



# Postgraduate Diploma

# Leisure and Social Infrastructures in Urban Green Spaces

» Modality: online

» Duration: 6 months.

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

 $We b site: {\color{blue}www.techtitute.com/in/engineering/postgraduate-diploma/postgraduate-diploma-leisure-social-infrastructures-urban-green-spaces} \\$ 

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# tech 06 | Introduction

The management of the so-called IVU or Urban Green Infrastructures is very complicated. Their multisectoral nature makes them difficult to enhance or energize, but at the same time they are essential in modern urban environments given their multiple social and economic benefits. The agents involved in their management must have perfected acquired skills, as well as develop techniques that allow them to maximize the benefits they bring.

This Postgraduate Diploma comes to meet this professional need, making an appropriate deepening both in the methodology of work to improve the performance of Urban Green Infrastructures and the different techniques to improve the livability of the city and revitalize urban spaces. The engineers will delve into the design of Educational Green Spaces, the management of parks, the different types of leisure in green spaces and the Ecosystem Services of UVIs, among other issues of great interest.

In addition, the format of the program is 100% online, which allows complete flexibility to the students, who can combine the academic activity with their own responsibilities or demands. There are no face-to-face classes or fixed schedules, as the entire content of the program is available on the Virtual Campus, accessible from any device with an Internet connection.

This Postgraduate Diploma in Leisure and Social Infrastructures in Urban Green Spaces contains the most complete and up-to-date educational program on the market. Its most outstanding features are:

- The development of case studies presented by experts in Design of Sustainable Green Infrastructures
- The graphic, schematic, and practical contents with which they are created, provide 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



Delve into the large and small infrastructures, as well as both small and large events that drive today's leisure trends"



Examine real cases on green infrastructures and their impact on the health and quality of life of citizens, gaining necessary practical insight to apply in your own praxis"

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.

The Virtual Campus is available 24 hours a day, so you can access it and download all the content at your convenience.

Choose where, when and how to take on the entire course load, without the restrictions of fixed schedules or face-to-face classes.







# tech 10 | Objectives

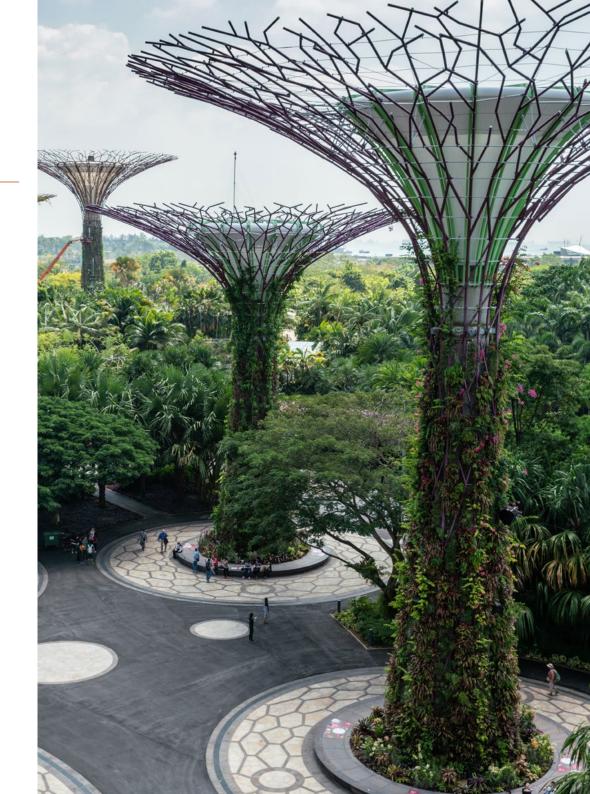


# **General Objectives**

- Provide a rationale for 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



The large amount of multimedia material and practical cases analyzed will help you to contextualize all the topics provided on Biodiversity and Security of Green Zones"





# **Specific Objectives**

# Module 1. Social infrastructures and experiences of Urban Green Infrastructure (UGI)

- 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

### Module 2. Dynamization of Green Zones

- Substantiate the dynamization as a vital part of an urban green area
- Analyze the different options that each green zone offers us
- Develop attractive and coherent proposals that are not supported by public entities
- Identify the weak points of a green infrastructure and mitigate them with dynamic proposals.
- Analyze, in early projects, where private investment can act in a green infrastructure
- Determine which activities or facilities are likely to be implemented
- Evaluate the economic and social impact of the implemented leisure activities
- Analyze the small and large infrastructures to be installed in green areas, children's areas, use and maintenance

- Compile the different options offered by leisure in existing green spaces
- Demonstrate that properly implemented leisure is a saving for the public purse and a very beneficial source of attraction
- Examine the type of dynamic recreation that a green space can support

### Module 3. Infrastructure to improve the livability of cities

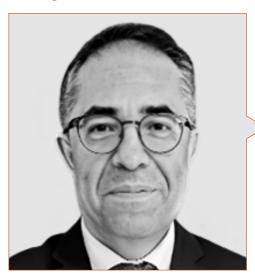
- Examine the ecosystem services that green infrastructure offers us
- Develop methodologies for analyzing the impact of green infrastructure on people's quality of life
- Analyze new techniques to promote the development of green infrastructure
- Generate opportunities for the participation of stakeholders in the management of green infrastructure and in the enjoyment of its ecosystem services
- Analyze the ESSES offered by the IVU in cities
- Evaluate the economic and social impact of the benefits of UVI on the health and quality of life of citizens
- Develop the therapeutic benefits of IVs as health recuperators
- Identify the actors involved in the management and promotion of IV to achieve holistic management of their EHCS
- Analyze how to involve citizens by managing stakeholders' expectations
- Discover success stories and innovative experiences in the field of IVU management





# tech 14 | Course Management

### 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 Zones from the Polytechnic University of Madrid
- Executive Management Program by the Instituto de Empresa

### **Professors**

### Ms. Agúndez Reigosa, Marina

- Consulting Development Director at Green Urban Data
- External Consultant in Green Infrastructure, Ecosystem Services and Process Improvement
- Coordinator of Operational Efficiency Projects at Grupo Ferrovial
- Production Manager in Gardening and Forestry Services at Grupo Ferrovial
- Forestry Engineer from the Polytechnic University of Madrid
- Specialization in Silvopastoral Farming
- Specialization Course in Rehabilitation of Historic Gardens and Parks, Natural Resources and Conservation

### 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 S.C.P
- Project Manager at Quesnel Arqs
- Coordinator of Metropolitan Urban Projects at UADY
- Architect by the Autonomous University of Yucatan



# Course Management | 15 tech

### Mr. Ipas, Alberto

- Managing Partner of Ocio en Verde
- Managing Director of the Public Spaces of the International Expo of Zaragoza
- Head of Operations of the Zaragoza Expo Water Park
- Commercial and Marketing Director of the Zaragoza Amusement Park
- CEO at Paintball Jungle Park Punta Cana
- Director of Animation and Operations at Manatí Park
- Professional Master's Degree MBA in Executive from the International Business School Columbus
- Professional Master's Degree MBA in Administration and Management of Renewable Energies by the Antonio de Nebrija University
- Professional Master's Degree in Emotional Intelligence and NLP by Euroinnova
- Certified Park Professional International by Indiana University, USA





# tech 18 | Structure and Content

# **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 Involvement
    - 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
  - .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

### Module 2. Dynamization of Green Zones

- 2.1. Planning for public-private partnerships in green spaces
  - 2.1.1. 100% public investment in green areas
  - 2.1.2. Mixed public-private investment in green spaces
  - 2.1.3. Financial sustainability
- 2.2. The three types of leisure in green spaces
  - 2.2.1. The three types of leisure: Static, Concessional and Dynamic
  - 2.2.2. Economic impact on green spaces
  - 2.2.3. Social impact on green spaces

# Structure and Content | 19 tech

2.3.	Static leisure I: Unildrens areas		
	2.3.1.	Location and environment	
	2.3.2.	Accessibility and inclusion	
	2.3.3.	Success for comfort	
	2.3.4.	Selection of play elements	
	2.3.5.	Safety flooring	
	2.3.6.	Value of the playground	
	2.3.7.	Materials and Environment	
	2.3.8.	Applicable regulations according to country	
	2.3.9.	Installation of the elements	
	2.3.10.	Maintenance of playground equipment	
	2.3.11.	Contracting procedure	
	2.3.12.	Invoicing and payment	
2.4.	Static leisure II: Sporting uses		
	2.4.1.	Outdoor gymnasiums	
		2.4.1.1. Security/Safety	
		2.4.1.2. Types of Apparatus, Modalities	
	2.4.2.	Senior or Bio-healthy Parks	
		2.4.2.1. Components	
	2.4.3.	RunningTracks	
		2.4.3.1. Design Rules	
	2.4.4.	Skate, pump truck, parkour and similar parks	
		2.4.4.1. Skate parks users	
		2.4.4.2. Differences between <i>Pump Truck</i> and BMX	
		2.4.4.3. Parkour Objectives	
2.5.	Static leisure III: Signage and Facilities		
	2.5.1.	Classical signage	
	2.5.2.	Virtual signage	
	2.5.3.	Dog areas	
		2.5.3.1. Design of dog areas	
		2.5.3.2. Implementation of Improvement Measures	
		2.5.3.3. Agility Park, Mixed Parks, and Dog Coexistence Zones	

2.6.	Concessionary Leisure I: Small infrastructures		
	2.6.1.	Minor gastronomy and food trucks	
	2.6.2.	Rental of bicycles, boats and the like	
		2.6.2.1. Delimitation, Mobility and Insurance	
	2.6.3.	Small bars, kiosks and cafes	
		2.6.3.1. Logistics Required Services	
	2.6.4.	Tourist train	
		2.6.4.1. Routes, Conditions and Synergies	
	2.6.5.	Handicrafts, souvenirs and the like	
	2.6.6.	Guided tours Types	
	2.6.7.	Other Occasional Leisure Activities	
2.7.	Concessionary Leisure II: Large infrastructures		
	2.7.1.	Success and Failure Cases of Concessions	
		2.7.1.1. Investments, Periods	
		2.7.1.2. Failed Concessions	
	2.7.2.	Large sports facilities. Synergies	
	2.7.3.	Congress Centers, Auditoriums, Museums. Synergies	
	2.7.4.	Congress Centers, Auditoriums, Museums. Synergies	
	2.7.5.	Large restaurants, Events. Synergies	
	2.7.6.	Other large Concessioned Spaces: Equestrian, Theate	
2.8.	Dynamic Leisure I: Small events		
	2.8.1.	Volunteering and dynamization. Requirements	
	2.8.2.	Citizen Participation Rental of space	
		2.8.2.1. Outline of the Citizen Participation Process	
		2.8.2.2. Small Format Rentals and Assignments	
	2.8.3.	Workshops, school visits	
	2.8.4.	Small actions: Low impact events	
		2.8.4.1. White nights	
2.9.	Dynamic leisure II: Major Events		
	2.9.1.	Major concerts or festivals	
		2 9 1 1 Previous Analysis Final Decision Making	

2.9.1.2. List of Conditions

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2.9.2.1. Pre and Post Organization

- 2.9.3. Fairs, Street Markets and Similar
- 2.9.4. Affections in Assemblies and Disassemblies
- 2.9.5. Other major events
  - 2.9.5.1. Affections to people and facilities
- 2.10. Management of Green Zones: Security/Safety
  - 2.10.1. International Associations linked to Green Zones
  - 2.10.2. Vandalism: Measurements
  - 2.10.3. Safety in Parks
    - 2.10.3.1. Parallel damage
    - 2.10.3.2. Deliberate thefts
  - 2.10.4. Ecological Management. Measures and Actions

### Module 3. Infrastructure to improve the livability of cities

- 3.1. Ecosystem Services of Green Infrastructure
  - 3.1.1. Regulatory Services
  - 3.1.2. Cultural Services
  - 3.1.3. Green Infrastructure Management based on Ecosystem Services
- 3.2. Green Infrastructure and Quality of Life in Cities
  - 3.2.1. Decarbonization of cities and health promotion through healthy mobility
  - 3.2.2. Mitigation of socioeconomic differences
  - 3.2.3. Transversal programs of municipal management and promotion of healthy living habits among citizens
- 3.3. Biodiversity. Effects on Health
  - 3.3.1. Resilient Cities through Biodiversity
  - 3.3.2. Biodiversity as a disservice minimizer
  - 3.3.3. Urban Green Infrastructures (IVU) indispensable eco-connector
- 3.4. Sustainable Drainage System. Sealing
  - 3.4.1. Soil and water management and their adaptation to meteorological phenomena
  - 3.4.2. Soil drainage improvement techniques and processes
  - 3.4.3. Soil management success stories





# Structure and Content | 21 tech

- 3.5. Façades and green roofs to naturalize the city
  - 3.5.1. Eco-connectivity in facades and roofs
  - 3.5.2. Management and conservation of green facades and roofs
  - 3.5.3. Valorization of the SSEE of green facades and roofs
- 3.6. Living tree surrounds and industrial areas
  - 3.6.1. Living flowerbeds. Design and Conservation
  - 3.6.2. Observatory of Nature-Based Solutions (NBS) in industrial areas
  - 3.6.3. Results and success stories
- 3.7. Landscape and Sense of belonging
  - 3.7.1. Landscape ecology
  - 3.7.2. Landscape in the urban forest and landscaped spaces
  - 3.7.3. Bioengineering solutions in the creation of the landscape and the integration of mobility infrastructures
- 3.8. Landscape restoration and biodiversity. Case Study
  - 3.8.1. Current and optimal status
  - 3.8.2. Definition of objectives and proposed solutions
  - 3.8.3. Planning and involvement of agents as pillars of success
- 3.9. Involvement of agents for holistic management
  - 3.9.1. Coordination between public administrations
  - 3.9.2. Education and Citizen Participation in Green Infrastructure (IV)
  - 3.9.3. Successful cases in cross-cutting management
- 3.10. Green infrastructure and health
  - 3.10.1. Green Infrastructure (IV) as a therapeutic element
  - 3.10.2. The green prescription. Health Promotion and Recovery through Green Infrastructure (IV)
  - 3.10.3. Green Infrastructure (IV) and its impact on the health system



You will be able to download all the content available in this Postgraduate Diploma, which will be useful even after you finish your qualification"





# tech 24 | 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 | 25 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 26 | 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 | 27 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.

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.





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.



25%

20%





# tech 32 | Certificate

This **Postgraduate Diploma in Leisure and Social Infrastructures in Urban Green Spaces** 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 Diploma** 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 Diploma in Leisure and Social Infrastructures in Urban Green Spaces

Official No of Hours: 450 h.



<sup>\*</sup>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.

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# Postgraduate Diploma Leisure and Social Infrastructures in Urban Green Spaces

- » Modality: online
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