

Postgraduate Certificate Natural Capital in Urban Infrastructures





Postgraduate Certificate Natural Capital in Urban Infrastructures

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/pk/engineering/postgraduate-certificate/natural-capital-urban-infrastructures

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01

Introduction

The acceleration of climate change and the implementation of nature conservation policies have greatly enhanced the concept of Natural Capital in recent years. Measuring air quality, existing biological diversity for the recovery of environments and its incorporation into urban infrastructure projects has meant a paradigm shift in the sector. A new look that brings this 100% online program to students interested in taking solid steps in their professional career through an education that will allow them to delve into the implementation of projects that enhance the value of the environment or propose solutions based on nature. High-level teaching with multimedia didactic material, accessible 24 hours a day, from any digital device with an Internet connection.





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A 100% online university qualification that adapts to your professional growth needs in the field of sustainable urban infrastructure creation”

Nowadays, the focus is on the conservation of the natural environment and the valorization of all the elements it provides to human beings. This is what is called Natural Capital, a concept that changes the course of action also in the development and creation of engineering projects, which take into consideration the quality of natural resources and their characteristics in order to adapt to the environment.

A new change of mentality that leads professionals to value the importance of nature and adapt their initiatives to the global regulatory framework and biodiversity. For this reason, TECH has designed this university qualification of 150 teaching hours and with the most advanced syllabus, developed by authentic specialists in this field.

It is an intensive program that leads the graduate to delve into the components of urban green infrastructure, to give sustainable meaning to their actions and to assess the economic and social impact of Nature-Based Solutions. An extensive content of 6 weeks' duration that becomes more attractive thanks to the numerous didactic resources based on video summaries, videos in detail, case studies and additional readings.

In addition, thanks to the *Relearning* method, the graduate will not have to invest a great amount of hours studying and memorizing, since the reiteration of the most important concepts throughout the academic pathway facilitates learning.

A unique Postgraduate Certificate that provides students with an unparalleled education and the necessary flexibility to access the program whenever and however they wish. All you need is a digital device with an Internet connection to access the content of this academic option at any time.

This **Postgraduate Certificate in Natural Capital in Urban Infrastructures** contains the most complete and up-to-date program on the market. The most important features include:

- ◆ The development of practical cases presented by experts in resilience Infrastructures
- ◆ The graphic, schematic and practical contents of the book provide technical and practical information on those 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



Thanks to this program you will be able to learn how to integrate biodiversity and Natural Capital in Urban Infrastructures"

“

Integrate into your engineering practice the success cases in Natural Capital Accounting provided by the specialized teaching team of this program”

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

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

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

With this academic option, delve deeper into the new paradigm of economics around Natural Capital.

You have unlimited access to teaching material throughout the day and through any digital device with Internet connection.



02 Objectives

The purpose of this Postgraduate Certificate is to provide students with a complete vision of the new scenario that has led to the promotion of the concept of Natural Capital in the development of Urban Infrastructures. For this purpose, it has a syllabus that offers the graduate a theoretical-practical perspective complemented with successful cases provided by the excellent teaching team that integrates this program. In addition, thanks to their proximity, students will be able to resolve any doubts they may have about the content of the program.





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In just 150 teaching hours you will be aware of the models of integration of urban infrastructures in natural spaces without losing their essence and value”



General Objectives

- ◆ Provide a foundation for the current context of Sustainable Urban Development
- ◆ Analyze the main global reference strategies for Sustainable Urban Development
- ◆ Protect and promote Urban Biodiversity
- ◆ Communicate through visualization of good environmental management
- ◆ Analyze different nature-based solutions as city transformers



Enhance the value of your engineering projects through the great opportunities offered by green spaces”





Specific Objectives

- ◆ Develop the concept of Nature, a new paradigm of economy
- ◆ Analyze the global framework for biodiversity and natural capital
- ◆ Identify the components of urban green infrastructure
- ◆ Learn to value the importance of nature
- ◆ Value the risks and opportunities associated with the new global framework
- ◆ Provide a foundation for the new global legislative framework in relation to biodiversity and natural capital
- ◆ Determine the new European legislative framework and the implications for business
- ◆ Identify the components of urban green infrastructure: assets and ecosystem services
- ◆ Establish frameworks for measuring, valuing, and accounting for nature's benefits to society and frameworks for measuring, valuing, and accounting for the impacts
- ◆ Examine the sustainability standards for urban infrastructure
- ◆ Categorize and understand the different risks to nature
- ◆ Assess the opportunities associated with the natural capital approach
- ◆ Compile management and financing models based on natural capital and ecosystem services
- ◆ Analyze in early projects where private investment in green infrastructure can play a role
- ◆ Concretize nature-based solutions and natural capital
- ◆ Assess the economic and social impact of Nature-Based Solutions

03

Course Management

In order to maintain its premise of offering all students a first class education, TECH has selected a teaching team composed of excellent professionals with experience in ecosystem services, biodiversity and drivers of Natural Capital. Their deep knowledge in this field will allow the student to obtain a truly effective and up-to-date learning that responds to the current needs of the sector, which requires personnel with a vision oriented towards the conservation of space and the enhancement of the sustainability of infrastructure and spaces.



“

Solve any questions you may have with the excellent teaching team versed in Ecosystem and Biodiversity Services”

Management



Mr. Rodríguez Gamo, José Luis

- ♦ Business Development Director at Green Urban Data
- ♦ Senior sustainability consultant for large companies and public administrations
- ♦ Manager of the Urban and Environmental Services Division of Grupo Ferrovial
- ♦ Manager of Climate Change and Biodiversity of Grupo Ferrovial
- ♦ Forestry Engineer from the Polytechnic University of Madrid
- ♦ Specialization in Silvopastoral Farming
- ♦ Postgraduate Degree in Conservation and Maintenance of Urban Green Spaces from the Polytechnic University of Madrid
- ♦ Management Program by the Instituto de Empresa

Professors

Mr. Álvarez García, David

- ♦ Executive Director of Ecoacsa Reserva de Biodiversidad
- ♦ Coordinator of the Organisations, Strategies and Sustainable Uses working area of the ISO 331 Biodiversity Committee at the global level
- ♦ International expert on biodiversity and natural capital for UN-WCMC, FAO and UN-STATS
- ♦ European Leader at Life Institute
- ♦ Member of the Advisory Board and Business Ambassador of the EC initiative Business@ Biodiversity
- ♦ Forestry Engineer from the Polytechnic University of Madrid
- ♦ Master MBA Executive by the European Business School of Aragon



04

Structure and Content

Thanks to the effectiveness of the Relearning method, based on the reiteration of the most important concepts throughout this academic path, the graduate will have the opportunity to reduce the hours of study and obtain an effective teaching in just 6 weeks. In addition, the variety of multimedia pedagogical resources adds an attractive feature to this Postgraduate Certificate that will allow you to dynamically delve into the concept of Natural Capital, its opportunities, its measurement and integration in engineering projects.



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The additional didactic material in this program will allow you to extend the information provided by this complete syllabus in Natural Capital in Urban Infrastructures”

Module 1. Natural Capital in Urban Infrastructures

- 1.1. Biodiversity. New Global Framework
 - 1.1.1. Theory of Change of the Global Framework
 - 1.1.2. The New Global Framework for Biodiversity. Implications
 - 1.1.3. New European Regulatory Framework
- 1.2. Natural Capital. New Paradigm of Economics and Management
 - 1.2.1. Natural Capital. New Paradigm of Economics and Management
 - 1.2.2. Natural Capital. Components
 - 1.2.3. Ecosystem Services
- 1.3. Natural Capital. Scope
 - 1.3.1. Natural Capital in Urban Infrastructures. Pre-existing Framework of each Country
 - 1.3.2. Components of Natural Capital in Urban Infrastructures
 - 1.3.3. Definition of Objectives
 - 1.3.4. Scope Identification
- 1.4. Impacts and Dependencies on Natural Capital
 - 1.4.1. Materiality. Concept and Variables
 - 1.4.2. Impacts on Natural Capital
 - 1.4.3. Natural Capital Dependencies
- 1.5. Bases for Natural Capital Measurement
 - 1.5.1. Natural Assets Measurement
 - 1.5.2. Indicators for Natural Assets Measurement. Extension
 - 1.5.3. Indicators for Natural Assets Measurement. Condition
- 1.6. Integration of Natural Capital Valuation
 - 1.6.1. Measurement of Urban Ecosystem Services
 - 1.6.2. Indicators of Urban Ecosystem Services
 - 1.6.3. Economic Valuation of Urban Ecosystem Services
- 1.7. Natural Capital Accounting
 - 1.7.1. The Natural Capital Accounting Framework
 - 1.7.2. Natural Capital Accounting in Urban Infrastructure
 - 1.7.3. Success Stories



- 1.8. Nature-Based Solutions from a Natural Capital Perspective
 - 1.8.1. Nature-Based Solutions. Features
 - 1.8.2. Standardization of Nature-Based Solutions
 - 1.8.3. SbN from a Natural Capital Perspective
- 1.9. Natural Capital in Urban Infrastructure Management. Integration Models
 - 1.9.1. Management Models Based on Ecosystem Services
 - 1.9.2. Financing Models based on Natural Capital
 - 1.9.3. Natural Capital. Management Implications
- 1.10. Opportunities based on Natural Capital
 - 1.10.1. Economic Impact Measurement
 - 1.10.2. Business Models based on Natural Capital
 - 1.10.3. Economic Impact of Business Models

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You will achieve an education that will provide you with the basis for measuring Natural Capital in any project you plan”



05

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





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Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

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.



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.

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.



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.



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

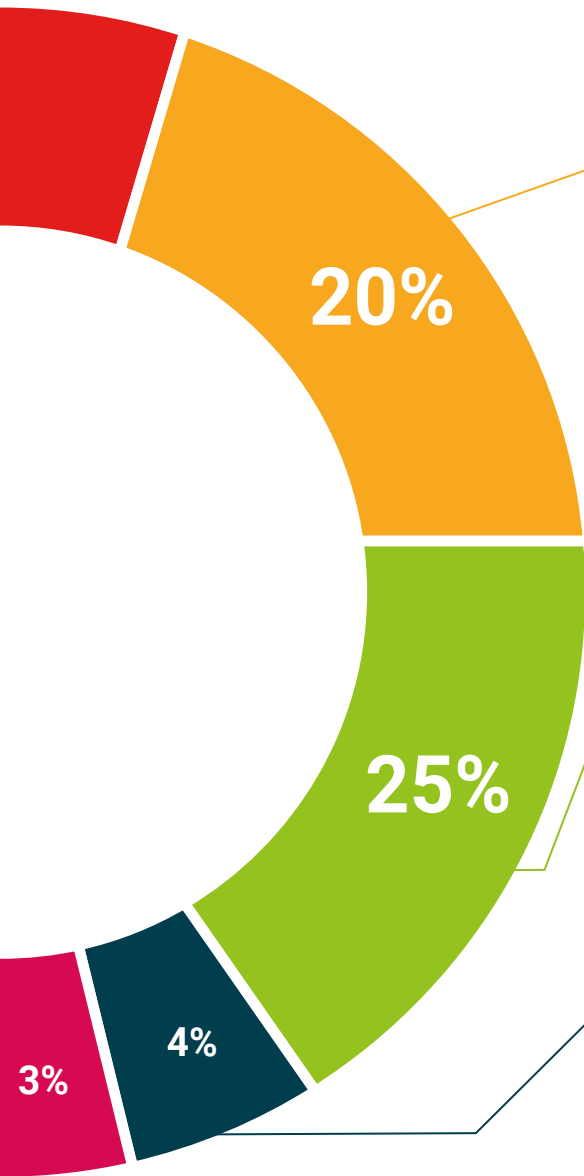
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



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.





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.



06

Certificate

The Postgraduate Certificate in Natural Capital in Urban Infrastructures guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Natural Capital in Urban Infrastructures** 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 Natural Capital in Urban Infrastructures**

Official N° of Hours: **150 h.**



*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.

future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present
online training
development languages
virtual classroom



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