Postgraduate Diploma Conservation Ecology



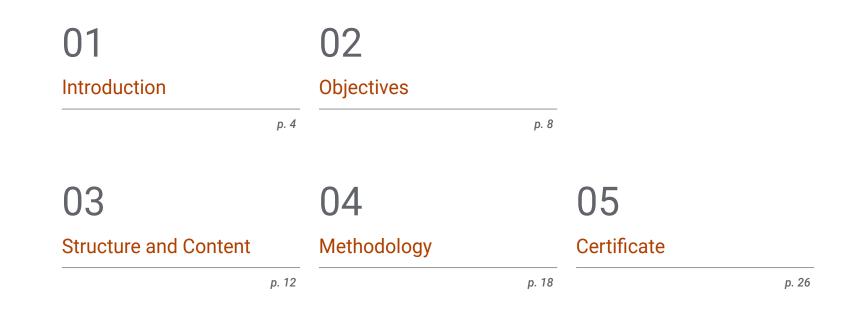


## **Postgraduate Diploma** Conservation Ecology

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

Website: www.techtitute.com/us/engineering/postgraduate-diploma/postgraduate-diploma-conservation-ecology

## Index



## 01 Introduction

Engineering creations have benefited human beings. For years, however, the impact of transportation and fuel use, the use of natural resources that were thought to be renewable, and the degradation of ecosystems were unknown. Increased awareness of the impact of different economic sectors has led to a change in mentality based on environmental protection. A transformation that goes beyond the conceptual and is applied from the planning of engineering projects. For this reason, TECH has created this 100% online degree in which graduates will delve into Ecology, the protection of fauna and flora, as well as the main lines of action in this field. All this, thanks to the innovative pedagogical resources provided by this program, which can be accessed at any time of the day.

This Postgraduate Diploma will allow you to advance in your professional career and you will be able to get into biodiversity conservation from the engineering point of view"

## tech 06 | Presentation

The approach of engineering to nature has made the professionals themselves more aware of the impact of their projects on the environment, and they also contribute with their technical knowledge to the recovery of certain polluted ecosystems, the reduction of polluting gas emissions or the adequate management of waste. This change has been possible thanks to greater environmental education and a change in society's own mentality.

The adoption of policies for the protection of species and the promotion of science and technology to favor the conservation of fauna and flora have also played a key role in this transformation. In this scenario, the profile of engineering professionals has undergone changes and they are capable of becoming key agents of the sustainable and efficient development that society and companies demand. That is why TECH offers professionals a university education that delves into Conservation Ecology through multimedia didactic resources that can be accessed at any time of the day from an electronic device with an internet connection.

Therefore, graduates will be able to delve into the conservation of biodiversity, biological systems, energy flows, strategic plans on biological diversity or the management carried out through natural parks for the protection of fauna and flora. Furthermore, students are provided with case studies that will help them to acquire learning that will be of great practical use in their professional performance.

All this, in a 100% online university education format, which does not have classes with fixed schedules, and whose teaching load can be distributed by the students according to their needs. An ideal educational option for people who wish to combine their work and/or personal responsibilities with a Postgraduate Diploma that is at the forefront of the academic world.

This **Postgraduate Diploma in Conservation Ecology** 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

You will acquire knowledge that will allow you to grow in projects that seek to improve the protection of endangered animals through engineering"

### Introduction | 07 tech

The case studies of this university degree will show you success stories in the use of surrogate species for environmental protection" Knows the main techniques for ex situ and in situ conservation of fauna, and the advances that engineering can bring.

Enroll in a Postgraduate Diploma that gives you the flexibility to view the most advanced content on invasive alien species management whenever you wish.

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 throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

## 02 **Objectives**

In only 6 months, students who enter this university program will obtain the most advanced and exhaustive learning about Ecology, the existing legal regulations for the management and protection of wildlife, as well as the different plans for the conservation of species. This knowledge will be acquired in a much more dynamic and attractive way thanks to the video summaries, diagrams or videos in detail elaborated expressly for this online program.

This program will lead you to better understand the functioning of ecosystems and take this into account in the creation of your engineering projects"

## tech 10 | Objectives



#### **General Objectives**

- Analyze some classical environmental models in detail
- Identify the organizational levels of nature, from individual specimens to the whole ecosystem
- Obtain samples in nature following the methodology according to the study to be carried out
- Know the conservation indicators of a species

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With this program you will learn about the management tools used by the different institutions to conserve species"





## Objectives | 11 tech



#### Specific Objectives

#### Module 1. Ecology

- Describe and understand the physico-chemical processes that structure and make ecosystems function
- Establish and understand the interrelationships between the different components that structure and allow an ecosystem to function
- Qualitatively and quantitatively analyze the structural and functional aspects of the different organizational levels
- Gain systematic and standardized understanding of the samples obtained in order to render reliable and comparable data

#### Module 2. Wildlife Management

- Describe the morphological and functional organization of organisms, and understand the basis of taxonomy and biological classifications
- Know the main biomes of the earth and general ecological processes, the factors that affect them and their dynamics
- Use procedures to estimate, represent and interpret biodiversity at various scales, population, taxonomic, ecological, their interactions in the natural and anthropized environment, and their environmental significance

#### Module 3. Wildlife Management and Conservation

- Identify space management
- Know the action plans carried out for endangered species conservation
- Understand management tools used by institutions
- Analyze wildlife conservation planning and management

## 03 Structure and Content

TECH employs in all of its degrees the system Relearning, students will progress through the syllabus of this program in a much more natural way, reducing even the long hours of study that are so frequent in other methodologies. In this way, they will be able to delve into biogeography, political initiatives for the conservation of species and the environment, as well as instruments and management tools for the protection of fauna and flora during the 450 teaching hours that make up this syllabus.

You will be able to access 24 hours a day, 7 days a week to the latest and most updated content on Conservation Ecology. Enroll now"

## tech 14 | Structure and Content

#### Module 1. Ecology

- 1.1. General Ecology I
  - 1.1.1. Reproduction Strategies
  - 1.1.2. Biological Indicators
    - 1.1.2.1. Productivity
    - 1.1.2.2. Sex Ratio
    - 1.1.2.3. Flight Rate
    - 1.1.2.4. Operational Birth Rate
    - 1.1.2.5. Reproductive Success
- 1.2. General Ecology II
  - 1.2.1. Birth Rate and Mortality
  - 1.2.2. Growth
  - 1.2.3. Density and Assessment
- 1.3. Population Ecology
  - 1.3.1. Gregariousness and Territorialism
  - 1.3.2. Feeding Area
  - 1.3.3. Activity Patterns
  - 1.3.4. Age Structure
  - 1.3.5. Predation
  - 1.3.6. Animal Nutrition
  - 1.3.7. Extinction: Critical Periods
- 1.4. Biodiversity Preservation
  - 1.4.1. Life Cycle Critical Periods
  - 1.4.2. International Union for Conservation of Nature (IUCN) Categories
  - 1.4.3. Conservation Indicators
  - 1.4.4. Vulnerability to Extinction

- 1.5. Surrogate Species I
  - 1.5.1. Keystone Species 1.5.1.1. Description 1.5.1.2. Real Examples
  - 1.5.2. Umbrella Species 1.5.2.1. Description
    - 1.5.2.2. Real Examples
- 1.6. Surrogate Species II
  - 1.6.1. Flagship Species)
    - 1.6.1.1. Description 1.6.1.2. Real Examples
  - 1.6.2. Indicator Species
    - 1.6.2.1. Biodiversity Status 1.6.2.2. Habitat Status
    - 1.6.2.3. Population Status
- 1.7. Plant Ecology
  - 1.7.1. Plant Successions
  - 1.7.2. Animal-Plant Interaction
  - 1.7.3. Biogeography
- 1.8. Ecosystems
  - 1.8.1. Structure
  - 1.8.2. Factors
- 1.9. Biological Systems and Communities
  - 1.9.1. Community
  - 1.9.2. Structure
  - 1.9.3. Biomass
- 1.10. Energy Flows
  - 1.10.1. Nutrient Cycles

### Structure and Content | 15 tech



#### Module 2. Wildlife Management

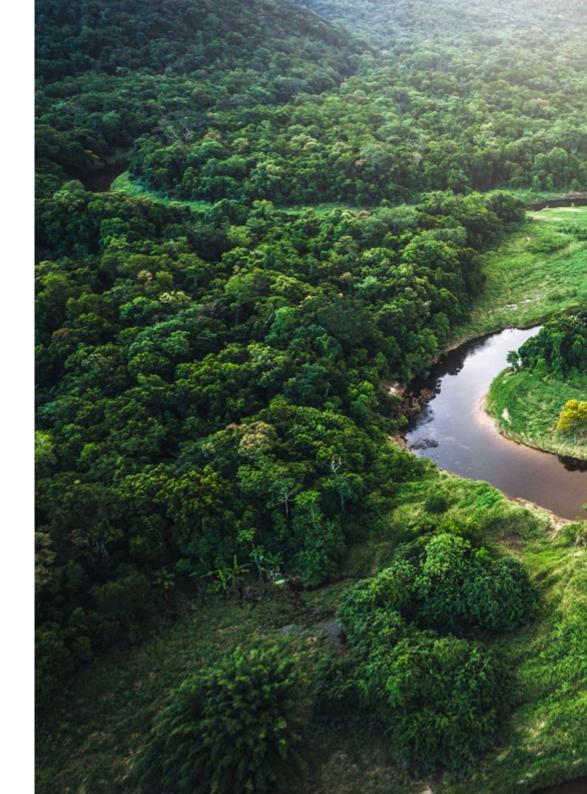
- 2.1. Convention on Biological Diversity
  - 2.1.1. Mission and Objectives
  - 2.1.2. Strategic Plan for Biological Diversity
- 2.2. Convention on International Trade in Endangered Species of Wild Fauna and Flora
  - 2.2.1. Structure and Objectives
  - 2.2.2. Appendices I, II and III
- 2.3. Ramsar Convention
  - 2.3.1. Structure and Objectives
  - 2.3.2. Designation of Ramsar Sites
- 2.4. Other International Conventions
  - 2.4.1. United Nations Convention to Combat Desertification
  - 2.4.2. Bonn Convention on the Conservation of Migratory Species
  - 2.4.3. OSPAR Convention
- 2.5. Berna Convention
  - 2.5.1. Structure and Objectives
- 2.6. South America: National Strategies for Biodiversity
  - 2.6.1. Mission and Objectives
  - 2.6.2. Main Lines of Action

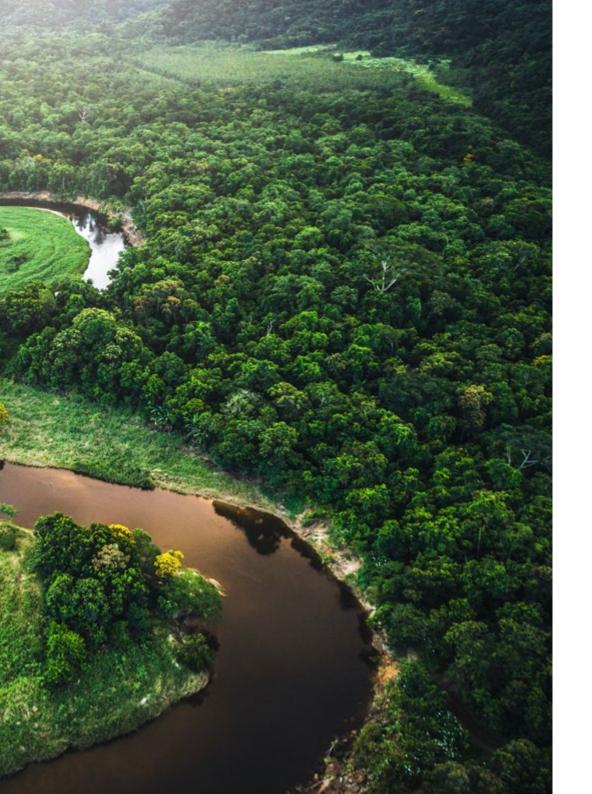
#### Module 3. Wildlife Management and Conservation

- 3.1. Management of Protected Natural Areas
  - 3.1.1. Introduction
  - 3.1.2. Structure
  - 3.1.3. Restrictions
- 3.2. Management of Endangered Species Conservation
  - 3.2.1. Action Plans
  - 3.2.2. Recovery Plans

## tech 16 | Structure and Content

- 3.3. Natura 2000 Management
  - 3.3.1. Structure
  - 3.3.2. Indicators
  - 3.3.3. Stocks
- 3.4. Forest Management
  - 3.4.1. Forest Planning
  - 3.4.2. Management Projects
  - 3.4.3. Main Overlap between Forestry Management and Species Conservation
- 3.5. OnSite Management
  - 3.5.1. Actions on the Habitat
  - 3.5.2. Actions on Prey and Predators
  - 3.5.3. Actions on Diet
- 3.6. OffSite Management
  - 3.6.1. Captive Breeding
  - 3.6.2. Reintroductions
  - 3.6.3. Translocations
  - 3.6.4. Recovery Centers
- 3.7. Invasive Alien Species (IAS) Management
  - 3.7.1. Strategies and Plans
- 3.8. Management Tools: Access to Information
  - 3.8.1. Data Sources
- 3.9. Management Tools: Strategies
  - 3.9.1. Main Lines
  - 3.9.2. Strategies against the Main Threats





### Structure and Content | 17 tech

With this 100% online program, you will learn about the international conventions that marked a before and after in the conservation of the world's fauna and flora"

## 04 **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"

## 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.



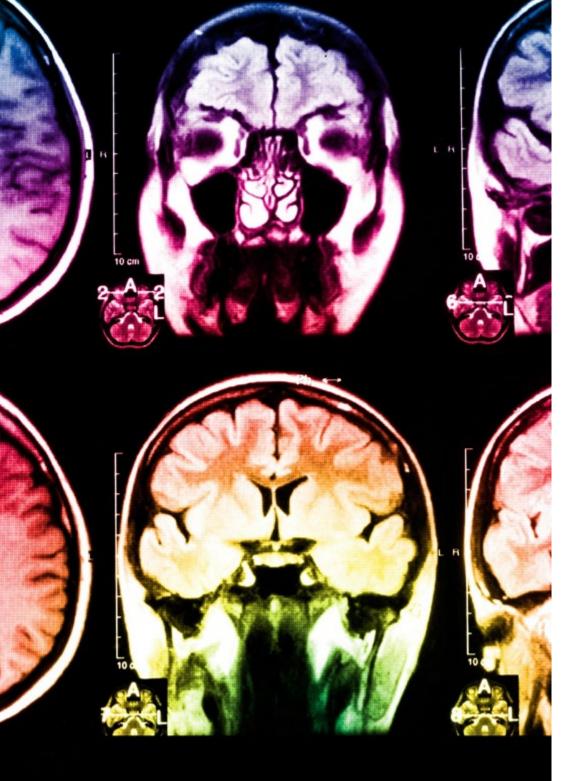
### Methodology | 23 tech

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.

30%

8%

10%

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



#### **Case Studies**

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.



4%

20%

25%

## 05 **Certificate**

The Postgraduate Diploma in Conservation Ecology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.



Successfully receive your u

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

## tech 28 | Certificate

This program will allow you to obtain your **Postgraduate Diploma in Conservation Ecology** 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 Conservation Ecology

Modality: online

Duration: 6 months

Accreditation: 18 ECTS



# tecn global university Postgraduate Diploma **Conservation Ecology** » Modality: online » Duration: 6 months » Certificate: TECH Global University » Credits: 18 ECTS » Schedule: at your own pace » Exams: online

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