

# Postgraduate Certificate

Risks in Occupational Activity:  
Regulations,  
Factors Involved,  
Detection and Control





## Postgraduate Certificate

### Risks in Occupational Activity: Regulations, Factors Involved, Detection and Control

Course Modality: **Online**

Duration: **6 weeks**

Certificate: **TECH - Technological University**

**6 ECTS Credits**

Teaching Hours: **150 hours.**

Website: [www.techtitute.com/medicine/postgraduate-certificate/risks-occupational-activity-regulations-factors-involved-detection-control](http://www.techtitute.com/medicine/postgraduate-certificate/risks-occupational-activity-regulations-factors-involved-detection-control)

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# 01

# Introduction

Determining the possible risks in a job is fundamental to be able to prevent potential accidents. However, this requires specialized professionals who are able to evaluate each space and carry out preventive measures. In this course we offer everything you need to know about this field in order to successfully develop in your profession.







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*Don't miss the opportunity to specialize in this exciting field with which you can improve your performance in your daily work and improve yourself personally and professionally"*

In this course we offer you the most up-to-date information on the detection, evaluation and control measures of risks related to occupational safety (fire and explosion risk, electrical and mechanical risk) and those related to industrial hygiene (noise, vibration, thermal environment, lighting, ionizing and non-ionizing radiation, chemical and biological risk). The objective is to provide you with the most advanced knowledge so that you are up to date with the regulations and the main technical aspects, so that you can apply them to your daily practice.

In this course a specific topic is dedicated to the management of industrial waste given its relation to chemical risks. In addition, we cover the emerging risks in the field. The objective is to acquire advanced skills in this area that has so many implications for both the individual and society.

In addition to the theoretical content, this course contains practical cases in which the student is expected to be able to apply the knowledge to possible situations that occur in professional practice. In this way, the student, from the new knowledge acquired and the practical skills gained, will have the necessary tools to develop in the field of occupational health with guaranteed quality prevention and care.

In addition, this course has the advantage of being developed in a 100% online format, so students will be in charge of deciding when and where to study, distributing their study hours to suit them, so that they can combine their studying with the rest of their daily commitments.

This **Postgraduate Course in Occupational Activity: Regulations, Factors Involved, Detection and Control** contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- ♦ Practical cases presented by experts in occupational medicine.
- ♦ The graphic, schematic, and eminently practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional practice.
- ♦ Updates on occupational health and safety.
- ♦ Practical exercises where self-assessment can be used to improve learning.
- ♦ Emphasis on innovative methodologies in Occupational Medicine and Health.
- ♦ 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



*We offer you a complete Postgraduate Certificate to help you develop in the field of occupational health” Don’t think twice and enrol with us”*

“

*This course is the best investment you can make when choosing a refresher programme to update your existing knowledge of Occupational Medicine"*

The teaching staff includes medical professionals who bring their 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 an immersive training experience designed to train for real-life situations.

This program is designed around Problem Based Learning, where the medical professional must try to solve the different professional practice situations that arise during the course. To do so, the specialist will be assisted by an innovative interactive video system created by renowned and experienced experts in Occupational Medicine.

*We offer you an interactive video system which makes it easier for you to study this course.*

*Our 100% online training and our original educational methodology allow you to combine your studies with your other daily commitments.*



# 02

# Objectives

The main objective of the program is the development of theoretical and practical learning, so that the physician can master in a practical and rigorous way the tasks of Occupational Health and Safety.







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*Our main objective is to help our students to achieve academic and professional excellence”*



## General Objectives

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- Have sufficient knowledge to provide a basis or opportunity for originality in the development and/or application of ideas, often in a research context.
- Apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study.
- Be able to integrate knowledge and face the complexity of making judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments.
- Communicate its conclusions and the ultimate knowledge and rationale behind them to specialized and non-specialized audiences in a clear and unambiguous manner.
- Manage the learning skills that will enable them to continue studying in a largely self-directed or autonomous manner.



*Be trained for success with this course that will help you develop in the field of occupational health and workplace safety”*





## Specific Objectives

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- ◆ Enable the student to detect, evaluate and control fire and explosion hazards in a practical way
- ◆ Train the student to detect, evaluate and control the risks of electrical accidents in a practical way
- ◆ Enable the student to detect, evaluate and control risks related to the use of machines and tools in a practical way
- ◆ Enable the student to practically detect, assess and control the risks associated with exposure to noise and vibration.
- ◆ Enable the student to practically detect, evaluate and control the risks derived from the thermal environment.
- ◆ Enable the student to practically detect, evaluate and control the risks associated with radiation exposure.
- ◆ Enable the student to practically detect, evaluate and control chemical risks
- ◆ Enable the student to detect, evaluate and control biological risks in a practical way
- ◆ Train the student to detect, evaluate and control psychosocial risks in a practical way
- ◆ Enable the student to carry out, in a practical way, the correct management of industrial waste
- ◆ Enable the student to detect, evaluate and control emerging risks in a practical way



03

# Course Management

The program's teaching staff includes leading experts in Occupational Medicine, who bring years of their own work experience to this programme. Additionally, other recognized experts participate in its design and preparation, completing the program in an interdisciplinary manner.





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*The leading professionals in the field have come together to offer you the most comprehensive knowledge in this field, so that you can develop with total guarantees of success”*



## Management



### **Dr. Ditolvi Vera, Nilo Giancarlo**

- Degree in Medicine and General Surgery.
- Specialist in Occupational Medicine via MIR.
- Master's Degree in Occupational Health and Safety (Pompeu Fabra University).
- Master's Degree in Valuation of Bodily Injury and Medical Expertise (University of Barcelona).
- Expert in Occupational Toxicology (University of Barcelona).
- Since 2011, he has been working in health surveillance, occupational epidemiology, technical support in industrial hygiene, toxicology, psychosociology and ergonomics in various external prevention services.
- He is currently working as an occupational physician, expert in toxicology, and technician in the area of ergonomics in the Department of Prevention PSA Zaragoza.



## Professor

### **Escudero Tapia, Carolina**

- Degree in Chemical Engineering.
- Senior Technician in Occupational Risk Prevention.
- Master's Degree in Occupational Risk Prevention.
- Quality, Environment and Prevention Expert.
- Has worked as Quality Coordinator and currently as Prevention Technician at the PSA plant in Zaragoza.

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*Take the leap to train with some of today's leading professionals. You will gain a competitive advantage in your profession"*

# 04

# Structure and Content

The structure of the syllabus has been designed by a team of professionals with knowledge of the implications of medical preparation, who are aware of the relevance of the up-to-date specialization, and are committed to quality teaching using new educational technologies.

... is inspected monthly for the following:  
... tact and in place.  
... the unit.  
... the instructions for use are visible and legible.  
... anywhere on the unit.  
... signs of leakage of the contents.  
... det is clear.

| Aug. | Sept. | Oct. | Nov. | Dec. |   |
|------|-------|------|------|------|---|
|      |       |      |      |      | Cathedral Square                          |
|      |       |      |      |      | Administrative Office area                |
|      |       |      |      |      | 13 B. Helon                               |
|      |       |      |      |      | North end of main hallway                 |
|      |       |      |      |      | 5 B. COJ                                  |
|      |       |      |      |      | Outside main storeroom                    |
|      |       |      |      |      | 9 B. Helon                                |
|      |       |      |      |      | HistoCytis under the storeroom window     |
|      |       |      |      |      | 20 st. Helon                              |
|      |       |      |      |      | HistoCytis alongside Cytology window 2    |
|      |       |      |      |      | B. Helon                                  |
|      |       |      |      |      | Microbiology: next to storage cabinet gas |
|      |       |      |      |      | 4 B. Helon                                |
|      |       |      |      |      | Microbiology: inside 17B/Fungus room 2    |
|      |       |      |      |      | B. Helon                                  |
|      |       |      |      |      | Microbiology: under the phone in          |
|      |       |      |      |      | biology room. 1 B. Helon                  |
|      |       |      |      |      | General Conference Room                   |
|      |       |      |      |      | 1 B. Chest Stand                          |
|      |       |      |      |      | South end of main hallway                 |
|      |       |      |      |      | 1 B. COJ                                  |
|      |       |      |      |      | Hallway to lab area                       |
|      |       |      |      |      | 1 B. Helon                                |
|      |       |      |      |      | Lab Room to main area                     |
|      |       |      |      |      | 1 B. Helon                                |
|      |       |      |      |      | General Conference                        |



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*A comprehensive teaching program, structured in well-developed teaching units, oriented towards efficient and swift learning”*

**Module 1. Risks in the work activity: regulations, factors involved, detection and control**

- 1.1. Risk of Fire and Explosion
  - 1.1.1. Fire and its Causes
  - 1.1.2. Factor Analysis
  - 1.1.3. Products Generated
  - 1.1.4. Detection Systems
  - 1.1.5. Control and Extinction
  - 1.1.6. Evacuation and Protection
- 1.2. Electrical Hazard
  - 1.2.1. Electricity Parameters
  - 1.2.2. Causes of the Electrical Accident
  - 1.2.3. Risk factors
  - 1.2.4. Biological Effects
  - 1.2.5. Safety Against Electrical Hazards
  - 1.2.6. Protection
- 1.3. Mechanical Risk
  - 1.3.1. Tools and Machines
  - 1.3.2. Risks due to Tools and Machines
  - 1.3.3. Safety in the Use of Tools and Machines
  - 1.3.4. Protection
  - 1.3.5. Welding Operations
- 1.4. Risks Associated with Noise and Vibration
  - 1.4.1. Noise Assessment Criteria
  - 1.4.2. Noise Risk Assessment
  - 1.4.3. Preventive Measures Against Noise
  - 1.4.4. Acoustic Protection
  - 1.4.5. Vibration Assessment Criteria
  - 1.4.6. Vibration Risk Assessment
  - 1.4.7. Preventive Measures Against Vibrations
- 1.5. Risks Associated with the Thermal Environment
  - 1.5.1. Thermal Environment
  - 1.5.2. Temperature Evaluation
  - 1.5.3. Preventive Measures
- 1.6. Lighting
  - 1.6.1. Assessment
  - 1.6.2. Control Measures
- 1.7. Risks Associated with Radiation
  - 1.7.1. Classification of Radiation
  - 1.7.2. Measuring Quantities
  - 1.7.3. Radiation Measurement
  - 1.7.4. Biological Effects
  - 1.7.5. Radiation Protection
- 1.8. Chemical Hazards
  - 1.8.1. Chemical Contaminants
  - 1.8.2. Causes of Industrial Poisoning
  - 1.8.3. Exposure Limits
  - 1.8.4. Environmental Sampling
  - 1.8.5. Protection
- 1.9. Biological Hazards
  - 1.9.1. Classification of Biological Agents
  - 1.9.2. Effects of Biological Agents
  - 1.9.3. Risk Assessment
  - 1.9.4. Prevention and Control
- 1.10. Industrial Waste
  - 1.10.1. Industrial Waste and Hazardous Waste
  - 1.10.2. Waste Management
  - 1.10.3. Treatment Processes
  - 1.10.4. Legislation
- 1.11. Emerging Risks





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*A unique, key, and decisive training experience to boost your professional development”*

05

# Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: *Re-learning*.

This teaching system is used 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.



“

*Discover Re-learning, 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

In a given situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you can experience a way of learning that is shaking the foundations of traditional universities around the world.*



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching potential or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in professional medical practice.

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*Did you know that this method was developed in 1912 at Harvard for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”*

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

1. Students who follow this method not only grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on 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.





## Re-Learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our University is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.



*The physician will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.*

At the forefront of world teaching, the Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

*Re-learning 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.*

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

The overall score obtained by our learning system is 8.01, according to the highest international standards.



In this program you will have access to the best educational material, prepared with you in mind:



#### Study Material

All teaching material is produced specifically for the course by the specialists who teach 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.



#### Latest Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### 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 unique multimedia content presentation training system 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 training.





**Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



**Testing & Re-Testing**

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



**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 our future difficult decisions.



**Quick Action Guides**

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.





06

# Certificate

The **Postgraduate Certificate in Risks in Occupational Activity: Regulations, Factors Involved, Detection and Control** guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by **TECH Technological University**.





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*Successfully complete this training and receive your university degree without travel or laborious paperwork”*

The Postgraduate Certificate in Risks in Occupational Activity: Regulations, Factors Involved, Detection and Control contains the most complete and up-to-date scientific program on the market.

After students have passed the assessments, they will receive by certified mail their **Postgraduate Certificate** issued by **TECH Technological University**.

The diploma issued by **TECH Technological University** will express the qualification obtained in the course, and meets the requirements commonly demanded by labor exchanges, competitive examinations and professional career evaluation committees.

Title: **Postgraduate Certificate in Risks in Occupational Activity: Regulations, Factors Involved, Detection and Control**

ECTS: 6

Official Number of Hours: **150 hours**.



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



## Postgraduate Certificate

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Course Modality: Online

Duration: 6 weeks

Certificate: TECH Technological University

6 ECTS Credits

Teaching Hours: 150 hours.

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Risks in Occupational Activity:  
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