



## Hybrid Master's Degree

# Occupational Medicine and Health

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 créditos ECTS

We bsite: www.techtitute.com/us/physiotherapy/hybrid-masters-degree/hybrid-occupational-medicine-health and the state of the companion of th

# Index

02 03 Why Study this Hybrid Introduction Objectives Skills Master's Degree? p. 4 p. 8 p. 12 p. 20 05 06 **Course Management Clinical Internship Educational Plan** p. 24 p. 30 p. 38 80 Methodology Where Can I Do the Clinical Certificate Internship? p. 44 p. 48 p. 56





### tech 06 | Introduction

The growing importance of occupational health at the social level has helped this discipline to evolve in recent years, integrating new procedures, protocols and diagnostic methods. Therefore, there have recently been numerous advances in aspects such as the intervention methodology for the management of work-related musculoskeletal injuries, various risks such as electrical, mechanical or those associated with noise and vibration, or the preparation of the occupational medical report.

In addition, the professional profile of the physician specialized in this field has become one of the most in-demand, so keeping up to date can provide great opportunities for the physician. This program, therefore, offers a complete update in this area, giving them the option of delving into the latest innovations and being able to incorporate into their daily work the most effective techniques for the prevention and treatment of occupational injuries and diseases.

All this, from a teaching system that combines online learning with an on-site internship in a health center. This way, during the first stage of this program, the professional will be able to combine their work with their studies, enjoying the multimedia contents available online and presented by a highly renowned teaching staff in this field.

At the end of this online phase, the physician will have the opportunity to carry out an internship in a prestigious center in the field of occupational health, where they will come into contact with patients and where they will have at their disposal the most advanced equipment and technology. Always, with the accompaniment of specialists from the health institution itself, who will ensure that the professional is updated through the performance of internship activities in a real environment.

This **Hybrid Master's Degree in Occupational Medicine and Health** contains the most complete and up-to-date scientific program on the market. The most important features include:

- More than 100 clinical cases presented by medical professionals with expertise in occupational health
- 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
- Tools for assessing and monitoring health risks in different work environments
- Comprehensive systematized action plans for the main occupational health risks
- Presentation of practical workshops on diagnostic techniques in the workplace as a place of health risk
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course.
- Clinical practice guidelines on the approach to different occupational pathologies and injuries
- With a special emphasis on evidence-based medicine and research methodologies in occupational medicine
- All of this will be complemented by 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
- Additionally, students will be able to carry out a clinical internship in one of the best hospitals in Spain

### Introduction | 07 tech



A high-level teaching staff will accompany you throughout the learning process, ensuring that not a minute of your time is wasted"

This Hybrid Master's Degree program, of a professionalizing nature and hybrid learning modality, is aimed at updating medical professionals who work in occupational health. The contents are based on the latest scientific evidence, and oriented in a educational way to integrate theoretical knowledge in the medical practice, and the theoretical-practical elements will facilitate the updating of knowledge and allow decision-making in patient management.

Thanks to the multimedia content, developed with the latest educational technology, medical professionals will benefit from situated and contextual learning, i.e., a simulated environment that will provide immersive learning 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 throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

The on-site internship will allow you to carry out a series of practical activities focused on bringing you up-to-date in a real environment.

During the online phase you will have access to the best multimedia materials: case studies, video procedures, master classes, among others. The best educational technology will be at your disposal.







### tech 10 | Why Study this Hybrid Master's Degree?

#### 1. Updating from the latest technology available

Diagnostic and medical assessment techniques are constantly changing, so specialists dedicated to Occupational Medicine and Health must incorporate them as soon as possible. This Hybrid Master's Degree is an outstanding advantage over other degrees, as it covers the latest developments in both theory and practice.

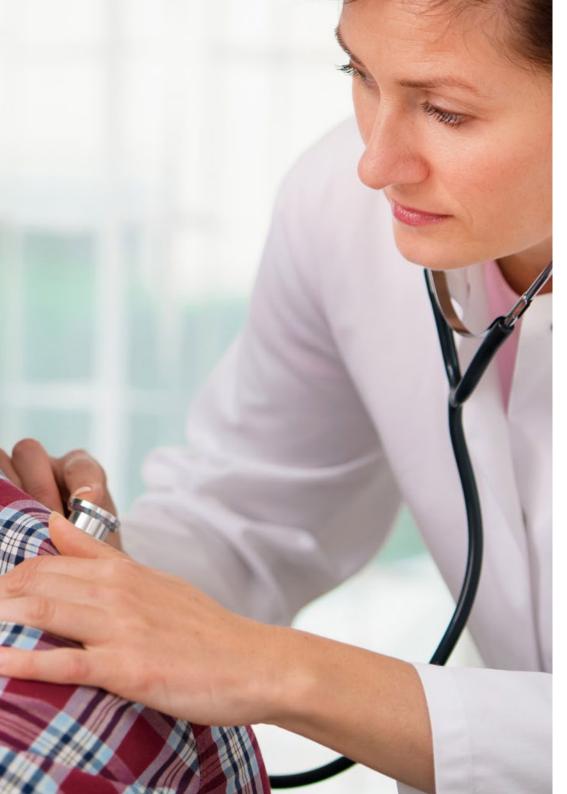
### 2. Gaining In-Depth Knowledge from the Experience of Top Specialists

All the syllabus of the degree is written by experts widely versed in the different fields of Occupational Medicine and Health, which provides an accurate and rigorous vision of the concepts covered. In addition, during the internship the professional will be surrounded by experts who will accompany and advise them at all times.

#### 3. Entering First-Class Clinical Environments

The clinical environments in which the specialist will develop their internship are of the highest level, guaranteeing access to the best technical equipment as well as to a group of expert professionals with extensive experience in Medicine and Occupational Health. This guarantees the examination of the most diverse cases and patients, in a demanding but rewarding experience.





### Why Study this Hybrid Master's Degree? | 11 tech

### 4. Combining the Best Theory with State-of-the-Art Practice

In the medical field, theoretical education is not enough to obtain a high degree of understanding of the current state of the field, especially when it comes to Occupational Medicine where legislative or social changes represent a major challenge. For this reason, this Hybrid Master's Degree combines the theory of a group of experts of renowned reputation in the area with a distinctive and unique internship, developing in the day to day of a clinic specializing in Occupational Medicine and Health.

#### 5. Expanding the Boundaries of Knowledge

As a degree that covers both the latest theory and practical aspects of Occupational Medicine and Health, after graduation, the specialist will have expanded their own frontiers of knowledge in an irrefutable way. This is guaranteed thanks not only to the quality of the contents and activities carried out, but also to TECH's own teaching methodology.



You will have full practical immersion at the center of vour choice" at the center of your choice"





### tech 14 | Objectives



### **General Objective**

The general objective of this program is to develop the necessary tools for the
physician to be able to detect all the risks and pathologies derived from a specific
work environment. Therefore, after completing this Hybrid Master's Degree in
Occupational Medicine and Health, the professional will be in a position to prepare reports,
and diagnose and treat patients suffering from injuries in this field



Occupational health has evolved a lot in recent years and this program will allow you to learn about its novelties in a simple and practical way"





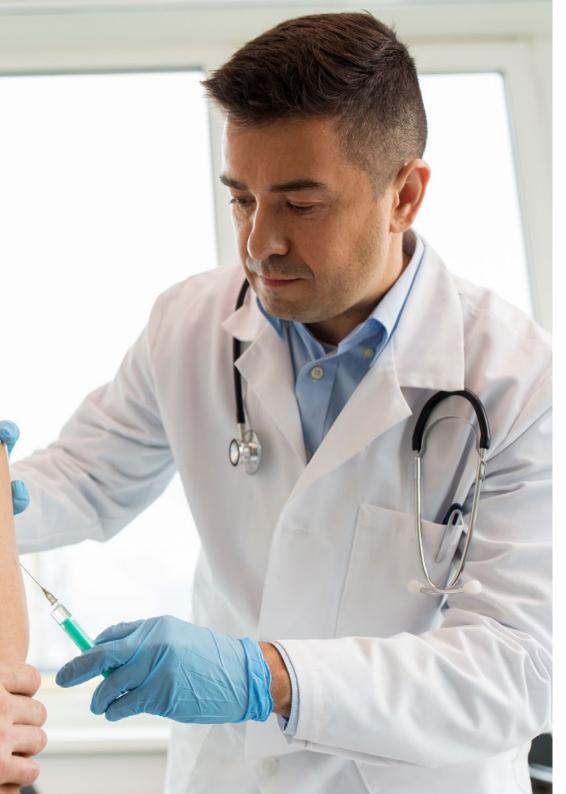
### **Specific Objectives**

#### Module 1. Introduction to Occupational Health and Occupational Medicine

- Know in depth the historical and scientific background of Occupational Health and Occupational Medicine
- Delve into the scientific basis of health determinants in the working population
- Deepen in the scientific foundations that govern the cause-effect relationship in occupational health
- Specialize, from a general point of view, in the possible risk situations faced by the working population
- In-depth knowledge of the demographic aspects within the work environment
- Specialize in national and international organizations with a bearing on occupational health

#### Module 2. Medical-Legal Aspects in Occupational Medicine.

- Know and properly interpret the legal aspects related to the different situations that may arise in a work environment, such as occupational accidents and occupational disease
- Know and properly interpret the most relevant aspects of Labor law related to the practice of occupational health and occupational medicine
- Know and properly interpret the most relevant aspects of Health Law related to the practice of occupational health and occupational medicine
- Specialize in the legal and technical aspects related to occupational disability
- Specialize in the legal and technical aspects related to the intervention of mutual insurance companies in the field of occupational health
- Deepen in the aspects related to the medical act itself in the context of occupational health and occupational medicine



### tech 16 | Objectives

### Module 3. Health Promotion and Ethics in the Workplace.

- Be able to carry out health promotion activities aimed at the control and improvement of workers' health in general
- Enable the student to promote the active participation of workers in health programs
- Know how to develop effective health programs on workers' behaviors, habits and lifestyles
- Be prepared to develop activities to promote vaccination campaigns in the workplace and in the public sector
- Be able to develop activities that promote a healthy environment both at company and public health level
- Enable the student to know and put into practice the good medical practices derived from the deontological codes
- Have the ability to perform well in daily medical acts and the correct use of clinical information, taking into account the confidentiality of data

### Module 4. Quality of Occupational Medicine

- Enable the student, from a practical point of view, to measure quality and implement programs to improve it and the services involved in Occupational Health
- Delve into the processes and procedures related to the certification of quality in the services involved in Occupational Health
- Specialize in the methodology established in prevention audits
- Know how to control, in an adequate and correct way, the information related to workers' health

#### Module 5. Specific Assessment of the Worker in his 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 his 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 damages
- 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 profesiogram 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 6. 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
- 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

### Module 7. Ergonomics and Psychosociology

- Know in depth the scientific bases of physiology and physical loading in order to be able to apply them
- Specialize in order to apply the scientific bases of human biomechanics
- Perform a correct and adequate ergonomic assessment of tasks and workstations
- Perform ergonomic assessment and improvement of tasks involving manual handling of loads
- Perform ergonomic assessment and improvement of tasks with associated risk of musculoskeletal injury
- Implement an ergonomic management and intervention system
- Carry out a correct and adequate assessment of the organizational conditions of the workplace
- Enable the student to carry out a correct and adequate assessment of the ergonomic conditions dependent on the work environment

### tech 18 | Objectives

### Module 8. Occupational Pathology

- Update the student in the etiology, clinical manifestations, diagnosis and treatment of the most prevalent Respiratory diseases and their relationship with the work activity
- Update the student on the etiology, clinical manifestations, diagnosis and treatment of the most prevalent Dermatological diseases and their relationship with the work activity
- Update the student in the etiology, clinical manifestations, diagnosis and treatment of the most prevalent Cardiocirculatory pathologies and their relationship with the work activity
- Update the student in the etiology, clinical manifestations, diagnosis and treatment of the most prevalent Otorhinolaryngology diseases and their relationship with the work activity
- Update the student in the etiology, clinical manifestations, diagnosis and treatment of the most prevalent Ophthalmologic injuries and diseases and their relationship with the work activity
- Update the student on the etiology, clinical manifestations, diagnosis and treatment
  of the most prevalent Infectious diseases and their relationship with the work
  activity
- Update the student in the etiology, clinical manifestations, diagnosis and treatment of the most prevalent Traumatological injuries and diseases and their relationship with the work activity
- Update the student in Rehabilitation and Physiotherapy techniques in the treatment of injuries in the workplace





### Module 9. Technopathies

- Train the student, in a practical way, to investigate, detect and control the pathologies related to the work activity in the steel and Metallurgy Industry
- Train the student, in a practical way, to investigate, detect and control the pathologies related to the work activity in the Mechanical Industry
- Train the student, in a practical way, to investigate, detect and control pathologies related to the work activity in the Plastics Industry
- Train the student, in a practical way, to investigate, detect and control
  pathologies related to work activity in the Wood Industry
- Train the student, in a practical way, to investigate, detect and control
  pathologies related to Health Activities
- Train the student, in a practical way, to investigate, detect and control the pathologies related to the work activity in the Chemical Industry
- Train the student, in a practical way, to investigate, detect and control pathologies
  related to mental Workload, such as work stress, mobbing and burnout syndrome,
  regardless of the work environment in which they occur
- Train the student, in a practical way, to investigate, detect and control
  pathologies related to the Sick Building syndrome
- Train the student, in a practical way, to investigate, detect and control
   Teratogenicity and Infertility problems related to the work activity

### Module 10. 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



With this Hybrid Master's Degree in Occupational Medicine and Health, physicians will be able to update their competencies in this area, and will obtain new skills related to the diagnosis and treatment of pathologies and injuries in the work environment. Therefore, this program is perfect for the specialist who wishes to get up-to-date, since it not only has complete and advanced contents, but its learning methodology has been designed for working professionals, adapting to their circumstances, allowing them to study whenever they wish.



### tech 22 | Skills



### **General Skills**

- Detect, analyze and control all those work or non-work situations that may influence the health, physical, psychological and social wellbeing of workers
- Obtain the necessary tools to perform in the field of occupational health with absolute preventive and assistance quality
- Understand occupational health as a fundamental element in the correct social functioning
- Warn of the different situations of physical risk that can occur in a work environment



You will combine theory and professional practice through a demanding and rewarding educational approach"







### **Specific Skills**

- Detect risk situations that a worker may face during the working day
- Know and interpret the specific regulations that may apply in the field of Occupational Medicine
- Carry out actions and activities that promote good habits in the area of Occupational Health
- Conduct prevention audits to promote the health of workers in their workplaces
- Carry out occupational risk prevention actions, according to the possible risks detected and focusing on the means against the COVID-19
- Detect, evaluate and control possible occupational hazards
- Propose ergonomic improvements in positions that may cause physical harm to the employee
- Diagnose and treat possible pathologies derived from work
- Detect and control possible pathologies related to new technologies
- Continue with their research facet taking into account the new knowledge acquired through this training





### Management



### Dr. Ditolvi Vera, Nilo Giancarlo

- Occupational Physician in Occupational Risk Prevention Service at Opel Spair
- Occupational Physician at Unipresaluc
- Environmental Coordinator in the Occupational Risk Prevention Department at OPEL-ESPAÑA
- Doctor of the Basic Unit of Occupational Risk Prevention in SPA MC-Prevencion
- Physician at Mutual Clinica Copernico
- Researcher specialized in Ergonomic Tools
- Degree in Medicine and General Surgery
- Master's Degree in Occupational Health and Safety from the Pompeu Fabra University
- Master's Degree in Assessment of Bodily Injury and Medical Expertise from the University of Barcelona
- Expert in Occupational Toxicology from the University of Barcelona



### Dr. Bascuas Hernández, Javier

- Opel-PSA Medical Service in Zaragoza. Occupational Physician and Ergonomics Area Coordinator
- Responsible for Occupational Health, Safety, Ergonomics and Employability at Stellantis car plant in Vigo
- Physician in the Medical Service of Opel-PSA in Zaragoza
- Associate Professor of Physiotherapy Degree and Nursing Degree at San Jorge 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 from the University of Barcelona
- Specialist in Ergonomics and Applied Psychosociology
- Researcher of the group recognized by the Government of Aragon INDIVO (Research on new targets in autoimmunity and oncological surveillance)
- President's Council Honor Award for his work in the field of ergonomics

### tech 28 | Course Management

#### **Professors**

#### Dr. Girao Popolizio, Italo Nicolás

- Assistant Physician in the Allergology Department of the Araba University Hospital
- Medical Specialist in Occupational Medicine and Occupational Risks in MC MUTUAL
- Researcher specializing in Allergology and Immunology
- University Studies in Medicine at the Academic Professional School of Medicine of the San Luis Gonzaga de Ica National University
- Master's Degree in Public Health Management at San Luis Gonzaga National University

#### Ms. Serna González, María Carmen

- Occupational Nurse at Mobility Ado
- Occupational Health Nurse at Quirón Prevención
- Occupational Health Nurse in Osakidetza
- Nursing (DUE) at the University of Health Sciences of Leon
- 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

#### Ms. Escudero Tapia, Carolina

- Prevention Technician at the PSA plant in Zaragoza, Spain
- Quality and Occupational Health and Safety Coordinator at VAND S.A.
- Degree in Chemical Engineering from the University of Vera Cruz
- Master's Degree in Occupational Risk Prevention, Occupational Safety, Industrial Hygiene and Ergonomics from the Francisco de Vitoria University
- Expert in Quality, Environment and Prevention, Santa Teresa de Jesús Catholic University

#### Ms. Jiménez Sánchez, Mónica

- Occupational and Assistance Nurse FREMAP
- Prevention Services Auditor and Auditor in OSHAS Standards
- Company Nurse at HIAB
- Company Nurse at SELCOM
- Teaching collaborator of the Aragón Teaching Unit for the MIR training of specialists in occupational medicine
- Graduate in Nursing at the University School of Health Sciences
- Nurse Specialist in Occupational Nursing by the Ministry of Education and Science
- Master's Degree in Occupational Risk Prevention from the San Pablo CEU University
- Professional Expert in Legal and Forensic Nursing by the UNED Foundation
- Senior technician in radiological installations

#### Ms. Callejas González, Amelia

- Social Worker of the Mutual Accident and Occupational Diseases Insurance Company FREMAP
- Coordinator of the FARO Program for family orientation and intervention in GM Spain
- Collaborator of the Occupational Medicine Teaching Unit for the specialization of Doctors
- Resident in Occupational Medicine
- Member of the Employee Assistance Program of Opel Spain
- Member of the Specific Drug Dependency Intervention Treatment Program of Opel Spain
- Member of the Medical-Labor Review Program of Opel Spain
- Social Worker at Mutua Fremap
- Diploma in Social Work at the University School S
- Expert in Systemic Intervention and Drug Dependency Intervention at EVN Family Therapy

#### Dr. Álvarez, José Manuel

- Occupational Risk Prevention Technician at the Miguel Servet University Hospital in Zaragoza
- Manager at ENARILA
- Director of the Ergonomics Institute Inermap
- Responsible for the Engineering Area of Mapfre's Ergonomics Institute
- Degree in Electronic Engineering from the National Technological University
- Degree in Labor Engineering from the National Technological University
- Dr. in Engineering from the University of Zaragoza

#### Ms. Abril Lope-Garnica, Marta

- Human Resources Director at Ringo Válvulas
- Labor Relations Advisor at Mowi
- Labor Relations Advisor at General Motors Spain
- Labor Relations Advisor at Groupe PSA (Opel Spain)
- Labor Lawyer in La Casa Abogados, Palacios & Partners
- Law Degree from the University of Zaragoza
- Master's Degree in European Union from the Royal Institute of European Studies (RIEE)
- Postgraduate in Financial Management from the CAI-Barcelona School of Management (UPF)

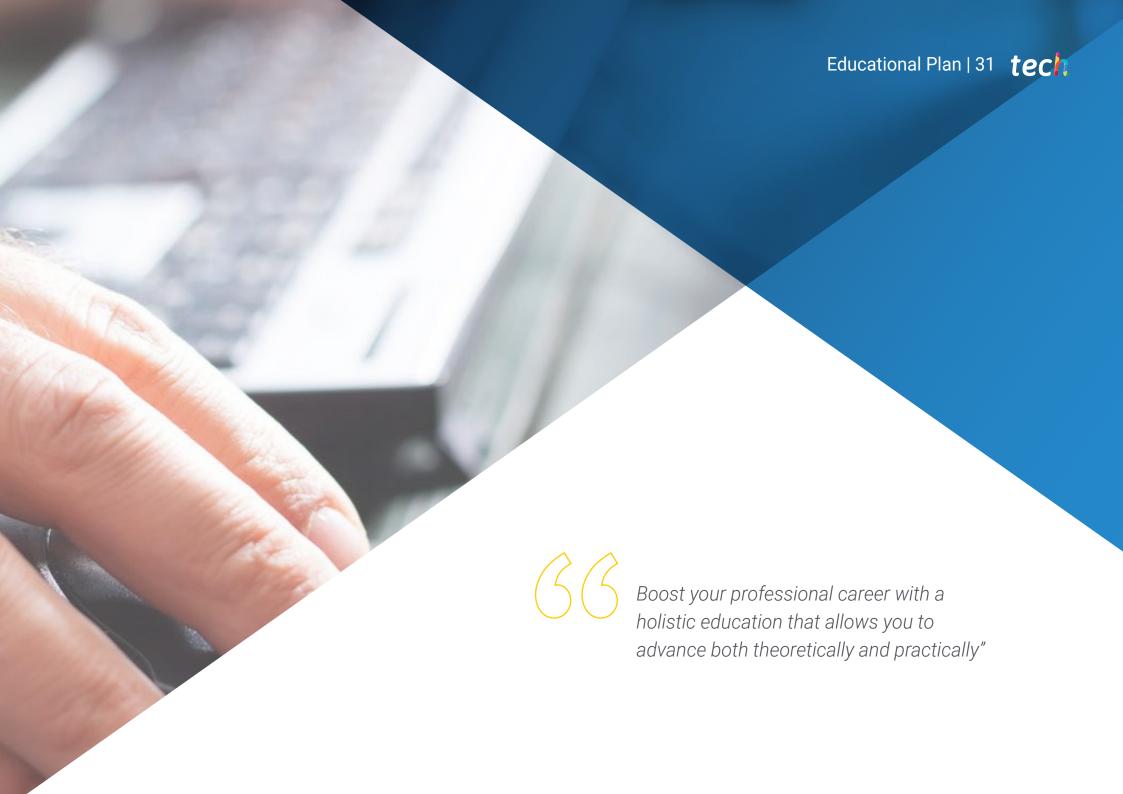
#### Ms. Rivas González, María del Pilar

- Occupational Risk Prevention Technician in Stellantis
- Industrial Technical Engineer from the University of Vigo
- Industrial Engineer in Manufacturing Technologies at UNED
- Master's Degree in PRL, Environment and Quality at CiP Formación Centro de Iniciativas Profesionales
- Adjunct teacher for academic programs of her specialty



Enroll now and advance in your field of work with a comprehensive program that will allow you to put into practice everything you have learned"

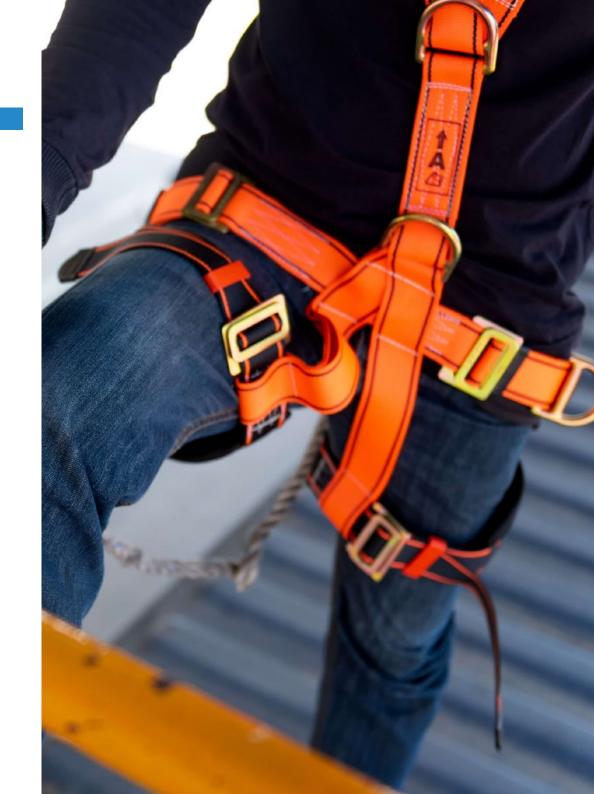




### tech 32 | Educational Plan

### Module 1. Introduction to Occupational Health and Occupational Medicine

- 1.1. History of Occupational Medicine
- 1.2. Concept of Health, Occupational Health and Public Health
- 1.3. Determinants of Occupational Health
  - 1.3.1. Biological Determinants
  - 1.3.2. Lifestyle Determinants
  - 1.3.3. Environmental Determinants
  - 1.3.4. Identification of Health Determinants
- 1.4. Causality in Occupational Medicine
  - 1.4.1. Multicausality
  - 1.4.2. Bradford Hill Criteria
- 1.5. Study of Working Conditions
  - 1.5.1. Safety-Related Risks
  - 1.5.2. Industrial Hygiene-Related Risks
  - 1.5.3. Ergonomics-Related Risks
  - 1.5.4. Work Organization-Related Risks
  - 1.5.5. Occupational Health Protection
- 1.6. Demographics and Occupational Health
  - 1.6.1. Demographic Changes
  - 1.6.2. Cultural Aspects in Labor Demographics
  - 1.6.3. Aging of the Working Population
- 1.7. Occupational Health Organization
- 1.8. National Organizations related to Occupational Health
  - 1.8.1. National Institute of Safety and Hygiene at Work
  - 1.8.2. Labor and Social Security Inspection
  - 1.8.3. National Occupational Safety and Health Commission
  - 1.8.4. Mutual Insurance Companies for Occupational Accidents and Occupational Diseases of the Social Security System
- 1.9. International Organizations related to Occupational Health
  - 1.9.1. WHO
  - 1.9.2. ILO
  - 1.9.3. European Agency for Safety and Health at Work



### Module 2. Medical-Legal Aspects in Occupational Medicine.

- 2.1. Concept and Management of Industrial Accidents (IA)
  - 2.1.1. Importance of TA
  - 2.1.2. Definition of TA
  - 2.1.3. Consideration of TA
  - 2.1.4. Notification of TA
  - 2.1.5. Economic and Financial Aspects related to TA
- 2.2. Concept of Occupational Disease (OD) and Work-Related Disease (WD)
  - 2.2.1. Concept of OD
  - 2.2.2. Notification of the OD
  - 2.2.3. Investigation of the OD
- 2.3. List of Occupational Diseases
  - 2.3.1. OD Caused by Chemical Agents
  - 2.3.2. OD Caused by Physical Agents
  - 2.3.3. OD Caused by Biological Agents
  - 2.3.4. OD Caused by Inhalation of Other Substances and Agents
  - 2 3 5 Skin OD
  - 2.3.6. OD Caused by Carcinogenic Agents
- 2.4. Investigation and Reporting of Occupational Disease
- 2.5. Labor Law in Occupational Medicine
  - 2.5.1. Labor Law
  - 2.5.2. Contract of Employment
  - 2.5.3. Labor Unions
  - 2.5.4. Employee Representation
  - 2.5.5. Collective Bargaining Agreement
  - 2.5.6. Collective Disputes
- 2.6. Responsibility in the Prevention of Occupational Risks
  - 2.6.1. The Duty of Prevention
  - 2.6.2. Jurisdiction in Occupational Risk Prevention
  - 2.6.3. Occupational Safety Offenses
  - 2.6.4. Recklessness

- 2.7. Health Law in Occupational Medicine
  - 2.7.1. The Social Security System
  - 2.7.2. Structure of the Social Security System
  - 2.7.3. Special Systems
  - 2.7.4. Enrollment, Affiliation, Registration and Deregistration of Employees
  - 2.7.5. Social Security Contributions
  - 2.7.6. Social Security Benefits
- 2.8. Laboral Disability
  - 2.8.1. Temporary Disability
  - 2.8.2. Permanent Disability
  - 2.8.3. Disability Review
- 2.9. Corporate Social Responsibility
- 2.10. Management of Mutual Insurance Companies in Occupational Health Care
  - 2.10.1. Mutual Insurance Companies for Occupational Accidents and Occupational Diseases
  - 2.10.2. Management of Professional Contingencies
  - 2.10.3. Collaboration in the Management of Common Contingencies
  - 2.10.4. Risk During Pregnancy Benefit
  - 2.10.5. Breastfeeding Benefit
  - 2.10.6. Other Benefits
- 2.11. Management of Mutual Insurance Companies in Occupational Risk Prevention Care

#### Module 3. Health Promotion and Ethics in the Workplace

- 3.1. Occupational Health Education and Promotion
- 3.2. Healthy Company
- 3.3. Intervention Programs Design and Planning of Interventions
- 3.4. Vaccines in Occupational and Population Settings
- 3.5. Alcohol, Tobacco, Drugs and Gambling Addictions
- 3.6. Promotion of Healthy Habits: Exercise, Nutrition, Education, etc.
- 3.7. The Medical Act in Occupational Medicine
  - 3.7.1. Physician-Patient Relationship
  - 3.7.2. Ethics in Occupational Medicine
  - 3.7.3. Information on Occupational Medicine
  - 3.7.4. Clinical Documentation: Informed Consent
  - 3.7.5. Health Care Provider's Responsibility
- 3.8. Data Confidentiality in the Field of Occupational Health Care

### tech 34 | Educational Plan

### Module 4. Quality of Occupational Medicine

- 4.1. Quality of the Occupational Risk Prevention Service
- 4.2. Process Management
- 4.3. Quality of Service
- 4.4. Quality Certification: ISO 9000, ISO 9001
- 4.5. Audits
- 4.6. Types of Audits
- 4.7. Methodology
- 4.8. Phases of the Audit
- 4.9. Health Information

### Module 5. Specific Assessment of the Worker in his Work Environment

- 5.1. General Evaluation of the Worker
  - 5.1.1. Healthy Worker Concept
  - 5.1.2. Bodily Injury in the Workplace
  - 5.1.3. Secuelas
  - 5.1.4. Scales
    - 5.1.4.1. Schedule of Non-Disabling Permanent Injuries
    - 5.1.4.2. Scale Structure
    - 5.1.4.3. Spanish and European Scales
  - 5.1.5. Non-Eligible Damages
- 5.2. Profesiogram
- 5.3. Particularly Sensitive Worker
- 5.4. Assessment of Disability
- 5.5. Specific Assessment of the Worker I
  - 5.5.1. Individual Health Surveillance
  - 5.5.2. Collective Health Surveillance
  - 5.5.3. Post Occupational Health Surveillance

- 5.6. Worker Specific Assessment II
  - 5.6.1. Initial Medical Examinations
  - 5.6.2. Periodic Medical Check-Ups
  - 5.6.3. Previous Medical Examinations
  - 5.6.4. Compulsory Medical Examinations
  - 5.6.5. Assessment of Fitness for Work
  - 5.6.6. Degrees of Aptitude
- 5.7. Worker Specific Assessment III
  - 5.7.1. Health Surveillance: Hospitality Sector
  - 5.7.2. Health Surveillance: Health Sector
  - 5.7.3. Health Surveillance: Agricultural Sector
- 5.8. Worker Specific Assessment IV
  - 5.8.1. Specific Surveillance Protocols: Manual Handling of Loads, Forced Postures, Repetitive Movements, Pressure Neuropathies, Data Display Screens, etc.
  - 5.8.2. Specific Surveillance Protocols: Asbestos, Silicosis and other Pneumoconiosis, Extrinsic Allergic Alveolitis, Occupational Asthma.
  - 5.8.3. Specific Surveillance Protocols: Noise, Ionizing Radiation, Lead, Pesticides, Dermatosis.
- 5.9. Specific Assessment of the Worker V
  - 5.9.1. Specific Monitoring Protocols: Inhalation Anesthetic Agents, Cytostatics, etc.
  - 5.9.2. Specific Surveillance Protocols: Adenocarcinoma, Vinyl Chloride Monomer, Ethylene Oxide
  - 5.9.3. Specific Surveillance Protocols: Biological Agents, COVID -19
- 5.10. Occupational Medical Report

# **Module 6.** Risks in the work activity: regulations, factors involved, detection and control

- 6.1. Risk of Fire and Explosion
  - 6.1.1. Fire and its Causes
  - 6.1.2. Factor Analysis
  - 6.1.3. Products Generated
  - 6.1.4. Detection Systems
  - 6.1.5. Control and Extinction
  - 6.1.6. Evacuation and Protection
- 6.2. Electrical Hazard
  - 6.2.1. Electricity Parameters
  - 6.2.2. Causes of the Electrical Accident
  - 6.2.3. Risk Factors
  - 6.2.4. Biological Effects
  - 6.2.5. Safety Against Electrical Hazards
  - 6.2.6. Protection
- 6.3. Mechanical Risk
  - 6.3.1. Tools and Machines
  - 6.3.2. Risks due to Tools and Machines
  - 6.3.3. Safety in the Use of Tools and Machines
  - 6.3.4. Protection
  - 6.3.5. Welding Operations
- 6.4. Risks Associated with Noise and Vibration
  - 6.4.1. Noise Assessment Criteria
  - 6.4.2. Noise Risk Assessment
  - 6.4.3. Preventive Measures Against Noise
  - 6.4.4. Acoustic Protection
  - 6.4.5 Vibration Assessment Criteria
  - 6.4.6. Vibration Risk Assessment
  - 6.4.7. Preventive Measures Against Vibrations

- 5.5. Risks Associated with the Thermal Environment
  - 6.5.1. Thermal Environment
  - 6.5.2. Temperature Evaluation
  - 6.5.3. Preventive Measures
- 6.6. Lighting
  - 6.6.1. Assessment
  - 6.6.2. Control Measures
- 6.7. Risks Associated with Radiation
  - 6.7.1. Classification of Radiation
  - 6.7.2. Measuring Quantities
  - 6.7.3. Radiation Measurement
  - 6.7.4. Biological Effects
  - 6.7.5. Radiation Protection
- 6.8. Chemical Hazards
  - 6.8.1. Chemical Contaminants
  - 6.8.2. Causes of Industrial Poisoning
  - 6.8.3. Exposure Limits
  - 6.8.4. Environmental Sampling
  - 6.8.5. Protection
- 6.9. Biological Hazards
  - 6.9.1. Classification of Biological Agents
  - 6.9.2. Effects of Biological Agents
  - 6.9.3. Risk Assessment
  - 6.9.4. Prevention and Control
- 6.10. Industrial Waste
  - 6.10.1. Industrial Waste and Hazardous Waste
  - 6.10.2. Waste Management
  - 6.10.3. Treatment Processes
  - 6.10.4. Legislation
- 6.11. Emerging Risks

### tech 36 | Educational Plan

### Module 7. Ergonomics and Psychosociology

- 7.1. Introduction to Egonomics
- 7.2. Basic Concepts in Work Physiology
- 7.3. Physical Load
- 7.4. Basic Concepts in Biomechanics
- 7.5. Ergonomic Analysis of Working Conditions
- 7.6. Ergonomic Analysis of Tasks Associated with Manual Handling of Loads
- 7.7. Work-Related Musculoskeletal Injuries
- 7.8. Intervention Methodology for the Management of Work-Related Musculoskeletal Injuries
- 7.9. Ergonomic Design of the Work System
- 7.10. Ergonomics Management
- 7.11. Applied Psychosociology in Occupational Health
- 7.12. Ergonomics of Environmental Factors

### Module 8. Occupational Pathology

- 8.1. Diseases of the Respiratory System I
  - 8.1.1. Etiology, Etiopathogenesis and Classification
  - 8.1.2. Diagnosis of Respiratory Diseases
- 8.2. Diseases of the Respiratory System II
  - 8.2.1. Pneumoconiosis, Pneumonitis, Diseases Caused by Fumes, Gases, Aerosols, etc.
  - 8.2.2. Occupational Asthma, COPD, Neoplasms
- 8.3. Occupational Dermatology: Occupational Dermatitis, Cutaneous Cancer
- 8.4. Cardiac Pathology in the Workplace
- 8.5. Occupational ENT
- 8.6. Occupational Ophthalmology
- 8.7. Infections: TB, HIV, Viral Hepatitis
- 8.8. Occupational Traumatology I: Assessment of the Orthopedic Patient
- 8.9. Occupational Traumatology II: Common Pathologies of the Upper Extremity.
- 8.10. Occupational Traumatology III: Common Pathologies of the Inferiority Extremity.
- 8.11. Occupational Traumatology III: Common Pathologies of the Lower Extremity.
- 8.12. Physiotherapy and Occupational Rehabilitation





- 9.1. Steelmaking, Metallurgy
- 9.2. Mechanical Industry
- 9.3. Plastics Industry
- 9.4. Wood Industry
- 9.5. Mining
- 9.6. Glass Industry
- 9.7. Chemical Industry
- 9.8. Sanitary Technopathies
- 9.9. Working with Data Screen
- 9.10. Job Stress, Burnout Syndrome and Mobbing
- 9.11. Sick Building Syndrome
- 9.12. Teratogenesis and Infertility

## Module 10. Research in Occupational Medicine

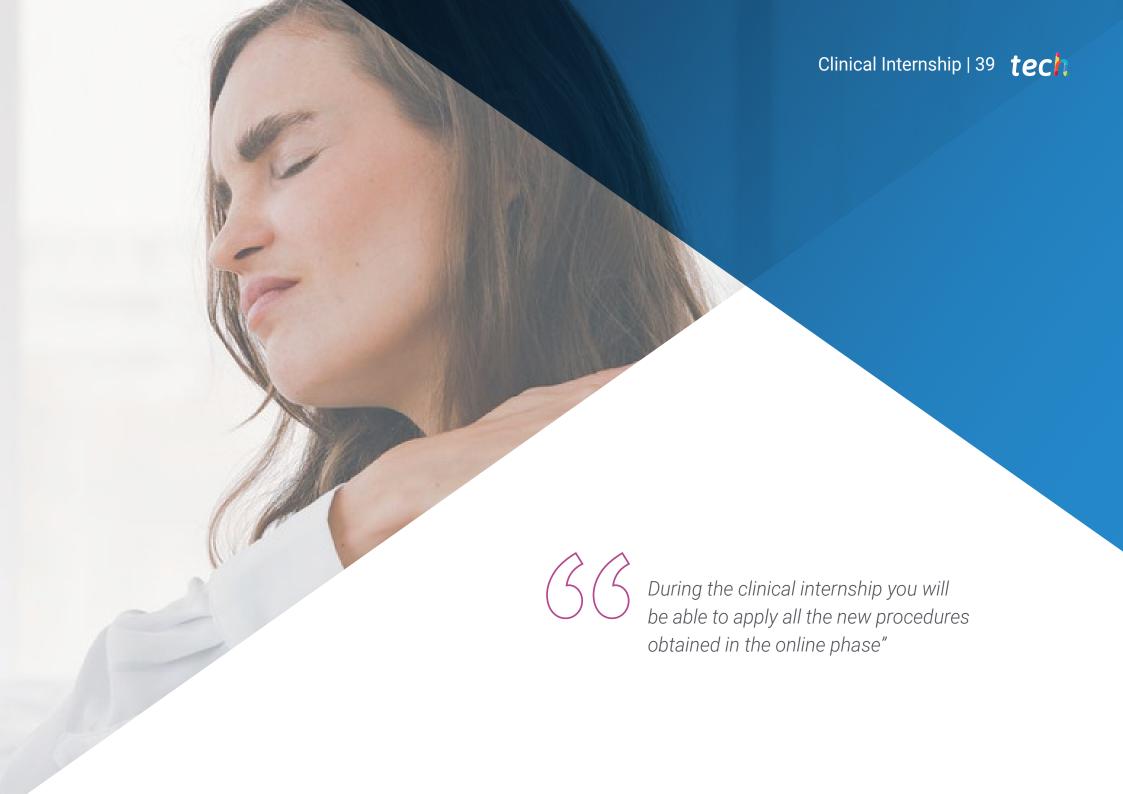
- 10.1. Epidemiology
- 10.2. Scientific Method
- 10.3. Variables, Risk Estimation and Causality
- 10.4. Epidemiological Studies
- 10.5. Research in Occupational Medicine
- 10.6. Legal framework
- 10.7. Types of Studies
- 10.8. Research Programs



# 07 Clinical Internship

After completing the online period, the physician has the opportunity to carry out a clinical internship in a prestigious health center. This internship is developed over 3 weeks of learning, with 8 hours of continuous teaching from Monday to Friday. This ensures the effective updating of the professional, who will be able to learn about real cases during these weeks, while being supervised by an associate specialist from the clinic.





## tech 40 | Clinical Internship

This Hybrid Master's Degree in Occupational Medicine and Health has a 3-week onsite internship, held from Monday to Friday and with 8 hours of continuous learning, always with the accompaniment of an assistant specialist from the center itself. These internships will allow the physician to treat real patients suffering from occupational injuries and pathologies, and to apply the most advanced diagnostic procedures and treatments in each case.

The practical teaching will be carried out with the active participation of the student performing the activities and procedures of each area of knowledge (learning to learn and learning to do), with the accompaniment and guidance of teachers and other fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for the practice of Occupational Medicine and Health (learning to be and learning to relate).



Access to real patients, learning first-hand about the most important pathologies in the field of work"





## Clinical Internship | 41 tech

The procedures described below will form the basis of the practical part of the training, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:

Module	Practical Activity
Diagnosis and Quality of Occupational Medicine	Design and plan health promotion interventions
	Manage the usual processes in the assessment of a patient with occupational pathology
	Know the most efficient processes for managing mutual insurance companies in Occupational Health and Occupational Risk Prevention
	Check practical developments in the investigation of occupational diseases
	Apply immunocytochemistry procedures in the diagnosis of liver diseases
Assessment of the Employee and their Work Environment	Analyze the job profile to detect areas for improvement
	Make a complete and exhaustive occupational medical report
	Follow up the evolution of a worker during their sick leave period
	Manage the general ergonomics of the work processes and possible improvements to be implemented
Occupational Pathology	Perform an examination in cardiac pathology in the work place
	Analyze occupational dermatology, including occupational dermatitis and skin cancer
	Analyze possible infections in occupational settings: TB, HIV and viral hepatitis
	Assess occupational stress, burnout syndrome and mobbing cases
Research Areas in Occupational Medicine	Examine the most recent epidemiological studies
	Learn about the most useful current practical developments in Occupational Medicine
	Promote the lines of research with the greatest momentum at present



## **Civil Liability Insurance**

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



## **General Conditions of the Internship Program**

The general terms and conditions of the internship agreement for the program are as follows:

- 1. TUTOR: During the Hybrid Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.
- **2. DURATION:** The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.
- 3. ABSENCE: If the students does not show up on the start date of the Hybrid Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

- **4. CERTIFICATION:** Professionals who pass Hybrid Master's Degree will receive a certificate accrediting their stay at the center.
- **5. EMPLOYMENT RELATIONSHIP:** the Hybrid Master's Degree shall not constitute an employment relationship of any kind.
- **6. PRIOR EDUCATION:** Some centers may require a certificate of prior education for the Hybrid Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed
- 7. DOES NOT INCLUDE: The Hybrid Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.





## tech 46 | Where Can I Do the Clinical Internship?

The student will be able to complete the internship of this Hybrid Master's Degree at the following centers:



### Hospital HM San Francisco

Country City
Spain León

Address: C. Marqueses de San Isidro, 11, 24004, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Update in Anesthesiology and Resuscitation - Trauma Nursing



### Hospital HM Regla

Country City
Spain León

Address: Calle Cardenal Landázuri, 2, 24003, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

### Related internship programs:

- Update on Psychiatric Treatment in Minor Patients



### **Hospital HM Madrid**

Country City
Spain Madrid

Address: Pl. del Conde del Valle de Súchil, 16, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Palliative Care - Anaesthesiology and Resuscitation



### Hospital HM Montepríncipe

Country City
Spain Madrid

Address: Av. de Montepríncipe, 25, 28660, Boadilla del Monte, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Palliative Care - Aesthetic Medicine



## **Hospital HM Torrelodones**

Country City
Spain Madrid

Address: Av. Castillo Olivares, s/n, 28250, Torrelodones, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Anaesthesiology and Resuscitation - Palliative Care



## **Hospital HM Sanchinarro**

Country City Spain Madrid

Address: Calle de Oña, 10, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

### Related internship programs:

Anaesthesiology and Resuscitation
 Palliative Care



## Hospital HM Puerta del Sur

Country City
Spain Madrid

Address: Av. Carlos V, 70, 28938, Móstoles. Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Palliative Care

- Clinical Ophthalmology



## Hospital HM Vallés

Country City
Spain Madrid

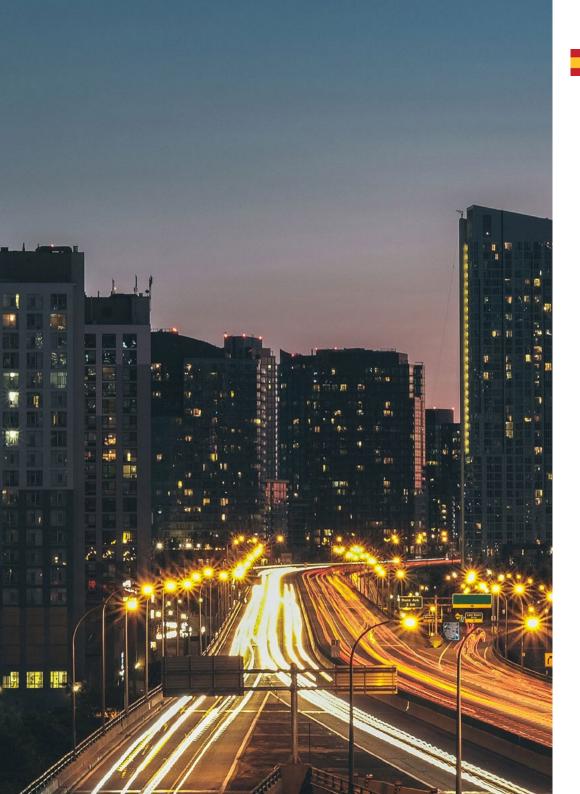
Address: Calle Santiago, 14, 28801, Alcalá de Henares. Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Gynecologic Oncology
- Clinical Ophthalmology









Take advantage of this opportunity to surround yourself with expert professionals and learn from their work methodology"





## tech 50 | Methodology

## 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.



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:

- 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.



## Methodology | 53 tech

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.

## tech 54 | Methodology

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**

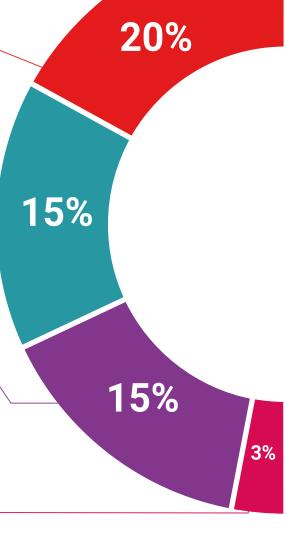
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many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

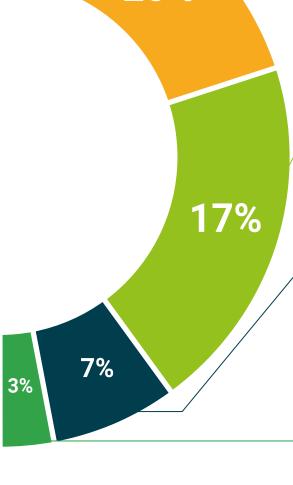
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



### **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.









## tech 58 | Certificate

This program will allow you to obtain your **Hybrid Master's Degree diploma in Occupational Medicine and Health** 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.

Mr./Ms. \_\_\_\_\_\_\_with identification document \_\_\_\_\_\_has successfully passed and obtained the title of:

Hybrid Master's Degree in Occupational Medicine and Health

This is a program of 1.620 hours of duration equivalent to 65 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

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: Hybrid Master's Degree in Occupational Medicine and Health

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

Recognition: **60 + 5 ECTS Credits** 



<sup>\*</sup>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.

health confidence people

education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment



## Hybrid Master's Degree

# Occupational Medicine and Health

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 créditos ECTS

