**Postgraduate Certificate** Strategic Urban Green Infrastructure Planning

> tecn global university

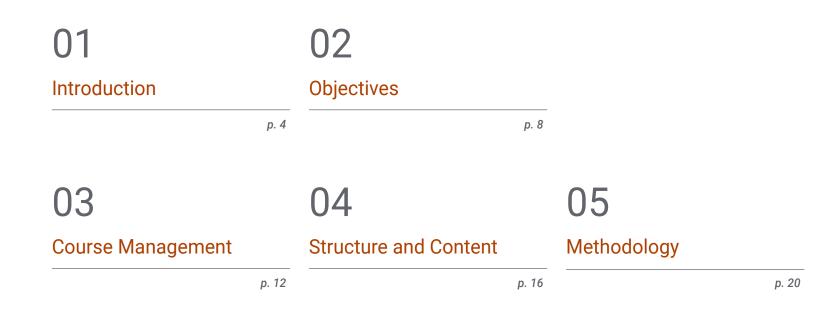


## **Postgraduate Certificate** Strategic Urban Green Infrastructure Planning

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

Website: www.techtitute.com/us/engineering/postgraduate-certificate/strategic-urban-green-infrastructure-planning

# Index



06 Certificate

# 01 Introduction

The United Nations warns that urban sprawl is leading to increasing numbers of slum dwellers and inadequate and overburdened infrastructure. This in turn leads to a rapid deterioration of biodiversity and natural ecosystems. Although cities are largely responsible for this, they are also positioned as the solution if they focus on sustainability. Under this need, this program seeks to specialize engineers in a highly effective area to provide environmental, economic and social benefits through natural solutions, reducing dependence on Gray Infrastructure. Undoubtedly, a highly qualified program in a 100% online format to be completed wherever and whenever the students want.

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Thanks to this Postgraduate Certificate you will be part of the solution that offers a new model of urban infrastructure"

## tech 06 | Introduction

In view of the environmental damage caused by the growth of cities, the European Union has established a strategy aimed at protecting, restoring and enhancing biodiversity and the ecosystem services it provides. To this end, the priority challenge is to halt this deterioration and restore degraded areas by introducing a new concept in territorial planning, known as Green Infrastructure. This network of natural and semi-natural spaces requires specialized engineers to reduce the risk of fragmentation of habitats or to allow the connection between green areas. There is thus a growing demand for profiles in this area.

Therefore, the Postgraduate Certificate in Strategic Urban Green Infrastructure Planning offers students the opportunity to learn the whys and wherefores of this planning, which allows the transfer of a city model according to objectives aligned with international urban agendas. The program achieves, in this way, to propose a more agile territorial planning to adapt to social changes, developing impact actions in key areas.

A program that, with this approach, will launch the professional careers of students, following a highly flexible modality. In this line, the Postgraduate Certificate is taught 100% online and the students will set the pace at all times, while accessing a complete digital library of resources on the subject.

This **Postgraduate Certificate in Strategic Urban Green Infrastructure Planning** 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 Urban Green 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



A Postgraduate Certificate for you to excel in a particularly demanded area, applying your acquired knowledge in an effective strategic planning in Urban Green Infrastructures"

### Introduction | 07 tech

Learn about new models of cities that meet the objectives of international urban agendas"

Specialize from home in the strategic planning of Urban Green Infrastructure with the deadlines you set.

Learn the necessary phases of strategic planning of Urban Green Infrastructure to be successful in its execution.

The program includes , in its teaching staff professionals from the sector who pour into this training the experience of their work, in addition , to recognized specialists from reference 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.

# 02 **Objectives**

The design of the program of this Postgraduate Certificate will allow the students to develop in the area of green urban spaces through advanced knowledge in strategic planning. In this sense, the key concepts of this subject will be analyzed and the necessary phases of the planning process will be known. Ultimately, upon completion of this program, students will demonstrate the effectiveness of strategic planning through real success stories and rethink investment and management towards sustainability-based models.

In this Postgraduate Certificate you will study real cases of success so that, at the end of the program, you will have the best references to be fluent in Urban Green Infrastructure"

## tech 10 | Objectives

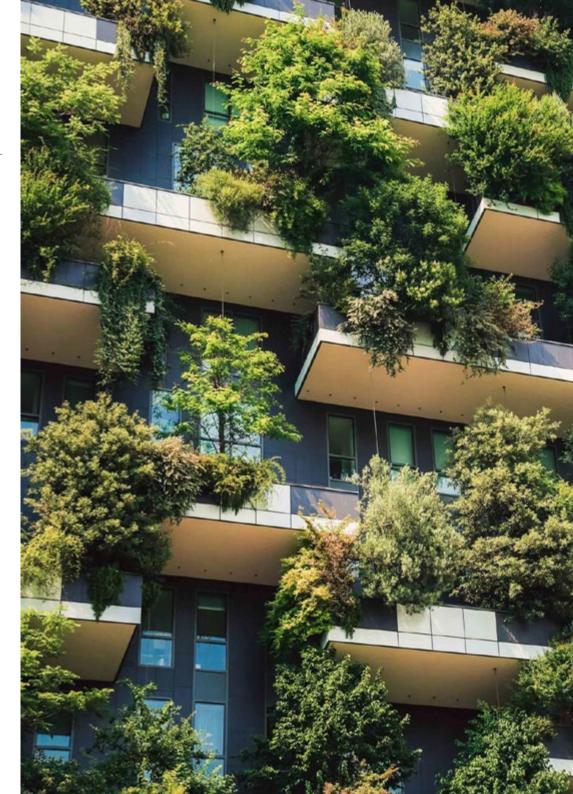


### **General Objectives**

- 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

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The objectives of the Postgraduate Certificate in Strategic Urban Green Infrastructure Planning are designed to make you an up-to-date professional and to make you stand out in your sector"







### Specific Objectives

- Analyze the key concepts in strategic planning of green infrastructure, within the existing policy or regulatory framework and possible scenarios
- Develop the possible phases necessary to carry out strategic planning, ranging from objective setting, information gathering and analysis, participation, situation diagnosis, action plans to monitoring and evaluation or communication
- Demonstrating the effectiveness of strategic planning through real-life success stories
- Connecting natural capital and consolidating urban green infrastructure
- Rethink investment and management towards models based on sustainability and the fight against climate change
- Encourage participation. Implement in the management itself the processes that promote citizen participation and involvement in the development of the city's green infrastructure
- Advance in the rebalancing of the city's green infrastructure, establishing a system of dynamic diagnosis of the city's green infrastructure to derive strategic proposals that correct imbalances, identify opportunities and enhance the differentiating values of the neighborhoods and promote new centers
- Periodically evaluate the actions proposed in the plan with a commitment to address the results with actions
- Improve communication and awareness and guarantee citizens' right of access to information related to green infrastructure

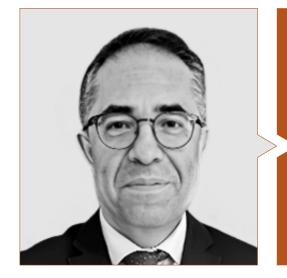
# 03 Course Management

The teaching team of this Postgraduate Certificate is composed of prestigious professionals who have excelled in the field of Urban Green Infrastructure. The professors have accumulated extensive experience in the sector, working in both public administrations and renowned private companies. They have worked in the areas of Projects, Rehabilitation of Green Areas or Parks and are specialists in disciplines such as Silvopasciculture, accumulating a broad background that will contribute to catapult students to success in their careers.

The outstanding professional and teaching background of the faculty will help the students to achieve the objectives of the Postgraduate Certificate in an outstanding way"

## tech 14 | Course Management

#### 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

#### Professors

#### Ms. García San Gabino, Beatriz

- Technical Advisor, Juan Carlos I Park, Madrid
- General Director of Water Management and Green Areas of the Madrid City Council
- Head of the Department of Green Areas and Parks Rehabilitation of the Madrid City Council
- Head of the Department of Projects and General Direction of Green Heritage
- Forestry Engineer from the Polytechnic University of Madrid
- Specialization in Silvopastoral Farming

- Professional Master's Degree in Advanced Studies in City Sciences, Polytechnic University of Madrid
- Professional Master's Degree in Public Policy Management and Analysis
- Degree in Planning, Management and Evaluation of Local Public Management, Geographic Information Systems of Green Heritage

Course Management | 15 tech

# 04 Structure and Content

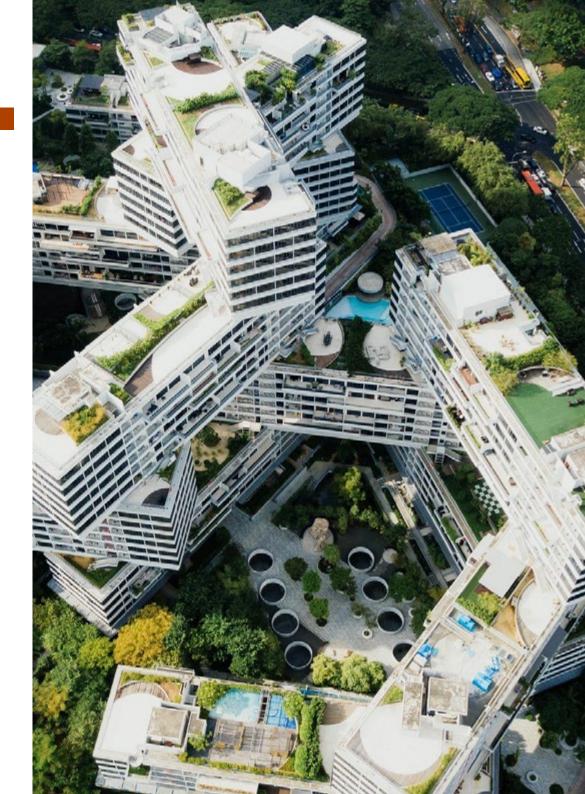
The program consists of 180 hours through a syllabus designed under high standards of educational quality and content. Under the supervision of its outstanding teaching team, students will acquire notions on scenario analysis, key elements of strategic planning and its phases and tools. In addition, they will study in depth successful cases in Europe, Asia and America. All these topics will be taught following the recognized educational methodology of *Relearning*.

With ReLearning you will assimilate the key concepts of the syllabus so that you can apply them successfully in your career"

## tech 18 | Structure and Content

#### Module 1. Strategic Urban Green Infrastructure Planning

- 1.1. Urban Green Infrastructure Strategic Planning (IVU) 1.1.1. Urban Green Infrastructure Strategic Planning (IVU) 1.1.2. Scenario Analysis Approach 1.1.3. Key Elements in Planning 1.1.3.1. Green Infrastructure Components 1.1.3.2. Biodiversity 1.1.3.3. Water 1.1.3.4. Permeability 1.1.3.5. Connectivity 1.1.3.6. Ecological Restoration 1.1.3.7. Adaptation and Resilience 1.1.3.8. Territorial Rebalancing 1.1.3.9. Teamwork Methodology for IVU Strategic Planning 1.2. 1.2.1. Objectives Approach 1.2.2. Main Milestones 1.2.3. Structure Phases 1.2.3.1. Information Gathering 1.2.3.2. Analysis and Diagnosis 1.2.3.3. Action plan 1.2.3.4. Implementation 1.2.3.5. Evaluation and Follow-Up 1.2.3.6. Communication 1.2.3.7. Participation and Governance 1.2.4. Scope, Validity and Revision
  - 1.2.5. Documentation Generated



### Structure and Content | 19 tech

- 1.3. Phases of Urban Green Infrastructure Strategic Planning (IVU): Information Gathering
  - 1.3.1. Study of the information
  - 1.3.2. Collection of Existing Information
  - 1.3.3. Preliminary Studies
    - 1.3.3.1. Contextual Studies
      - 1.3.3.1.1. Legal and Regulatory Framework of each country
      - 1.3.3.1.2. Historical Evolution
      - 1.3.3.1.3. Urban, Peri-urban and Social Environment
      - 1.3.3.1.4. Other contextual studies of interest
    - 1.3.3.2 Current State of the Territory
      - 1.3.3.2.1. Regional and Municipal Scope
      - 1.3.3.2.2. Urban and Periurban Scope
    - 1.3.3.3 Other Preliminary studies of interest
  - 1.3.4. Tools
- 1.4. Phases of IVU Strategic Planning: Analysis and Diagnosis
  - 1.4.1. Information Management
  - 1.4.2. Priority Setting
  - 1.4.3. Strategic Analysis
  - 1.2.4. Diagnosis
  - 1.2.5. Conclusions
- 1.5. Phases of Urban Green Infrastructure Strategic Planning (IVU): Action Plan
  - 1.5.1. Strategic Objectives and Lines of Action
  - 1.5.2. Specific Direct Actions
  - 1.5.3. Transversal Actions
  - 1.5.4. General Guidelines
  - 1.5.5. Ongoing Actions
  - 1.5.6. Timeline
  - 1.5.7. Final Documents
- 1.6. Phases of Urban Green Infrastructure Strategic Planning (IVU): Implementation
  - 1.6.1. Phases of the Action Plan Implementation Process

- 1.6.2. Feasibility Analysis within the Organization
  - 1.6.2.1. Proposal Timeliness
  - 1.6.2.2. Legal Analysis
  - 1.6.2.3. Processing and Timeline
  - 1.6.2.4. Organizational and Competency Analysis
  - 1.6.2.5. Budget Analysis Implementation Costs. Co-financing
  - 1.6.2.6. Estimation of Human, Material and Technological Resources for Implementation
- 1.6.3. Institutional Anchoring and Coordination necessary for the implementation of the plan
- 1.6.4. Impulse
- 1.7. Monitoring and Evaluation of the Action Plan
  - 1.7.1. Follow-up Process
  - 1.7.2. Assessment
    - 1.7.2.1. Establishment of Objectives and Priorities
    - 1.7.2.2. Definition of Indicators
    - 1.7.2.3. Organization and Scorecard
    - 1.7.2.4. Corrective Actions
  - 1.7.3. Resources
- 1.8. Actions transversal to planning: Participation and Governance
  - 1.8.1. Stakeholders Analysis
  - 1.8.2. Action Plan
  - 1.8.3. Tools
  - 1.8.4. Implementation and Management
  - 1.8.5. Governance and Participation Plan
- 1.9. Actions transversal to planning: Communication and Awareness
  - 1.9.1. Communication
  - 1.9.2. Sensitization
  - 1.9.3. Generation of Alliances
  - 1.9.4. Graphic and Audiovisual Resources Generated
- 1.10. Case Studies and Best Practices
  - 1.10.1. Successful cases in Europe
  - 1.10.2. Successful cases in Asia and America
  - 1.10.3. Other Approaches to Green Infrastructure Plan Development

# 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"

## tech 22 | 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 | 23 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 24 | 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 | 25 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 26 | 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 | 27 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%

# 06 **Certificate**

The Postgraduate Certificate in Strategic Urban Green Infrastructure Planning guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.

Certificate | 29 tech

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

## tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Strategic Urban Green Infrastructure Planning** 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 Certificate in Strategic Urban Green Infrastructure Planning Modality: online Duration: 6 weeks Accreditation: 6 ECTS



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