

Postgraduate Certificate Infrastructures to Improve Urban Liveability



Postgraduate Certificate Infrastructures to Improve Urban Liveability

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

Website: www.techtitute.com/us/engineering/postgraduate-certificate/infrastructures-improve-urban-liveability

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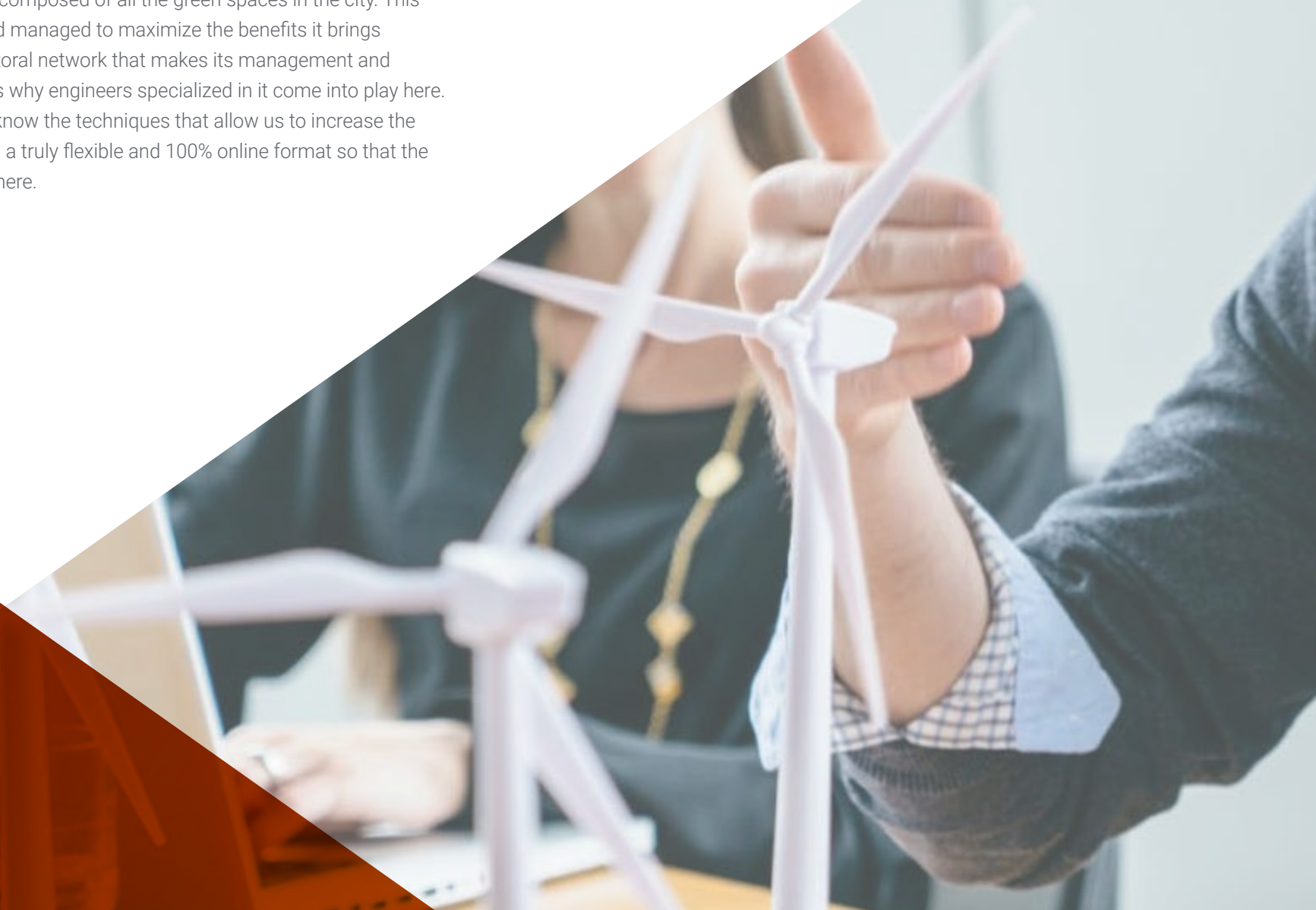
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01

Introduction

Urban Green Infrastructure (UGI) is composed of all the green spaces in the city. This forms a network that is planned and managed to maximize the benefits it brings to society. However, it is a multisectoral network that makes its management and enhancement complicated, which is why engineers specialized in it come into play here. This TECH program is essential to know the techniques that allow us to increase the benefits of UGI. A training offered in a truly flexible and 100% online format so that the student can complete it from anywhere.





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*Thanks to this Postgraduate Certificate
you will know everything about UGI”*

The commitment to UGI is an opportunity, as a structural tool, to improve the liveability of the city and urban conurbations. At the same time, it makes it possible to reduce their environmental footprint. Logically, this also has implications in the area of health, since this infrastructure is positioned as a mechanism for transforming cities into healthier spaces. In this sense, urban green areas would develop a therapeutic function dedicated to the recovery of physical and mental health and the promotion of healthy living habits, so engineers prepared to improve their habitability are vital.

This program will provide students with an integral perspective of UGI and will investigate the different agents involved in its management. They will also learn the ways to get the greatest possible positive impact and analyze the value of the Urban Forest, breaking the barrier of multiple ownership.

In this sense, the Postgraduate Certificate will address new techniques and technological developments that facilitate the implementation and development of this green infrastructure, such as its management or nature-based solutions that allow for transforming vulnerable areas of cities into neuralgic nodes. These enhance the value of the city, increasing its resilience to the challenges of the future.

In addition, students will specialize in a highly demanded area in a self-taught way in which they will set the time of their own learning, always accompanied by an outstanding teaching team. Likewise, students will have at their disposal from the very beginning an extensive digital library of resources 24 hours a day.

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

- ♦ The development of practical cases presented by experts in Urban Green Infrastructure
- ♦ 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



Lead the change in big cities towards healthier and more sustainable spaces”

“

*Set the pace of your learning
and become a reference on
UGI from home”*

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.

The 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 immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Specialize with a program
that takes into account
the needs of the market.*

*Learn how to manage
city infrastructures in
a sustainable way.*



02

Objectives

City infrastructures pose more challenges every day, so this program aims to train students to improve the liveability of urban spaces through infrastructures that adhere to criteria related to Sustainability and Health. The program seeks to prepare professionals who generate new opportunities with the most updated knowledge in the sector.





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*TECH will boost your career
with the most up-to-date
knowledge in the industry”*



General Objectives

- ◆ Substantiate 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



Learn about real success stories in UGI management so that you too can stand out in the field"





Specific Objectives

- ♦ 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 UGI in cities
- ♦ Evaluate the economic and social impact of the benefits of UGI on the health and quality of life of citizens
- ♦ Develop the therapeutic benefits of UGIs as health recuperators
- ♦ Identify the actors involved in the management and promotion of UGI 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 UGI management

03

Course Management

The TECH faculty for this program is highly qualified in UGI, Ecosystem Services and general Process Improvement. With extensive professional experience in the field of Urban Planning and Environment, the teaching team has worked on relevant green infrastructure projects based on territorial information from satellite images. Therefore, the student has all the guarantees to acquire solid knowledge in this specialty that can then be successfully applied in their careers.



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You will have the support of a highly qualified teaching team in the field of UGI, Ecosystem Services and general Process Improvement”

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. Agúndez Reigosa, Marina

- ♦ Consulting Development Director at Green Urban Data
- ♦ External Consultant in Green Infrastructure, Ecosystem Services and General Improvement of Processes
- ♦ Operational Efficiency Projects Coordinator at Grupo Ferrovial
- ♦ Head of Production 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



04

Structure and Content

TECH is a pioneer in the Relearning methodology, an innovative way of learning that guarantees the acquisition of professional competencies in each training program. Therefore, the syllabus of this program is offered in a reiterative and directed way, forming an individualized educational itinerary that ensures that students successfully assimilate the key concepts of the Postgraduate Certificate. In this way, you will enjoy a more natural academic experience that will suit your needs.





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You will internalize the key concepts of the program thanks to Relearning to apply them later in your professional career”

Module 1. Infrastructures to Improve Urban Liveability

- 1.1. Ecosystem Services of Green Infrastructure
 - 1.1.1. Regulatory Services
 - 1.1.2. Cultural Services
 - 1.1.3. Green Infrastructure Management Based on Ecosystem Services
- 1.2. Green Infrastructure and Quality of Life in Cities
 - 1.2.1. Decarbonization of Cities and Health Promotion through Healthy Mobility
 - 1.2.2. Mitigation of Socioeconomic Differences
 - 1.2.3. Transversal Programs of Municipal Management and Promotion of Healthy Living Habits among Citizens
- 1.3. Biodiversity. Effects on Health
 - 1.3.1. Resilient Cities through Biodiversity
 - 1.3.2. Biodiversity as a Disservice Minimizer
 - 1.3.3. Urban Green Infrastructures (UGI) as Indispensable Eco-Connectors
- 1.4. Sustainable Drainage System. Sealing
 - 1.4.1. Soil and Water Management and Their Adaptation to Meteorological Phenomena
 - 1.4.2. Soil Drainage Improvement Techniques and Processes
 - 1.4.3. Soil Management Success Stories
- 1.5. Facades and Green Roofs to Naturalize the City
 - 1.5.1. Eco-Connectivity in Facades and Roofs
 - 1.5.2. Management and Conservation of Green Facades and Roofs
 - 1.5.3. Valorization of the SSEE of Green Facades and Roofs
- 1.6. Living Flowerbeds and Industrial Areas
 - 1.6.1. Living Flowerbeds. Design and Conservation
 - 1.6.2. Observatory of Nature-Based Solutions (NBS) in Industrial Areas
 - 1.6.3. Results and Success Stories
- 1.7. Landscape and Sense of Belonging
 - 1.7.1. Landscape Ecology
 - 1.7.2. Landscape in the Urban Forest and Landscaped Spaces
 - 1.7.3. Bioengineering Solutions in the Creation of the Landscape and the Integration of Mobility Infrastructures





- 1.8. Landscape Restoration and Biodiversity. Case Study
 - 1.8.1. Current and Optimal Status
 - 1.8.2. Definition of Objectives and Proposed Solutions
 - 1.8.3. Planning and Involvement of Agents as Pillars of Success
- 1.9. Involvement of Agents for Holistic Management
 - 1.9.1. Coordination between Public Administrations
 - 1.9.2. Education and Citizen Participation in Green Infrastructure (GI)
 - 1.9.3. Successful Cases in Cross-Cutting Management
- 1.10. Green Infrastructure and Health
 - 1.10.1. Green Infrastructure (GI) as a Therapeutic Element
 - 1.10.2. The Green Prescription. Health Promotion and Recovery through Green Infrastructure (GI)
 - 1.10.3. Green Infrastructure (GI) and Its Impact on the Health System

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A program designed under the high standards of the faculty to provide high employability”

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.



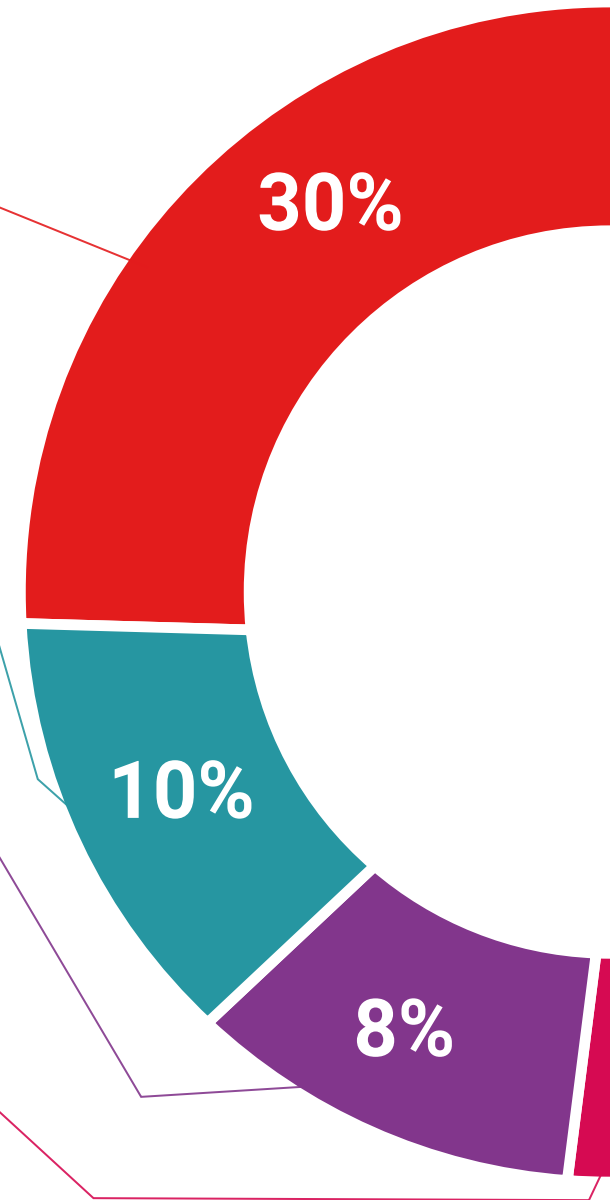
Practising Skills and Abilities

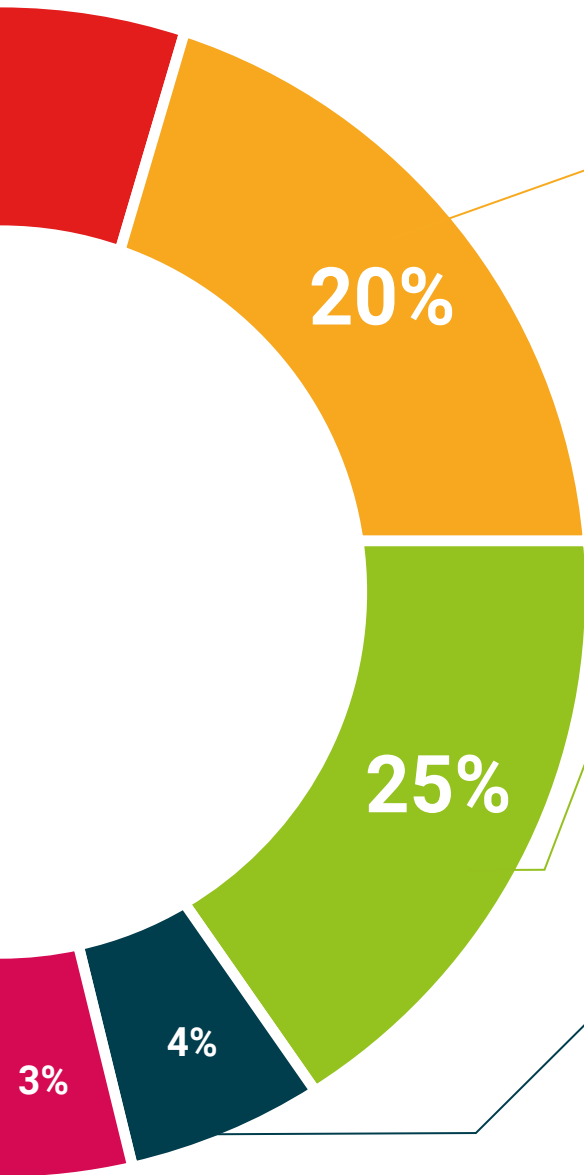
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



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 Infrastructures to Improve Urban Liveability guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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

This private qualification will allow you to obtain a **Postgraduate Certificate in Infrastructures to Improve the Liveability of Cities** 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.

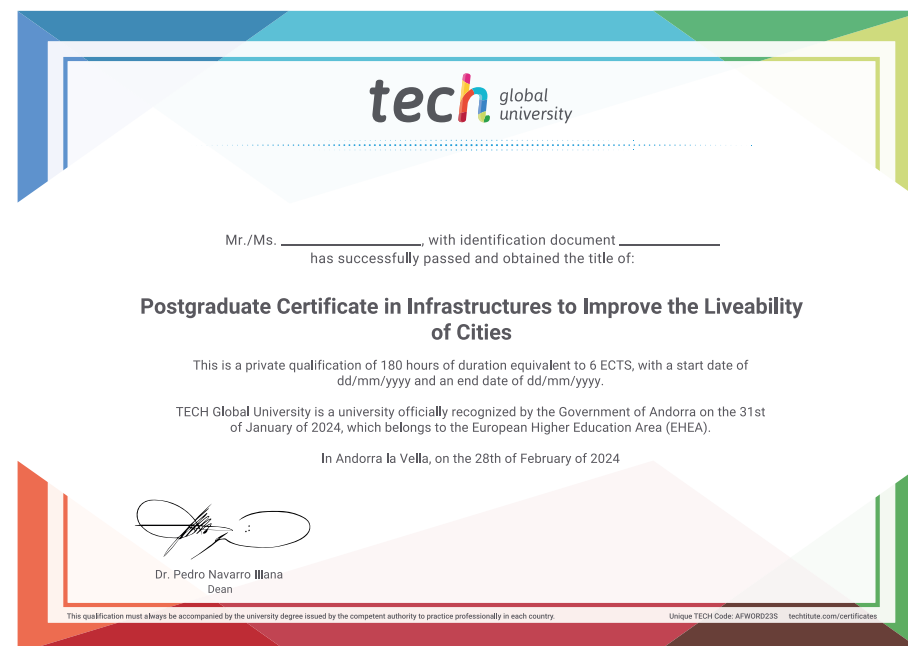
This **TECH Global University** private qualification, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Infrastructures to Improve the Liveability of Cities**

Modality: **Online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University 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 lang
classroom



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