

# Postgraduate Diploma

## Occupational Medicine: Assessment and Risks in Occupational Activity



## Postgraduate Diploma Occupational Medicine: Assessment and Risks in Occupational Activity

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

Website: [www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-occupational-medicine-evaluation-risks-occupational-activity-research](http://www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-occupational-medicine-evaluation-risks-occupational-activity-research)

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# 01

# Introduction

The profession of occupational physicians is essential to improve the quality of life of the employees of any company since thanks to their recommendations and prevention protocols it is possible to improve working conditions and, therefore, prevent possible illnesses. In this Postgraduate Diploma, we offer you the most complete specialization on Assessment and Risks in Occupational Activity in this Field.







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*Detecting possible occupational risks is essential to prevent accidents and pathologies in workers. Improve your skills in this sector and give your career a boost”*

The specific assessment of the worker within their work environment is a fundamental part of the preventive activity that serves as a basis for medical surveillance and subsequent assessment of the injury. For this reason, this Postgraduate Diploma will deal with such every day and common practice issues as sensitive workers, occupational charts, injury assessment, medical protocols, assessment of fitness for work, the occupational medical report, etc.

In this program we also focus on the risks of occupational activity, providing you with the most up-to-date information on the detection, assessment 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)

Research in occupational medicine is a subject of great importance, and it is aimed at updating the student on the methods of research in the working population, based on the scientific method and through the correct study of the situation. In addition, this Postgraduate Diploma has the advantage of being developed in a 100% online format, so that students will be in charge of deciding when and where to study, distributing their study hours autonomously, so that they can combine their studying with the rest of their daily obligations.

This **Postgraduate Diploma in Occupational Medicine: Assessment and Risks in Occupational Activity** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ♦ Practical cases presented by experts in occupational medicine
- ♦ 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
- ♦ Updates on occupational health and safety
- ♦ Practical exercises where the self-assessment process can be carried out 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 program to help you develop in the field of occupational health. Don't think twice and enrol with us"*

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

It includes, in its teaching staff, professionals belonging to the field of medicine, who bring to this program the experience of their work, in addition to recognized specialists from prestigious reference societies and universities.

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

This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise throughout the program. 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 a system of interactive videos that will make it easier for you to study this Postgraduate Diploma.*

*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 the 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
- ♦ Know how to communicate conclusions knowledge, and supporting arguments to specialized and non-specialized audiences in a clear and unambiguous way
- ♦ Manage the learning skills that will enable them to continue studying in a largely self-directed or autonomous manner







## Specific Objectives

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### Module 1. Specific Assessment of the Worker in their Work Environment

- ◆ Perform an adequate and correct identification and evaluation of the risks derived from the different types of work activities
- ◆ Decide on the necessary preventive measures according to the risks detected
- ◆ Know how to carry out the medical protocolization according to the specific risks of the worker in their work environment
- ◆ Train the student in the interpretation and application of the different and current specific medical protocols
- ◆ Be able to measure the effectiveness of preventive measures
- ◆ Prepare and enable the student for the preventive investigation of health problems
- ◆ Carry out a correct assessment of bodily injury in the workplace
- ◆ Correct and appropriate application of existing scales
- ◆ Prepare and enable the student to carry out a correct assessment of disability
- ◆ Knowing how to make the professiogram according to the type of activity
- ◆ Identify the particularly sensitive worker and act accordingly to the work activity he/she carries out
- ◆ Update the student in the management and prevention of biological risks and have at hand the most recent data on prevention in the workplace before COVID-19
- ◆ Know how to prepare a medical-occupational report

## Module 2. Risks in the Work Activity: Regulations, Factors Involved, Detection and Control

- ♦ 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
- ♦ Enable 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





### Module 3. Research in Occupational Medicine

- ◆ Update knowledge on epidemiology and its application in the work environment
- ◆ Conduct epidemiological studies with the highest quality
- ◆ Promote research studies related to occupational health of a sufficient level to be disseminated

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*Become successful with this Postgraduate Diploma which will help you develop in the field of occupational health and workplace safety”*

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

- Occupational physician, expert in toxicology, and technician in the area of ergonomics in the Department of Prevention PSA Zaragoza
- He performs tasks of health surveillance, occupational epidemiology, technical support in industrial hygiene, toxicology, psychosociology and ergonomics in various external prevention services
- 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)





### **Dr. Bascuas Hernández, Javier**

- ◆ Opel-PSA Medical Service in Zaragoza. Occupational physician and coordinator of the Ergonomics area in this factory
- ◆ Associate Professor of the Physiotherapy Degree and Nursing Degree at San Jorge University
- ◆ Director of the Official Master's Degree in Health Sciences Research at this university
- ◆ Degree in Medicine and Surgery from the University of Zaragoza
- ◆ Doctor of Medicine and Surgery from the University of Zaragoza
- ◆ Specialist in Occupational Medicine (University of Barcelona)
- ◆ Specialist in Ergonomics and Applied Psychosociology
- ◆ He has been part of several consolidated research groups and currently belongs to the research group recognized by the Government of Aragon INDIVO (Research on new targets in autoimmunity and oncological surveillance)
- ◆ He has supervised three doctoral theses
- ◆ Received the President's Council Honor Award for his work in the field of ergonomics

## Professors

### Ms. Escudero Tapia, Carolina

- ◆ Prevention Technician at the PSA plant in Zaragoza, Spain
- ◆ Degree in Chemical Engineering
- ◆ Senior Technician in Occupational Risk Prevention
- ◆ Master's Degree in Occupational Risk Prevention
- ◆ Quality, Environment and Prevention Expert

### Ms. Serna, María Carmen

- ◆ Fraterprevención/Quirón Prevención. Occupational Nurse
- ◆ Nurse Specialist in Occupational Nursing
- ◆ Nursing (DUE) by Health Sciences University in León
- ◆ Master's Degree in Occupational Health with specialties in Safety, Hygiene, Ergonomics and Psychosocial by the University of the Balearic Islands
- ◆ University Expert in Nursing Services Management for UNED

### Dr. Girao, Italo

- ◆ Medical specialist in Allergology and Clinical Immunology. Araba University Hospital. Vitoria/Gasteiz
- ◆ Medical Specialist in Occupational Medicine via MIR. Ministry of Education, Culture and Sports
- ◆ Medical Specialist in Allergology via MIR. Ministry of Education, Culture and Sports
- ◆ University Studies in Medicine. Academic Professional School of Medicine, National University "San Luis Gonzaga" of Ica - Peru
- ◆ Homologation of the degree of Medical Surgeon to the official Spanish university degree of Graduate in Medicine. Ministry of Education and Science. Spain
- ◆ Postgraduate degree in Public Health Management. San Luis Gonzaga National University. Peru





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*Take the leap to learn 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 up-to-date specialization, and are committed to quality teaching using new educational technologies.







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

## Module 1. Specific Assessment of the Worker in their Work Environment

- 1.1. General Evaluation of the Worker
  - 1.1.1. Concept of a Healthy Worker
  - 1.1.2. Bodily Injury in the Workplace
  - 1.1.3. After Effects
  - 1.1.4. Scales
    - 1.1.4.1. Schedule of Non-Disabling Permanent Injuries
    - 1.1.4.2. Scale Structure
    - 1.1.4.3. Spanish and European Scales
  - 1.1.5. Non-Eligible Damages
- 1.2. Professiogram
- 1.3. Particularly Sensitive Worker
- 1.4. Assessment of Disability
- 1.5. Specific Assessment of the Worker I
  - 1.5.1. Individual Health Surveillance
  - 1.5.2. Collective Health Surveillance
  - 1.5.3. Post Occupational Health Surveillance
- 1.6. Worker Specific Assessment II
  - 1.6.1. Initial Medical Examinations
  - 1.6.2. Periodic Medical Check-Ups
  - 1.6.3. Previous Medical Examinations
  - 1.6.4. Compulsory Medical Examinations
  - 1.6.5. Assessment of Fitness for Work
  - 1.6.6. Degrees of Aptitude
- 1.7. Worker Specific Assessment III
  - 1.7.1. Health Surveillance: Hospitality Sector
  - 1.7.2. Health Surveillance: Health Sector
  - 1.7.3. Health Surveillance: Agricultural Sector

- 1.8. Worker Specific Assessment IV
  - 1.8.1. Specific Surveillance Protocols: Manual Handling of Loads, Forced Postures, Repetitive Movements, Pressure Neuropathies, Data Display Screens, etc
  - 1.8.2. Specific Surveillance Protocols: Asbestos, Silicosis and other Pneumoconiosis, Extrinsic Allergic Alveolitis, Occupational Asthma
  - 1.8.3. Specific Surveillance Protocols: Noise, Ionizing Radiation, Lead, Pesticides, Dermatitis
- 1.9. Specific Assessment of the Worker V
  - 1.9.1. Specific Monitoring Protocols: Inhalation Anesthetic Agents, Cytostatics, etc
  - 1.9.2. Specific Surveillance Protocols: Adenocarcinoma, Vinyl Chloride Monomer, Ethylene Oxide
  - 1.9.3. Specific Surveillance Protocols: Biological Agents, COVID 19
- 1.10. Occupational Medical Report

## Module 2. Risks in the Work Activity: Regulations, Factors Involved, Detection and Control

- 2.1. Risk of Fire and Explosion
  - 2.1.1. Fire and its Causes
  - 2.1.2. Factor Analysis
  - 2.1.3. Products Generated
  - 2.1.4. Detection Systems
  - 2.1.5. Control and Extinction
  - 2.1.6. Evacuation and Protection
- 2.2. Electrical Hazard
  - 2.2.1. Electricity Parameters
  - 2.2.2. Causes of the Electrical Accident
  - 2.2.3. Risk Factors
  - 2.2.4. Biological Effects
  - 2.2.5. Safety Against Electrical Hazards
  - 2.2.6. Protection

- 2.3. Mechanical Risk
  - 2.3.1. Tools and Machines
  - 2.3.2. Risks due to Tools and Machines
  - 2.3.3. Safety in the Use of Tools and Machines
  - 2.3.4. Protection
  - 2.3.5. Welding Operations
- 2.4. Risks Associated with Noise and Vibration
  - 2.4.1. Noise Assessment Criteria
  - 2.4.2. Noise Risk Assessment
  - 2.4.3. Preventive Measures Against Noise
  - 2.4.4. Acoustic Protection
  - 2.4.5. Vibration Assessment Criteria
  - 2.4.6. Vibration Risk Assessment
  - 2.4.7. Preventive Measures Against Vibrations
- 2.5. Risks Associated with the Thermal Environment
  - 2.5.1. Thermal Environment
  - 2.5.2. Temperature Evaluation
  - 2.5.3. Preventive Measures
- 2.6. Lighting
  - 2.6.1. Assessment
  - 2.6.2. Control Measures
- 2.7. Risks. Associated with Radiation
  - 2.7.1. Classification of Radiation
  - 2.7.2. Measuring Quantities
  - 2.7.3. Radiation Measurement
  - 2.7.4. Biological Effects
  - 2.7.5. Radiation Protection
- 2.8. Chemical Hazards
  - 2.8.1. Chemical Contaminants
  - 2.8.2. Causes of Industrial Poisoning
  - 2.8.3. Exposure Limits
  - 2.8.4. Environmental Sampling
  - 2.8.5. Protection
- 2.9. Biological Hazards
  - 2.9.1. Classification of Biological Agents
  - 2.9.2. Effects of Biological Agents
  - 2.9.3. Risk Assessment
  - 2.9.4. Prevention and Control
- 2.10. Industrial Waste
  - 2.10.1. Industrial Waste and Hazardous Waste
  - 2.10.2. Waste Management
  - 2.10.3. Treatment Processes
  - 2.10.4. Legislation
- 2.11. Emerging Risks

### Module 3. Research in Occupational Medicine

- 3.1. Epidemiology
- 3.2. Scientific Method
- 3.3. Variables, Risk Estimation and Causality
- 3.4. Epidemiological Studies
- 3.5. Research in Occupational Medicine
- 3.6. BORRAR
- 3.7. Types of Studies
- 3.8. Research Programs

05

# Methodology

This academic program offers students 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

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you will 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 power 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 the physician's professional 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 achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate 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.





## Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This 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, a real revolution with respect to the mere study and analysis of cases.

*Professionals will learn through real cases and by resolving 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 Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

*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.*

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.

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



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.



#### Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



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



#### 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.







#### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### 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 their goals.



#### Classes

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in 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.



06

# Certificate

Postgraduate Diploma in Occupational Medicine: Assessment and Risks in Occupational Activity guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Diploma issued by TECH Global University.



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



This program will allow you to obtain your **Postgraduate Diploma in Occupational Medicine: Assessment and Risks in Occupational Activity** 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.

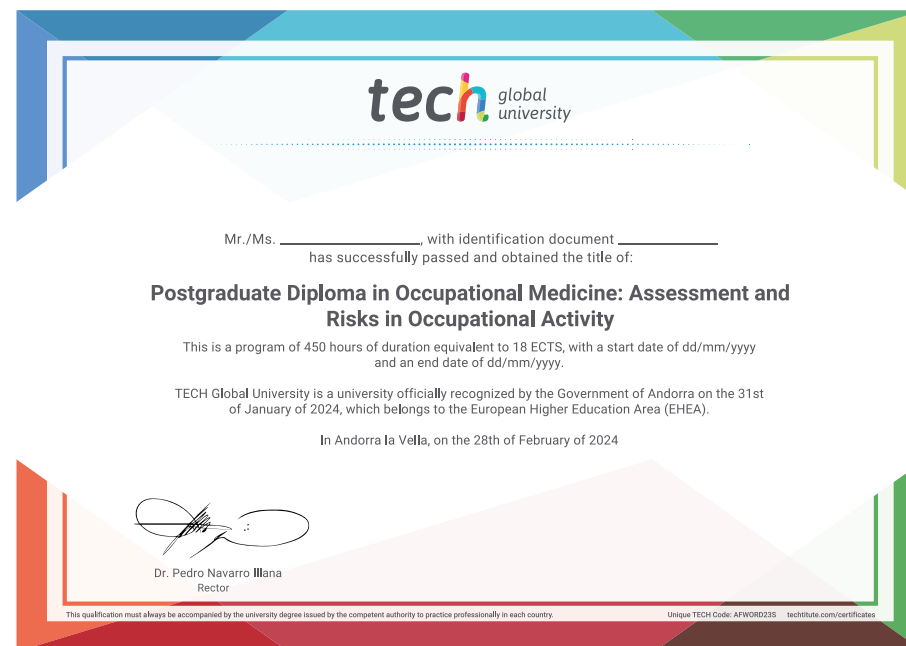
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Occupational Medicine: Assessment and Risks in Occupational Activity**

Modality: **online**

Duration: **6 months**

Credits: **18 ECTS**



\*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.



future

health

confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

personalized service innovation

knowledge present

online training

development language

virtual classroom

**tech** global  
university

**Postgraduate Diploma**  
Occupational Medicine:  
Assessment and Risks  
in Occupational Activity

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

# Postgraduate Diploma

## Occupational Medicine: Assessment and Risks in Occupational Activity

