



## Postgraduate Certificate Environmental Project Management

» Modality: online

» Duration: 12 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

 $We b site: {\color{blue}www.techtitute.com/in/engineering/postgraduate-certificate/environmental-project-management} \\$ 

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### tech 06 | Presentation

Compliance with existing regulations, as well as the measures promoted to favor the conservation and protection of the environment, make it essential to have an in-depth knowledge of the transformation proposed by different environmental policies. In this scenario of change towards a more sustainable economic model, any project developed must be aligned with measures aimed at preserving ecosystems.

A transition encouraged by different countries around the world and acquired by all productive sectors aware of the need to implement initiatives to reverse climate change, reduce pollution and eliminate the effects of toxic substances in water or soil. A reality where the engineer can achieve a great professional projection with the proper knowledge. That is why TECH Technological University has designed this university program that will allow you to delve into Environmental Project Management in just 12 weeks.

A program whose multimedia educational resources will allow students to learn in detail the most relevant aspects of sustainable economy, eco-design, the effects of pollution, as well as project creation considering all the necessary elements to carry it out in an adequate and sustainable way.

The Engineering professional is, therefore, provided with an excellent opportunity to study a university education, placed at the academic leading edge, conveniently from and when they wish to do so. All you need is an electronic device with Internet connection to view the syllabus. In addition, the Relearning method, used by TECH Technological University in all its programs, will favor the progression through the content of this program in a more natural way, even reducing the study hours.

This **Postgraduate Certificate in Environmental Project Management** 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 self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection



Do you have an Environmental Project in mind? This Diploma provides you with the keys you need to successfully implement it"



Click here to enroll in a flexible program designed for professionals who want to combine quality education with their personal responsibilities"

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.

Thisprogram provides you with the most recent knowledge on waste and by-product revaluation entrepreneurship.

Delve conveniently from your computer or Tablet into the quality requirements that every project must have throughout its life cycle.







### tech 10 | Objectives

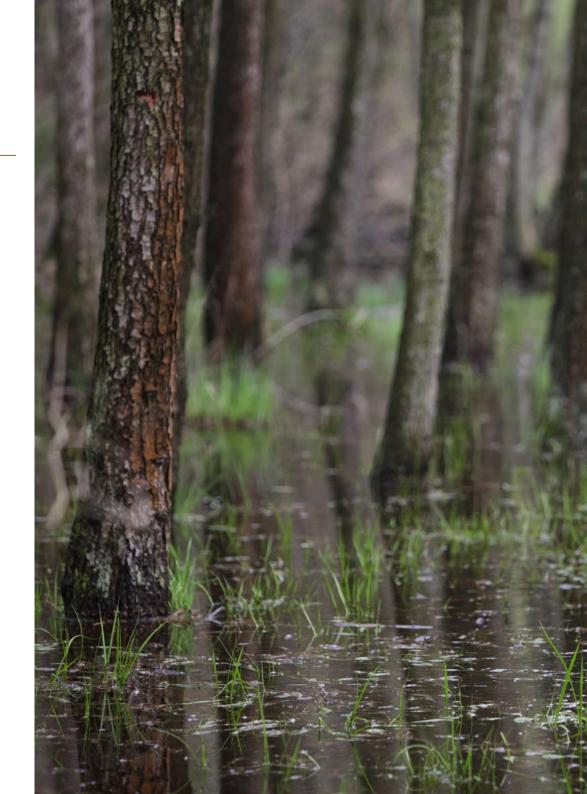


### **General Objectives**

- Acquire basic knowledge of science and use its results, integrating them with the social, economic, legal and ethical spheres for the identification of environmental problems
- Know basic models of pollutant dispersion and understand the functioning of pollution control networks
- Understand the regulations and legislation related to projects
- Apply organizational aspects in projects
- Know, in general terms, the main aspects of environmental legal protection in different areas where legal-administrative intervention is applied



Delve into the social, business and environmental advantages of the sustainable economy with the multimedia resources provided by TECH"





### **Specific Objectives**

#### Module 1. Sustainable Economy

- Acquire basic knowledge of science and use its results, integrating them with social, economic, legal and ethical fields for the identification of environmental problems
- Understand the conceptual approaches and tools of environmental economics and ecological or sustainable economics
- Understand what is meant by sustainability and know how to apply this concept to production and consumption patterns and land use
- Understand the interrelation of the different dimensions (social, historical, technological, political, etc) that trigger, in different times and places, distinct ways of understanding and building the environment

#### Module 2. Project Organization and Management

- Identify the elements, parts and phases of an Environmental Project
- Elaborate project documents, as well as other complementary documentation
- Apply activity planning and scheduling techniques
- Apply technical and administrative aspects of the different phases of projects





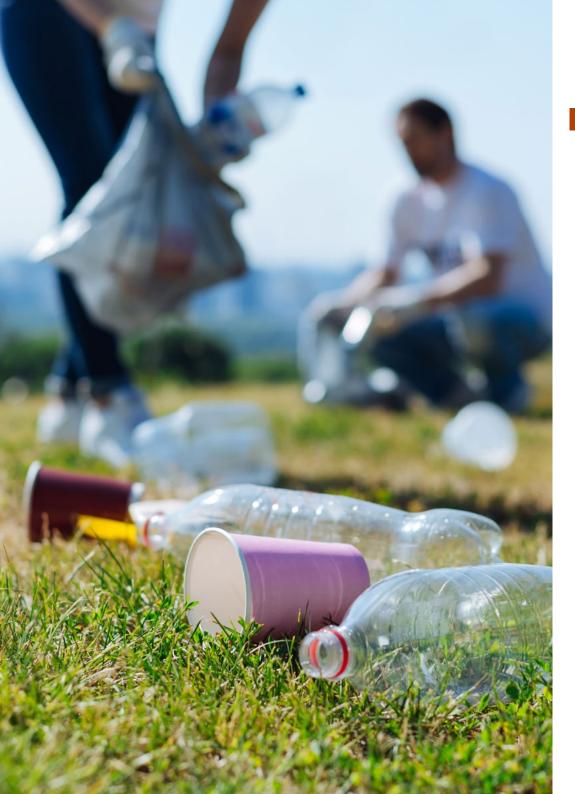


### tech 14 | Structure and Content

#### Module 1. Sustainable Economy

- 1.1. Aspects and Characteristics of Circular Economy
  - 1.1.1. Origin of Circular Economy
  - 1.1.2. Principles of Circular Economy
  - 1.1.3. Key Features
- 1.2. Adaptation to Climate Change
  - 1.2.1. Circular Economy as a Strategy
  - 1.2.2. Economic Advantages
  - 1.2.3. Social Benefits
  - 1.2.4. Business Benefits
  - 1.2.5. Environmental Benefits
- 1.3. Efficient and Sustainable Water Use
  - 1.3.1. Rainwater
  - 1.3.2. Gray Water
  - 1.3.3. Irrigation Water Agriculture and Gardening
  - 1.3.4. Process Water Agrifood Industry
- 1.4. Revaluation of Wastes and By-Products
  - 1.4.1. Wastewater Footprint
  - 1.4.2. From Waste to By-Product
  - 1.4.3. Classification According to Production Sector
  - 1.4.4. Revaluation Undertakings
- 1.5. Life Cycle Analysis
  - 1.5.1. Life Cycle Assessment (LCA)
  - 1.5.2. Stages
  - 1.5.3. Reference Standards
  - 1.5.4. Methodology
  - 1.5.5. Data Science

- 1.6. Ecodesign
  - 1.6.1. Ecodesign Principles and Criteria
  - 1.6.2. Characteristics of the Products
  - 1.6.3. Ecodesign Methodologies
  - 1.6.4. Ecodesign Tools
  - 1.6.5. Success Stories
- 1.7. Zero Discharge
  - 1.7.1. Principles of Zero Discharge
  - 1.7.2. Benefits
  - 1.7.3. Systems and Processes
  - 1.7.4. Success Stories
- 1.8. Green Public Procurement
  - 1.8.1. Legislation
  - 1.8.2. Green Procurement Manual
  - 1.8.3. Guidelines for Public Procurement
  - 1.8.4. Public Procurement Plan 2018-2025
- 1.9. Innovative Public Procurement
  - 1.9.1. Types of Innovative Public Procurement
  - 1.9.2. Contracting Process
  - 1.9.3. Sheet Design
- 1.10. Environmental Accounting
  - 1.10.1. Best Available Environmental Technologies (BAT)
  - 1.10.2. Ecotaxes
  - 1.10.3. Ecological Account
  - 1.10.4. Environmental Cost



### Structure and Content | 15 tech

#### Module 2. Project Organization and Management

- 2.1. Classical Project Theory
  - 2.1.1. Traditional Concept of Project
  - 2.1.2. The Preliminary Project
  - 2.1.3. The Project
  - 2.1.4. Project Documentation
  - 2.1.5. Entities Involved in the Project
  - 2.1.6. Types of Projects
- 2.2. Modern Project Management
  - 2.2.1. General Concepts
  - 2.2.2. Multidimensional Approach
  - 2.2.3. Project Phases and Milestones
  - 2.2.4. Process Model
- 2.3. Initial Project Phases
  - 2.3.1. Detection of Opportunities
  - 2.3.2. Project Selection Criteria
  - 2.3.3. Preparation and Submission of Bids
  - 2.3.4. Feasibility Studies
  - 2.3.5. Cost Estimation
  - 2.3.6. Disaggregated Project Structure
  - 2.3.7. Project Technology
  - 2.3.8. Definition and Objectives (Scope). The Project Plan
- 2.4. Human Resources in the Project
  - 2.4.1. Organization of the Project in the Company
  - 2.4.2. Project Manager and Project Team
  - 2.4.3. Motivation. Time Management Meetings
  - 2.4.4. Consulting and Engineering Companies

### tech 16 | Structure and Content

- 2.5. Time, Cost and Resource Planning
  - 2.5.1. Elements of Scheduling and Planning
  - 2.5.2. PMBOK Schedule Management
  - 2.5.3. Cost Management PMBOK
  - 2.5.4. Scheduling Tools (Gantt, CPM, PERT)
  - 2.5.5. Resource Optimization
  - 2.5.6. Use of the ProjectLibre Software Application
- 2.6. The Contracting and Procurement Process
  - 2.6.1. Contract Management
  - 2.6.2. Contract Specifications
  - 2.6.3. Legal Clauses
  - 2.6.4. Change and Revision Mechanisms
  - 2.6.5. Procurement Management (PMBOK)
  - 2.6.6. The Purchasing Cycle
- 2.7. Project Quality Management
  - 2.7.1. Introduction to Quality
  - 2.7.2. Regulations Related to Quality
  - 2.7.3. Quality System in the Company
  - 2.7.4. Quality in Project Management
- 2.8. Project Risk Management
  - 2.8.1. Introduction to Risk Management
  - 2.8.2. Risk Management Models
  - 2.8.3. Risk Management Processes



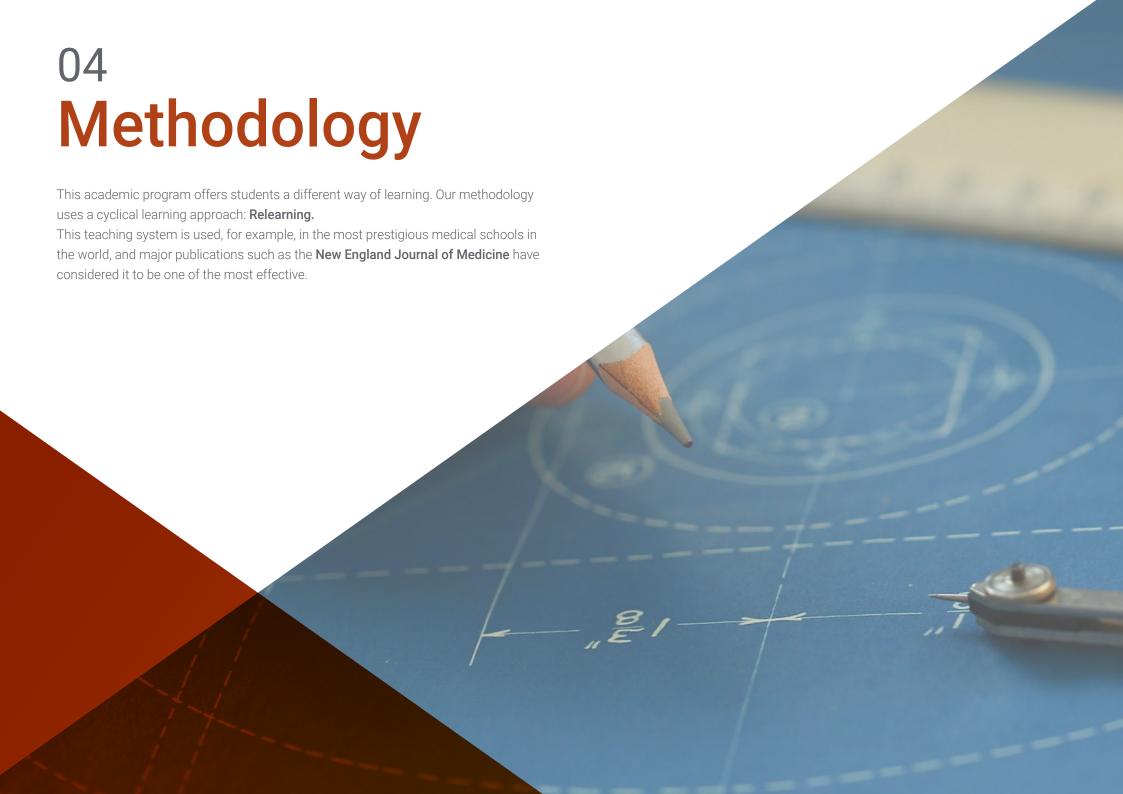


### Structure and Content | 17 tech

- 2.9. Project Communications Management
  - 2.9.1. Introduction to Communications Management (PMBOK)
  - 2.9.2. Communication and Quality
    - 2.9.2.1. Identify Stakeholders
    - 2.9.2.2. Planning Communication
    - 2.9.2.3. Information Distribution
    - 2.9.2.4. Stakeholder Expectation Management
    - 2.9.2.5. Performance Reporting
- 2.10. Control of the Execution and Closure of the Project
  - 2.10.1. Project Administration and Control
  - 2.10.2. Integrated Control of Deadlines and Costs (Earned Value Method)
  - 2.10.3. Project Closing



Enroll now in a Postgraduate Certificate that provides you with the knowledge you need to efficiently manage any environmental project"





### tech 20 | 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 | 21 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 22 | 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 | 23 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 24 | 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.



### Methodology | 25 tech



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.

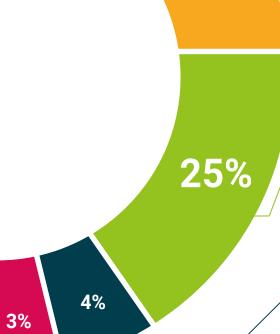


This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

#### **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.





20%





### tech 28 | Certificate

This **Postgraduate Certificate in Environmental Project Management** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **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 Environmental Project Management
Official N° of Hours: 300 h.



#### POSTGRADUATE CERTIFICATE

**Environmental Project Management** 

This is a qualification awarded by this University, equivalent to 300 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

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ualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.

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technological university Postgraduate Certificate **Environmental Project** 

- Management

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