



# Postgraduate Certificate Pollution Treatment

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/in/engineering/postgraduate-certificate/pollution-treatment

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## tech 06 | Introduction

There are multiple scientific studies that warn of the dangers for human beings due to the pollution of rivers, seas, air or the very soil where products that are later served on tables are grown. The effects are noticeable on people's health, but they also affect the balance of ecosystems.

This is an undeniable reality, but from which we work with high-tech projects to clean the oceans from microplastics, water purification measures or the use of containment, confinement or soil decontamination techniques.

A degradation scenario, which needs to be reversed by employing the most effective techniques and knowledge. Evidently, this is only possible with the implementation of measures by highly qualified professionals in this field. For this reason, TECH Technological University has created this Postgraduate Certificate, which seeks to provide the graduate with the most relevant and advanced information on Pollution Treatment.

A program with a theoretical-practical approach, where students will delve into the different techniques currently used to treat water, soil or air contaminated by different substances. Additionally, multimedia resources (video summaries, detailed videos), specialized readings or case studies will help you to delve into urban waste management or the debate surrounding small plastic fragments found anywhere on the planet.

An excellent opportunity for professionals to advance in their careers through a university program, which they can study comfortably at any time of the day, from a computer or Tablet with Internet connection. No class attendance or fixed class schedules, students also have the freedom to distribute the course load according to their needs. An ideal educational option for those who wish to pursue a university program without compromising their work and/or personal responsibilities.

This **Postgraduate Certificate in Pollution Treatment** contains the most complete and up-to-date program on the market. The most important features include:

- The development of case studies presented by experts of Environmental Engineering
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection



You will be immersed in the current debate on the impact of microplastics on the environment. Enroll now!"



The multimedia resource library and case studies will be at your disposal 24 hours a day. Access it easily from your computer with Internet connection"

The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

In this program, you will delve into the main techniques currently used for urban waste management.

Learn, in just 6 weeks, the main scientific-technical solutions used for the treatment of contaminated water.





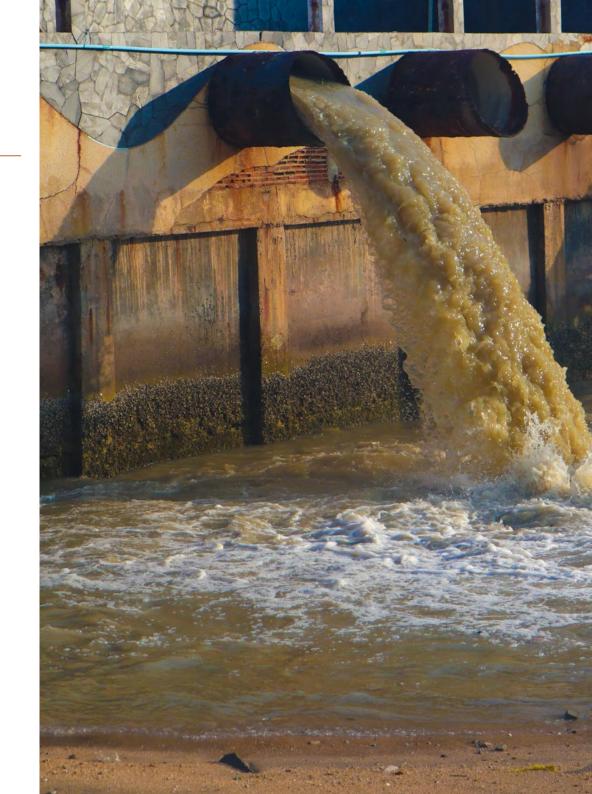


## tech 10 | Objectives



## **General Objectives**

- Be able to use information from various sources on an applied topic, interpret it appropriately, draw meaningful conclusions and present them publicly
- Understand the environmental problems faced by human beings today
- Know the preventive or corrective technologies for water and soil pollution
- Learn about the existing debate on the impact of microplastics



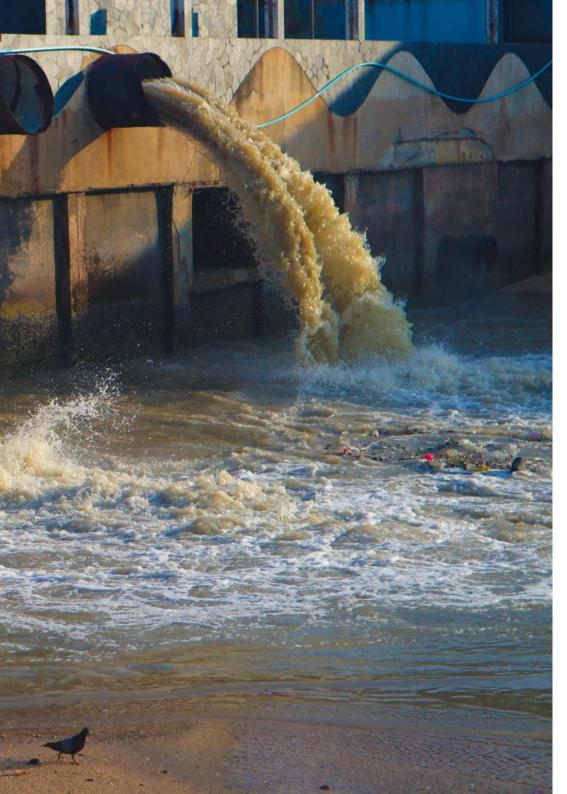


## **Specific Objectives**

- Know basic models of pollutant dispersion and understand the functioning of pollution control networks
- Understand pollutant treatment methods and control strategies applicable in each case
- Design systems for physical and chemical purification of gaseous emissions



The Relearning system will take you through the syllabus of this Postgraduate Certificate in a much more comfortable way, and you will even be able to reduce long study hours"



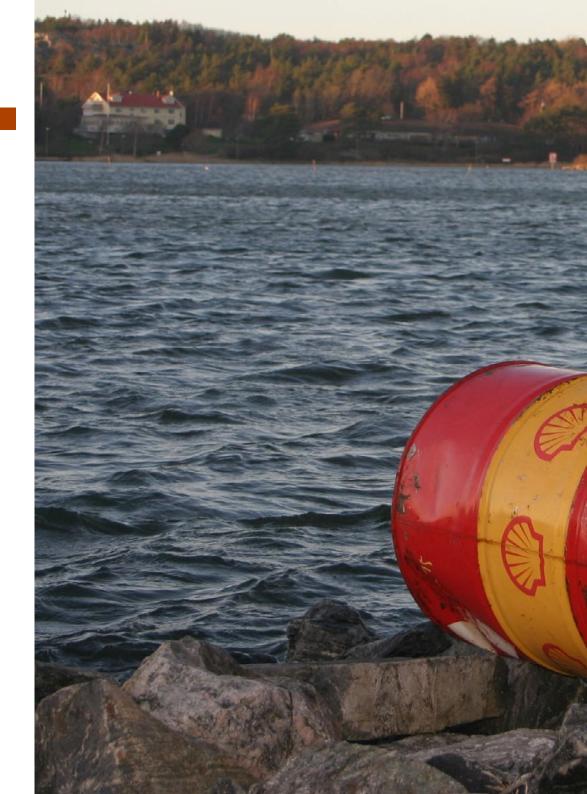




## tech 14 | Structure and Content

### Module 1. Environmental Pollution Treatment

- 1.1. Environmental Pollution
  - 1.1.1. Introduction to the Concept of Pollution
  - 1.1.2. History of Environmental Pollution
  - 1.1.3. Current Environmental Issues
- 1.2. Air Pollution
  - 1.2.1. Introduction to Air Pollution
  - 1.2.2. Air Pollution Problems
  - 1.2.3. Solutions to Air Pollution
- 1.3. Soil Pollution
  - 1.3.1. Introduction to Soil Pollution
  - 1.3.2. Soil Pollution Problems
  - 1.3.3. Solutions to Soil Pollution
- 1.4. Water Pollution
  - 1.4.1. Introduction to Water Pollution
  - 1.4.2. Ocean Pollution
  - 1.4.3. River and Lake Pollution
- 1.5. Soil Decontamination
  - 1.5.1. Introduction
  - 1.5.2. Soil Decontamination Techniques
  - 1.5.3. Results of Soil Decontamination Techniques
- 1.6. Water Decontamination
  - 1.6.1. Water Potabilization
  - 1.6.2. Water Purification
  - 1.6.3. Results of Water Decontamination
- 1.7. Solid Waste
  - 1.7.1. Introduction to the USW Problem
  - 1.7.2. Concept of Solid Urban Waste
  - 1.7.3. Types of USW



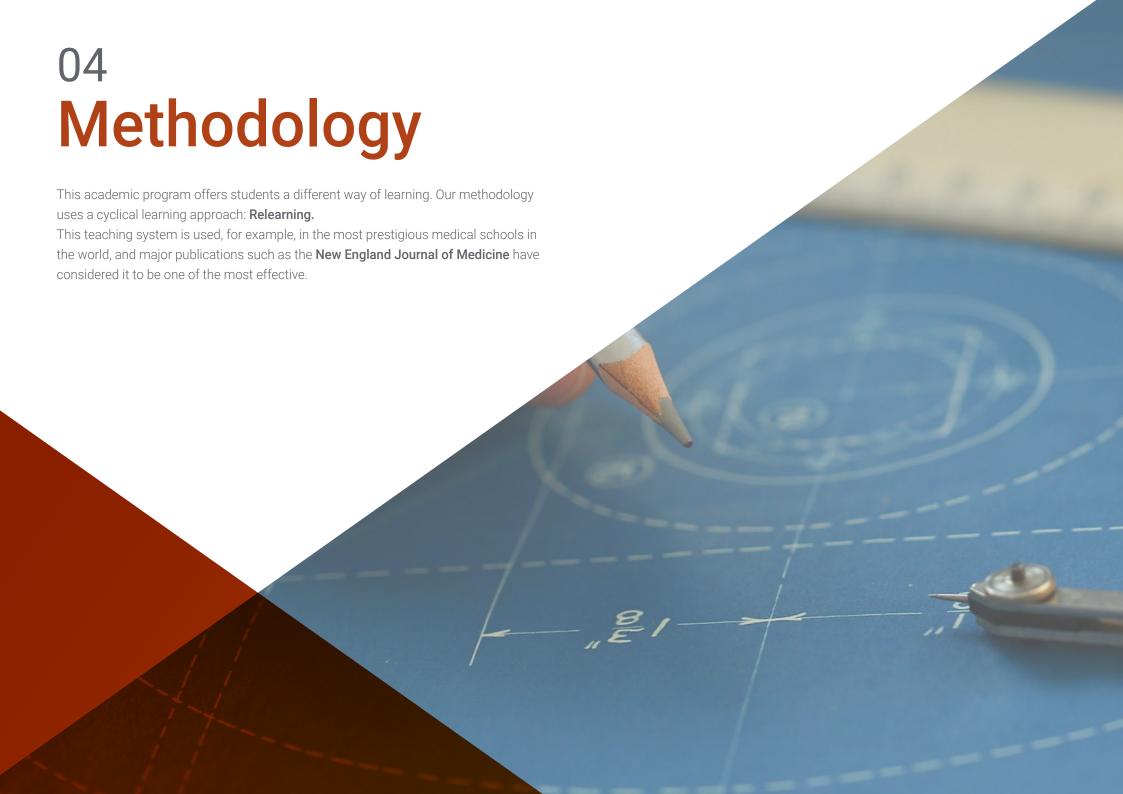


### Structure and Content | 15 tech

- 1.8. USW Management
  - 1.8.1. Landfills and Collection System
  - 1.8.2. Recycling
  - 1.8.3. Other Management Techniques
- 1.9. Dangerous Waste
  - 1.9.1. Introduction
  - 1.9.2. Radioactive Waste
  - 1.9.3. Waste from Medical Activity
- 1.10. New Environmental Problems: The Impact of Microplastics
  - 1.10.1. What Is Plastic?
  - 1.10.2. Plastic and Recycling
  - 1.10.3. Microplastics and Their interaction with the Environment
  - 1.10.4. Brief Review of the PM Problem



Acquire the knowledge you need in your career to advance in the management of hazardous waste such as medical waste"





## tech 18 | Methodology

### Case Study to contextualize all content

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



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



You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.

## Methodology | 19 tech



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

### A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and professional reality is taken into account.



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

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

What should a professional do in a given situation? This is the question that you are presented with in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

## tech 20 | Methodology

### Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

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

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

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



## Methodology | 21 tech

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

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

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

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

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

## tech 22 | 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.



### Classes

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

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



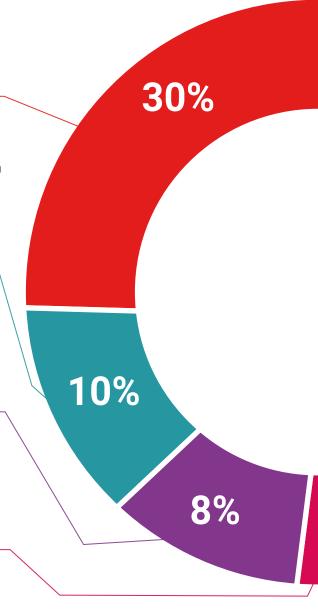
### **Practising Skills and Abilities**

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



### **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.





Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best specialists in the world.



### **Interactive Summaries**

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



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

### **Testing & Retesting**

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



25%

20%

4%





## tech 26 | Certificate

The Postgraduate Certificate in Pollution Treatment contains the most complete and up-to-date program of the market.

After the student has passed the assessments, they will receive their corresponding Postgraduate Certificate issued by TECH Technological University via tracked delivery. their Postgraduate Certificate issued by TECH Technological **University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations and professional career evaluation committees.

Title: Postgraduate Certificate in Pollution Processing Official No of Hours: 150 h.



### Pollution Treatment

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

technological university

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