

Postgraduate Diploma Industrial Quality and Safety





Postgraduate Diploma Industrial Quality and Safety

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

Website: www.techtute.com/us/engineering/postgraduate-diploma/postgraduate-diploma-industrial-quality-safety

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Methodology

p. 22

06

Certificate

p. 30

01

Introduction

Quality and safety is a primary factor in industrial processes, and it serves the purpose of guaranteeing the protection of people, their surroundings and the environment. In countries with advanced industrial sectors, it is an aspect of special attention within the framework of process standardization and accreditation. That is why this program proposes an in-depth study of the subject, to provide professionals with the most updated knowledge; with a teaching methodology 100% online, and based on Relearning, which facilitates the learning process to obtain the degree in only six months.





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Identifying the fundamental aspects of current Industrial Quality and Safety regulations is basic in production processes, with this program you will learn it”

Quality and safety translate into the generation of trust in any environment. In an industrial context, it is necessary to properly use quality assurance tools to generate confidence in the performance of the organization. Understanding the rules and regulations and having updated knowledge in terms of legality and process management is part of what the profile of today's worker must have.

This program proposes to analyze, control and make decisions for the continuous improvement of industrial processes. It will also take into account the behavior of the organization and the intervention criteria for the efficient resolution of crisis situations, as part of the effective management in productive environments and the handling of techniques oriented to efficient management.

The program will delve deep into understanding corporate social responsibility, managing company reputation, mastering negotiation in organizational environments to achieve efficient results and carrying out brand strategies, as well as taking care of all aspects of quality and occupational and industrial safety.

For that purpose, this refresher program has been structured into three modules of specialized topics in quality management, labor and industrial safety and crisis management in organizations. Graduates will be able to apply efficient models and integrated systems in their executions. A total of 450 hours of learning based on an innovative and cutting-edge methodology known as *Relearning* and 100% **online** powered by TECH, which has revolutionized the foundations of the current university environment.

This **Postgraduate Diploma in Industrial Quality and Safety** contains the most complete and up-to-date educational program on the market. Its most notable features are:

- ◆ Case studies presented by experts in Industrial Engineering
- ◆ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ◆ Practical exercises where 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



With this program, you will understand how quality management systems function within organizations”

“

Thanks to the knowledge acquired in this program, you will generate occupational safety and prevention plans, according to the risks associated with the company and its production processes”

The program's teaching staff includes professionals from the sector who contribute their work experience to this training 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 training programmed to train 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 academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

Apply continuous improvement methodologies to quality management in your organizational environment.

Study 100% online and from the comfort of your favorite device, wherever you are.



02

Objectives

With the purpose of training today's professionals towards more demanding production environments for the future, this program provides students with the necessary knowledge in quality management and industrial safety. Being an indispensable component in the organizational environment to achieve the confidence and optimal results required. For that purpose TECH has compiled multiple teaching resources with the most advanced technology and study methodology, and the most exclusive content in the current online university environment.





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Today's professionals must be the drive behind strength and profitability in industry; with this Postgraduate Diploma you will be trained to do so”



General Objectives

- ◆ Understand company functions and the elements involved
- ◆ Understand new in company production designs, considering sustainability and product life cycle
- ◆ Comply with regulatory policies in terms of quality and industrial safety
- ◆ Undertake production processes based on quality and problem solving
- ◆ Understand the importance of planning within production processes, production units work dynamics and function interactions
- ◆ Analyze industrial organization needs to design maintenance plans adjusted to current and future contexts
- ◆ Know new business models in entrepreneurship, its components and different value propositions
- ◆ Understand the importance of creativity and innovation in business approaches
- ◆ Analyze the different tools to promote entrepreneurship in the digital era
- ◆ Delve deeper into the operation of logistics and distribution management systems
- ◆ Analyze the influence of information systems on supply chains
- ◆ Understand the methodologies in business project management processes
- ◆ Delve deeper into the prevention of occupational accidents within industrial plants or work sites, the risks and legal frameworks to which to adapt
- ◆ Understand the different organizational strategies to follow to respond to critical situations in the company





Specific Objectives

Module 1. Quality Management

- ◆ Identify the fundamental aspects of current regulations on quality and industrial safety
- ◆ Identify the main characteristics of the different Quality Management models
- ◆ Apply quality management models in specific industrial environments
- ◆ Analyze quality management from an integral vision of the process
- ◆ Know how to properly use quality assurance tools
- ◆ Plan locality management processes in real contexts
- ◆ Analyze, control and make decisions to continuously improve industrial processes
- ◆ Identify and select process improvement and quality problem solving methods

Module 2. Occupational and Industrial Safety

- ◆ Comply with current regulations and have the minimum documentation required to develop a correct prevention management system
- ◆ Analyze the operational management in occupational risk prevention to carry out effective risk prevention management
- ◆ Elaborate adequate hazard identification and risk assessment in occupational health and safety
- ◆ Focus the occupational risk prevention management system to minimize occupational accidents and to prioritize constant improvement

Module 3. Crisis Management in Organizations

- ◆ Identify different crisis situations in the company and their implications
- ◆ Analyze organization behavior and intervention criteria to efficiently resolve crisis situations
- ◆ Identify the most appropriate techniques to deal with crisis or risk situations using efficient management techniques
- ◆ Formulate communication and negotiation strategies that allow for adaptive and strategic leadership
- ◆ Design positive negotiation and crisis communication management processes for proposed cases



With this program you will manage and direct projects in the field of Industrial Organization Engineering. Enroll now"

03

Course Management

This academic program includes the most specialized teaching staff in the current educational market. They are specialists selected by TECH to develop the whole syllabus. In this way, starting from their own existence and the latest evidence, they have designed the most up-to-date content that provides a guarantee of quality in such a relevant subject.



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TECH offers the most specialized teaching staff in the field of study. Enroll now and enjoy the quality you deserve”

International Guest Director

Mohit Ahuja is a strategic leader with more than two decades of experience in **operations management, organizational transformation** and continuous improvement across diverse industries. In fact, his focus is on **optimizing supply chains**, improving **operational efficiency** and implementing transformational changes that directly impact **revenue growth** and long-term **sustainability** of companies. In addition, his ability to **manage multi-million dollar initiatives** and his ability to **generate tangible results** have brought value to the organizations in which he has worked.

As such, he has held leadership roles in major global companies. At **Caterpillar Inc.** he has served as **Strategy and Transformation Leader**, where he designed and executed strategies for a **business unit** with annual revenues of \$3.8 billion, achieving significant improvements in **operational efficiency** and **financial results**. In turn, at **Biogen** he has held the role of Operations and Systems Improvement Leader, leading **Operational Excellence** teams and aligning **functional strategies with corporate objectives**.

Likewise, he has been an international reference in the implementation of **Lean methodologies, Six Sigma** and other advanced continuous improvement practices. His ability to lead complex programs and manage **multicultural teams** has made him a trusted **advisor** in the **operational transformation** of large organizations. He has also been recognized with several **awards** and **citations** for his contributions to the success of companies.

In addition to his corporate work, he has dedicated time to **mentoring**, sharing his expertise in **cultural change management** and **Operational Excellence**. As such, through his focus on **coaching**, he has helped develop new generations of leaders who successfully apply best practices in their respective industries.



Mr. Ahuja, Mohit

- Strategy and Transformation Leader at Caterpillar Inc, Illinois, United States
- Operations and Systems Improvement Leader at Biogen, Inc.
- Continuous Improvement Leader at Caterpillar Inc.
- NPI Program Manager at Ali Group
- Change Management Leader at ITW Food Equipment Group
- Master of Business Administration (MBA), Global Strategy and Innovation Management
- Master of Science, Aerospace, Aeronautical and Astronautical Engineering, University of Cincinnati

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

04

Structure and Content

TECH has designed this refresher program aimed at professionals in industrial sectors who wish to specialize in the area of quality and safety. Structured into three modules, each with specific content, which has been distributed in a variety of written and audiovisual formats, so professionals can acquire specialized knowledge in a dynamic and comfortable way. Thanks to an efficient and innovative methodology based on Relearning and 100% online, you will advance in a training program adapted to your present.





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Scientific evidence indicates that repetition is the best way to learn. TECH implements Relearning as a 100% online study methodology”

Module 1. Quality Management

- 1.1. Total Quality
 - 1.1.1. Total Quality Management
 - 1.1.2. External and Internal Customers
 - 1.1.3. Quality Costs
 - 1.1.4. Continuous Improvement and the Deming Philosophy
- 1.2. ISO 9001:15 Quality Management System
 - 1.2.1. ISO 9001:15 Quality Management 7 Principle
 - 1.2.2. Process Approach
 - 1.2.3. ISO 9001: 9001 Requirements
 - 1.2.4. Implementation Stages and Recommendations
 - 1.2.5. Deployment Objectives in a Hoshin-Kanri-type Model
 - 1.2.6. Audit Certification
- 1.3. Integrated Management Systems
 - 1.3.1. Environmental Management Systems: ISO Business School 14000
 - 1.3.2. Occupational Risk Management System: ISO Business School 45001
 - 1.3.3. Integrating Management Systems
- 1.4. Excellence in Management: EFQM Model
 - 1.4.1. EFQM Model: Principles and Fundamentals
 - 1.4.2. New EFQM Model Criteria
 - 1.4.3. EFQM Diagnostic Tool: REDER Matrices
- 1.5. Quality Tools
 - 1.5.1. Basic Tools
 - 1.5.2. Statistical Process Control (SPC)
 - 1.5.3. Control Plan and Guidelines for Product Quality Management
- 1.6. Advanced Tools and Troubleshooting Tools
 - 1.6.1. FMEA
 - 1.6.2. 8D Report
 - 1.6.3. Five Whys
 - 1.6.4. 5W + 2H
 - 1.6.5. *Benchmarking*
- 1.7. Continuous Improvement Methodology I: PDCA
 - 1.7.1. PDCA Cycle and Stages
 - 1.7.2. Applying PDCA Cycle to *Lean Manufacturing Development*
 - 1.7.3. Keys to Success in PDCA Projects
- 1.8. Continuous Improvement Methodology II: *Six Sigma*
 - 1.8.1. *Six Sigma* Description
 - 1.8.2. *Six Sigma* Principles
 - 1.8.3. *Six Sigma* Project Selection
 - 1.8.4. *Six Sigma* Project Stages: DMAIC Methodology
 - 1.8.5. *Six Sigma* Roles
 - 1.8.6. *Six Sigma* and *Lean Manufacturing*
- 1.9. Quality Suppliers: Audits Trials and Laboratory
 - 1.9.1. Reception Quality: Agreed Quality
 - 1.9.2. Management System Internal Audits
 - 1.9.3. Product and Process Audits
 - 1.9.4. Phases to Doing Audits
 - 1.9.5. Auditor Profile
 - 1.9.6. Testing, Laboratory and Metrology
- 1.10. Organization Aspects in Quality Management
 - 1.10.1. The Role of Administration in Quality Management
 - 1.10.2. Quality Area Organization and the Relationship with Other Areas
 - 1.10.3. Quality Circles

Module 2. Occupational and Industrial Safety

- 2.1. Work and Health: Occupational Hazards: Risk factors
 - 2.1.1. Prevention Management
 - 2.1.2. The Work
 - 2.1.3. Professionals Health
 - 2.1.4. Risk Factors Inherent to Work
 - 2.1.5. Influence of Working Conditions on Prevention Management
 - 2.1.6. Prevention Techniques and Protection Techniques
 - 2.1.7. Personal Protective Equipment: Functions, Usefulness and Selection for Each Occupational Activity
- 2.2. Damages Derived from Work: Occupational Accidents and Occupational Diseases
 - 2.2.1. Health damages: Occupational Accidents and Professional Diseases
 - 2.2.2. Occupational Accidents Types
 - 2.2.3. Accident/Incident Ratio Rule
 - 2.2.4. Occupational Accident Repercussions
 - 2.2.5. Professional Diseases: How to Face them Equitably and Sustainably
- 2.3. Public Bodies Related to Occupational Safety and Health
 - 2.3.1. Public Agencies
 - 2.3.2. European Agencies
 - 2.3.3. National Agencies
- 2.4. Risks Associated with the Workplace Environment: How to Minimize Them
 - 2.4.1. Ionizing Radiation
 - 2.4.2. Electrical and Magnetic Fields
 - 2.4.3. Optical Radiation
- 2.5. Risks Associated with Psycho-sociology Applied to Work: How to Minimize Them
 - 2.5.1. Work Content, Load, Pace and Time
 - 2.5.2. Work Activity Participation and Control
 - 2.5.3. Organizational Culture: Influence on Risk Management and Prevention

Module 3. Crisis Management in Organizations

- 3.1. Organizational Design
 - 3.1.1. Concept of Organizational Design
 - 3.1.2. Organizational Structures
 - 3.1.3. Types of Organizational Design
- 3.2. Organizational Structure
 - 3.2.1. Main Coordination Mechanisms
 - 3.2.2. Departments and Organization Charts
 - 3.2.3. Authority and Responsibility
 - 3.2.4. *Empowerment*
- 3.3. Corporate Social Responsibility
 - 3.3.1. Social Commitment
 - 3.3.2. Sustainable Organizations
 - 3.3.3. Ethics in Organizations
- 3.4. Social Responsibility in Organizations
 - 3.4.1. RSC Management in Organizations
 - 3.4.2. RSC Applied to Employees
 - 3.4.3. Sustainable Action
- 3.5. Reputation Management
 - 3.5.1. Corporative Reputation Management
 - 3.5.2. Focus on Brand Reputation
 - 3.5.3. Leadership Reputation Management
- 3.6. Reputation Risk and Crisis Management
 - 3.6.1. Listening to and Managing Feedback
 - 3.6.2. Procedures, Crisis Manual and Contingency Plans
 - 3.6.3. Spokesperson Training in Emergency Situations
- 3.7. Conflict in Organizations
 - 3.7.1. Interpersonal Conflicts
 - 3.7.2. Conflict Conditions
 - 3.7.3. Conflict Consequences

- 3.8. *Lobbies and Pressure Groups*
 - 3.8.1. Opinion Groups and Their Actions in Businesses and Institutions
 - 3.8.2. Institutional Relations and *Lobbying*
 - 3.8.3. Areas of Intervention, Regulatory Instruments, Diffusion Strategies and Media
- 3.9. Negotiation
 - 3.9.1. Intercultural Negotiation
 - 3.9.2. Negotiation Focuses
 - 3.9.3. Effective Negotiation Techniques
 - 3.9.4. Restructuring
- 3.10. Corporate Brand Strategy
 - 3.10.1. Public Image and *Stakeholders*
 - 3.10.2. *Corporate Branding* Strategy and Management
 - 3.10.3. Corporate Communication Strategy in Line with Brand Identity





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*Enroll now and learn all about
Industrial Quality and Safety in an
easy and efficient way”*

05

Methodology

This training program offers a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





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Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

Our program offers a revolutionary method of skills and knowledge development. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

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At TECH, you will experience a way of learning that is shaking the foundations of traditional universities around the world”



We are the first online university to combine Harvard Business School case studies with a 100% online learning system based on repetition.



A learning method that is different and innovative.

This intensive Engineering program at TECH Global University prepares you to face all the challenges in this field, both nationally and internationally. We are committed to promoting your personal and professional growth, the best way to strive for success, that is why at TECH Global University you will use Harvard case studies, with which we have a strategic agreement that allows us, to offer you material from the best university in the world.

“ *Our program prepares you to face new challenges in uncertain environments and achieve success in your career”*

The student will learn, through collaborative activities and real cases, how to solve complex situations in real business environments.

The case method is the most widely used learning system by the best faculties in the world. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question that you are presented with in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases.

They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

Relearning Methodology

TECH is the first university in the world to combine Harvard University case studies with a 100% online learning system based on repetition, which combines 8 different didactic elements in each lesson.

We enhance Harvard case studies with the best 100% online teaching method: Relearning.

In 2019, we obtained the best learning results of all online universities in the world.

At TECH, you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our university is the only university in the world authorized to employ this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

This methodology has trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, and financial markets and instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.



This program offers the best educational material, prepared with professionals in mind:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



Classes

There is scientific evidence suggesting that observing third-party experts can be useful. Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



Practising Skills and Abilities

They will carry out activities to develop specific competencies and skills in each thematic area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization we live in.



Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Case Studies

They will complete a selection of the best case studies in the field used at Harvard. Cases that are presented, analyzed, and supervised by the best senior management specialists in the world.



Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive multimedia content presentation training Exclusive system was awarded by Microsoft as a "European Success Story".



Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises: so that they can see how they are achieving your goals.



06

Certificate

The Postgraduate Diploma in Industrial Quality and Safety guarantees, in addition to the most rigorous and updated training, access to a qualification issued by TECH Global University.



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Successfully complete this training program and receive your certificate without travel or laborious paperwork”

This program will allow you to obtain your **Postgraduate Diploma in Industrial Quality and Safety** 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** title 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 Quality and Safety**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**



future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present quality
development languages
virtual classroom



Postgraduate Diploma Industrial Quality and Safety

- » Modality: online
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