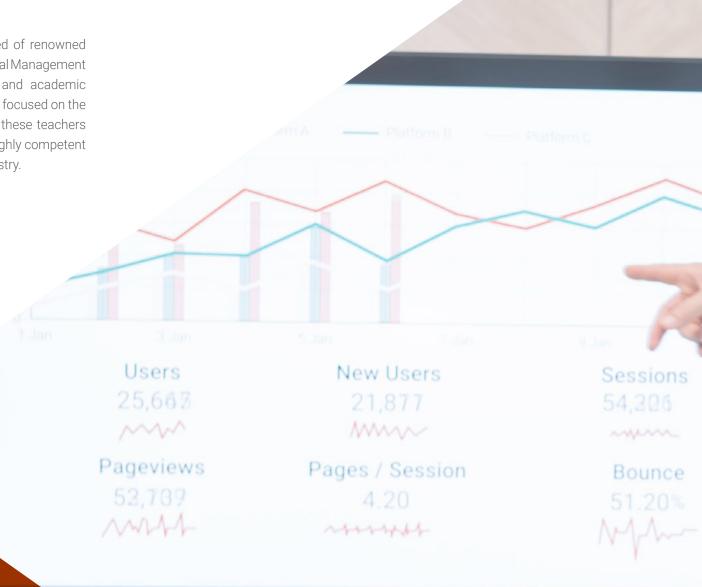


TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.



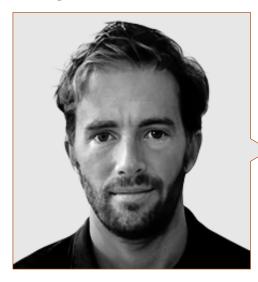
06Teaching Staff

The teaching staff of this Postgraduate Certificate is composed of renowned experts with extensive experience in Industrial Safety, Environmental Management and indicator analysis. Thanks to their practical experience and academic knowledge, they guarantee a comprehensive, up-to-date teaching focused on the real needs of the sector. With an innovation-oriented approach, these teachers bring international perspectives and advanced tools to prepare highly competent professionals capable of meeting the challenges of modern industry.





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. Peña Vidal, José Alberto

- Environmental Consultant Specializing in Sanitation Projects
- Responsible for Environmental Safety at Construction Sites in Trans Electronic Industries
- Drinking Water and Sanitation Works Inspector at the Secretariat of Water and Sanitation of the Ministry of Infrastructure and Transportation of Argentina
- Environmental Site Manager at NEOCON S.A.
- Specialized Technician in the Environmental Management Department at Aguas Santafesinas S.A.
- Specialization in Sanitary Engineering from the National University of Rosario
- Degree in Environmental Engineering from the National University of Litoral



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





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This private qualification will allow you to obtain a diploma for the **Postgraduate Certificate in Key Indicators 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 Certificate in Key Indicators in Industrial Safety and Environmental Management

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



Mr./Ms. _____, with identification document _____ has successfully passed and obtained the title of:

Postgraduate Certificate in Key Indicators in Industrial Safety and Environmental Management

This is a private qualification of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



^{*}Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.



Postgraduate Certificate Key Indicators in Industrial Safety and Environmental Management

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