

# Postgraduate Certificate Urban Social Infrastructures





## Postgraduate Certificate Urban Social Infrastructures

- » 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-social-infrastructures](http://www.techtitute.com/us/engineering/postgraduate-certificate/urban-social-infrastructures)

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# 01

# Introduction

The creation of sustainable urban infrastructures to face the challenges of Climate Change also implies the need for redesigned social spaces, especially parks. Not in vain, having these leisure areas from the perspective of Urban Green Infrastructure would bring evident benefits to the population thanks to an increase in Physical Activity, such as the reduction of Obesity or greater lung capacity. However, the proliferation of these spaces towards more sustainable models is still insufficient, so this degree provides an answer with the qualification of engineers with the latest knowledge in this area. The program offers a great opportunity for professional development with a 100% online format.



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*Thanks to this Postgraduate Certificate you will contribute to making Urban Social Infrastructures greener and healthier”*



The fact that more than 55% of the world's citizens live in cities implies several health problems, especially in the most polluting ones. For this reason, it is essential to bet on urban parks, which have been revealed as agents that improve air quality. In this line, they capture pollutants such as SO<sub>x</sub>, NO<sub>x</sub>, CO<sub>x</sub> and other harmful particles. Because of this, the growth of green infrastructure in cities should also be extended to these social spaces, in order to maximize the benefits they provide.

This is why the conception of the park from a citizen's perspective makes it necessary to think about and implement participation models that ensure the appropriation of public space. But it is important to remember that managing a park is not a simple task, since it involves a myriad of relationships and knowledge that make it a multidisciplinary task.

Consequently, engineering profiles focused on the design of green and healthy parks are necessary. The Postgraduate Certificate in Urban Social Infrastructures offers the perfect preparation for this task, with a 100% online format that provides the students with all the facilities, being the owner of their own learning.

This **Postgraduate Certificate in Urban Social 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 Urban Social 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 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



*Analyze the latest models of social spaces in various cities around the world in line with Urban Green Infrastructures"*

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*Unlimited access to the largest multimedia library of Urban Social Infrastructures resources to hone your knowledge whenever you want”*

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.

*Launch your professional career from home with the latest educational technologies that TECH offers you.*

*Become a reference in the design of parks and educational green spaces.*



# 02

# Objectives

This Postgraduate Certificate is designed to provide a high level of training with the most current knowledge focused on engineers who intend to focus their careers on Urban Social Infrastructures. The program aims to promote these professionals from a global perspective, with a full specialization that will facilitate the achievement of the objectives set in their career. In addition, it does so considering the sustainability criteria that different institutions and entities require today, focusing on the typology of Urban Green Infrastructures.





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*Get a global and multidisciplinary perspective  
to develop projects praised for their  
healthiness and natural integration”*



## General Objectives

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- ◆ 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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*You will deepen your knowledge of planning and managing an urban park to be successful in this area"*







## Specific Objectives

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- ◆ Generate specialized knowledge on the planning and management of an urban park
- ◆ Apply citizen participation methodology in the different steps of planning formulation
- ◆ Analyze the strategic and operational planning of urban parks
- ◆ Understand and encourage active citizen participation in parks
- ◆ Examine different urban park management models
- ◆ Understand the strategic partners of parks
- ◆ Determine the importance of user-driven park design  
Identify, design and implement tools for participatory analysis and design
- ◆ Identify, design and implement participatory analysis and design tools





# 03

# Course Management

For an area of high demand such as Sustainable Urban Infrastructures, TECH has incorporated renowned teachers to make students excel when they finish the program. They have a wide professional background in the management of companies oriented to Sustainability and in the management of Sustainable Public Spaces. In this way, students have the guarantees they need to specialize at an international level.







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*A teaching team with experience in the management of Sustainable Public Spaces will ensure your development in the Postgraduate Certificate"*

## 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. Velázquez Celorio, María Isabel

- ♦ General Director of Public Space Projects of Parks of Mexico
- ♦ Coordinator of Sustainable Urban Mobility Projects at Arkom Arquitectura
- ♦ General Director of Urban Projects at Consultores en Diseño Urbano del Sureste SCP
- ♦ Project Manager at Quesnel Arqs
- ♦ Coordinator of Metropolitan Urban Projects at UADY
- ♦ Architect by the Autonomous University of Yucatan







# 04

# Structure and Content

The syllabus of this Postgraduate Certificate contains everything necessary to provide specialized knowledge in Urban Social Infrastructures of reference. In this sense, throughout 150 hours the students will analyze the planning of urban parks as co-educational spaces, the design of educational green spaces or the socio-cultural values of Urban Green Infrastructures. These are just some of the contents of a complete syllabus that follows the *Relearning* method, which, through repetition, guarantees the assimilation of the concepts by the students.







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*Discover the latest tools that have led to participatory design in parks”*



**Module 1. Social infrastructures and experiences of Urban Green Infrastructure (IVU)**

- 1.1. Planning Urban Parks as Coeducational Spaces
  - 1.1.1. Schoolyards as Restorative Elements
  - 1.1.2. Education and Green Spaces
  - 1.1.3. The Schoolyard. Recreation and Nature
- 1.2. Design of Educational Green Spaces. Technical Aspects
  - 1.2.1. Play structures and furniture
  - 1.2.2. Enclosure, shading and horticultural production systems
  - 1.2.3. Irrigation and vegetation systems
- 1.3. Methodology for the design of healthy parks
  - 1.3.1. Characterization of parks and gardens according to their typology for the contribution to the improvement of people's health
  - 1.3.2. Functionality and usability
    - 1.3.2.1. Healthiness and cleanliness
    - 1.3.2.2. Civil works elements in the design of green infrastructure as healthy
  - 1.3.3. Activation of public-private collaboration for the management of the design, works and maintenance of healthy parks
- 1.4. Socio-Cultural Values of Urban Green Infrastructure
  - 1.4.1. Planning, design, management and monitoring
    - 1.4.1.1. International use cases
  - 1.4.2. Communication and Awareness
  - 1.4.3. Community participation
    - 1.4.3.1. Process improvement
    - 1.4.3.2. International use cases
- 1.5. Park Management
  - 1.5.1. Quality certifications in Parks
  - 1.5.2. Human Resource Management
  - 1.5.3. Economic and financial resource management
- 1.6. *Toolkit* - Toolbox for qualitative research in parks
  - 1.6.1. Public space observation tools
  - 1.6.2. Public space qualification tools
  - 1.6.3. Systematization and presentation of information





- 1.7. *Toolkit II- Toolbox for Participatory Design in parks*
  - 1.7.1. Design of participatory design tools
  - 1.7.2. Application and systematization of participatory design tools
  - 1.7.3. Content program and relationship with the master plan
- 1.8. Sustainability plans for parks
  - 1.8.1. Linkage of the master plan with the sustainability plan
  - 1.8.2. Contents and preparation of a financial sustainability plan
  - 1.8.3. Financial columns for parks
- 1.9. Management models. Success Stories
  - 1.9.1. Management, governance and innovation
  - 1.9.2. Management and public-private partnership models
  - 1.9.3. Successful cases of management and partnership models
- 1.10. Revitalization of the parks and appropriation of the Public Sector
  - 1.10.1. Users
  - 1.10.2. Strategies of appropriation of the Public
  - 1.10.3. Dynamization

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*Thanks to the Relearning educational method, you will fully assimilate the concepts learned during the Postgraduate Certificate to keep them very present in your career”*



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.







“

*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 Social 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 Urban Social 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 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 Social Infrastructures**

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.





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

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