

Postgraduate Certificate Urban Tree Technical Planning



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

Website: www.techtitute.com/us/engineering/postgraduate-certificate/urban-tree-technical-planning

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01

Introduction

Municipal tree management is one of the most complex tasks facing a city council. This is due to the fact that trees, fundamental for the quality of life and health of the urban population, must adapt to the public space. In addition, the correct maintenance of urban trees is essential, since abandoning them can cause damage to citizens due to the fall of branches or entire trunks, among other examples. Therefore, this TECH program provides all the keys for an excellent technical planning of an essential element in cities, offered in a convenient 100% online format.





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With this Postgraduate Certificate you will be a specialist in the technical planning of trees and you will ensure the quality of life of the urban population"

The maintenance and proper planning of trees in cities is an important task for their proper development. It should be remembered that a truly sustainable city is one that has managed to integrate green space into its urban system. Therefore, technicians or engineers are required to ensure that both coexist in harmony for greater human and ecological benefit.

For this reason, TECH puts on the table a program focused on the diagnosis of the conditions of trees in the city. In this sense, we will analyze the ecosystemic disservices they produce to society, such as allergenicity, cross-contamination, the fall of annoying fruits or branches and trees altogether. However, the focus will also be on what they contribute to urban spaces, especially in terms of CO2 and pollutant uptake or emission of oxygen and other volatile organic compounds.

Likewise, students will delve into the management plans of urban trees or ways to improve urban sustainability through functional and ecological connectivity. All this specialization will be accompanied by leading teachers in the field, who have prepared online materials for students to acquire knowledge at their own pace. In fact, the only thing you will need to complete the course will be an Internet connection to access the Virtual Campus.

This **Postgraduate Certificate in Urban Tree Technical Planning** 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 in Urban Tree Technical Planning
- ♦ 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 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



Set your own learning deadlines and contribute to making cities more sustainable"

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Specialize from home with cutting-edge educational content including videos, practical exercises and methodologies complemented by a large digital library of resources”

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.

Its multimedia content, developed with the latest educational technology, will provide the professionals 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 professionals must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned experts.

Get highly trained in the diagnosis of trees in urban spaces and the keys to manage them with mastery.

Launch your career towards change and become the author of the Tree Management Plans in large cities.



02 Objectives

The Postgraduate Certificate in Urban Tree Technical Planning is designed to provide engineers with useful tools for planning, quantifying and monitoring tree planting. The program will prepare students with the most up-to-date knowledge of the sector for the effective management of green urban spaces. In this line, the objectives of the program will be achieved with the development of exercises and case studies that will facilitate the deepening of the lessons.





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Benefit from an internationally recognized educational pathway to sufficiently achieve the objectives of the program"



General Objectives

- ♦ Substantiate the current context of Sustainable Urban Development
- ♦ Analyze the main global reference strategies for Sustainable Urban Development
- ♦ Protecting and promoting Urban Biodiversity
- ♦ Communicate through visualization of good environmental management
- ♦ Analyze different nature-based solutions as city transformers



Delve into the ecosystem services of trees to prevent damage to the city"





Specific Objectives

- ◆ Train in the study of the diagnosis of a city's tree population
- ◆ Examine the services and disservices provided by ornamental public trees
- ◆ Acquiring skills for the management of public trees
- ◆ Learn how to assess using specific calculation tools
- ◆ Face the problems of creating new spaces where existing trees need to be introduced or modified in a sustainable manner
- ◆ Identify the main barriers to management based on ecosystem services for urban tree species
- ◆ Inventory and identify the most common tree management problems
- ◆ Apply valuation standards
- ◆ Elaborate tree master plans
- ◆ Manage trees in urban works and infrastructures
- ◆ Identify the danger parameters of a tree and the work to be carried out in each case to minimize risk
- ◆ Develop tools for the selection of species adapted to climate change
- ◆ Establish monitoring programs for tree management based on KPIs

03

Course Management

The teaching team of this program excels in the area of Urban Tree Planting thanks to a wide professional experience in Green Infrastructures or Natural Capital. In this sense, the faculty combines teaching with great responsibilities in companies of Environmental Intelligence for cities. Therefore, students will have all the guarantees required to specialize in a sector that manages an essential area in cities.





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Reach professional excellence from the hand of a teaching team with experience in positions of responsibility in companies of Ambient Intelligence for cities"

Management



Mr. Rodríguez Gamo, José Luis

- ♦ Business Development Director at Green Urban Data
- ♦ Senior Sustainability Consultant for Large Corporations 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 Zones from the Polytechnic University of Madrid
- ♦ Executive Management Program by the Instituto de Empresa



04

Structure and Content

The syllabus of the Postgraduate Certificate in Urban Tree Technical Planning follows the *ReLearning* methodology. This system combines the latest educational techniques to offer a method in which the students will naturally assimilate the key concepts of the contents throughout the learning cycle. As a result, you will enjoy a more natural experience with this program and, at the end of it, you will have internalized the syllabus in an effective way.



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A syllabus that offers a more natural learning experience thanks to ReLearning”

Module 1. Urban Tree Technical Planning

- 1.1. Diagnosis of the city's trees
 - 1.1.1. Current State
 - 1.1.2. Inventory
 - 1.1.3. Alignment or street trees
 - 1.1.4. Park trees
 - 1.1.5. Management System
- 1.2. Elaboration of a Tree Master Plan
 - 1.2.1. Target image
 - 1.2.2. Management guidelines
 - 1.2.3. Implementation and monitoring plans
- 1.3. Ornamental Tree Assessment.
 - 1.3.1. Valuation of trees
 - 1.3.2. Valuation of palm trees
 - 1.3.3. The norms for the valuation of ornamental trees
 - 1.3.4. Incorporation of ecosystem services
- 1.4. Management of trees in urban works and infrastructures
 - 1.4.1. From the nursery to the construction site
 - 1.4.2. Pruning and felling on site
 - 1.4.3. Transplants
 - 1.4.4. Plantations
- 1.5. Diservices caused by urban trees
 - 1.5.1. Nuisance fruit
 - 1.5.2. Sidewalk breakage due to roots
 - 1.5.3. Falling branches
 - 1.5.4. Allergenicity
 - 1.5.5. Attraction of unwanted fauna





- 1.6. Benefits and ecosystem services of woodlands
 - 1.6.1. Support or provisioning
 - 1.6.2. Regulation of pollution, noise, heat island effect and flood protection
 - 1.6.3. Cultural, health and leisure
- 1.7. Topiary pruning or ornamental pruning. Risk of failure
 - 1.7.1. Ornamental Pruning
 - 1.7.2. The Pruning Process
 - 1.7.3. Risk of breakage and its management
- 1.8. Management guidelines
 - 1.8.1. Management plans
 - 1.8.2. Adaptation to the SDGs
 - 1.8.3. Implementation plans
- 1.9. Species selection tool
 - 1.9.1. Monitoring of species adapted to climate change
 - 1.9.2. Design of a selection matrix
 - 1.9.3. Design of the calculation tool
- 1.10. Monitoring and follow-up
 - 1.10.1. Creation of information and management scorecard
 - 1.10.2. Panel of indicators or KPIs to be monitored
 - 1.10.3. Communication and follow-up by the company



A program designed with the highest educational standards for you to delve into all the key areas of your specialization"

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.

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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 Urban Tree Technical Planning 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 Urban Tree Technical Planning** 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 diploma 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 Urban Tree Technical Planning**

Official N° of Hours: **150 h.**



*Apostille Convention. In the event that the student wishes to have their paper diploma 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
development language
virtual classroom



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