Postgraduate Certificate

Sustainable Urban Infrastructure Planning

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Postgraduate Certificate
Sustainable Urban 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/sustainable-urban-infrastructure-planning**

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01

Introduction

Current urban development poses numerous problems that will increase in the future due to lack of planning. In its State of the World's Cities Report, UN-Habitat has warned that continuing with this trend will lead to increased inequality, the growth of 'slums' and catastrophic impacts on the climate. In this sense, a commitment to responsible development becomes a sine qua non condition for sustainable and prosperous societies. This is the focus of this TECH program, specializing engineers in strategies and initiatives on Urban and Peri-urban Green Infrastructure with a 100% online methodology with a novel and highly effective approach.

Thanks to this Postgraduate Certificate you will contribute to the sustainability of the planet by specializing in innovative Urban Green Infrastructure solutions"

More than one fifth of the world's population lives in just 600 cities on the planet, according to data collected by the UN. This trend will be on the rise and two-thirds of all citizens are expected to reside in urban areas by 2030. Undoubtedly, this increases the need for this challenge to be faced following criteria of responsible Urbanism, something to which TECH's teaching team has paid special attention to develop this Postgraduate Certificate in Sustainable Urban Infrastructure Planning.

With this program, students will learn to examine the different global contexts of reference for Sustainable Urban Development. To this end, the background to the current context will be analyzed in order to deepen the knowledge of the areas of action that are being pursued today. These are the Sustainable Development Goals, the Urban Agendas or the UN-Habitat plans, among others.

In this way, students will learn more about each of the Urban Sustainability initiatives, their objectives, commitments, roadmaps, indicator systems, etcetera. Along these lines, the program includes references to the objectives and strategies on which Green Infrastructure has the greatest presence. This approach makes it possible, in short, to develop strategies and action plans with a more holistic, cross-cutting vision and greater impact.

As can be seen, a complete study plan on everything there is to know about the Airport Manual, in a totally online training program made up of the most up-to-date pedagogical resources and multimedia material. In addition, it is tutored by a teaching staff composed of prestigious professionals in the sector.

This **Postgraduate Certificate in Sustainable Urban Infrastructure Planning** contains the most complete and up-to-date program on the market. The most important features include:

- The development of case studies presented by experts in Sustainable Urban Infrastructure Planning
- The graphic, schematic and practical contents of the book provide technical and practical information on those disciplines that are essential for professional practice
- Practical exercises where 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

The 100% online mode and flexibility of this Postgraduate Certificate allows a high level of training in the place and time you want"

Become a reference in Urban and Peri urban Green Infrastructure from home"

Work in line with the United Nations Sustainable Development Goals thanks to this program.

Analyze the goals and strategies on which Green Infrastructure has the greatest impact.

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.

02

Objectives

The design of the program of this Postgraduate Certificate will allow the students to acquire the necessary competences to increase their knowledge in the profession, deepening in the key aspects for a Sustainable Urban Development. The knowledge poured into each of the points of the syllabus will drive the engineers from a global perspective, with full training for the achievement of the proposed objectives. In this way, they will develop full faculties in an essential field of Engineering, guiding them towards the excellence of a sector in continuous environmental adaptation.

Access an extensive digital library of resources on Sustainable Urban Infrastructure Planning at your complete disposal"

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

An individualized educational itinerary will make it easier for you to achieve your goals thanks to innovative tools and the best professionals"

Specific Objectives

- Determine the aspects and objectives on which green infrastructure has the greatest impact on the sustainable development of towns and cities
- Develop the different strategies and initiatives for sustainable development at a global level
- Analyze the concept of Urban Sustainability
- Explore the main objectives and challenges of sustainable urban development strategies
- Examine the objectives of sustainable development most closely linked to urban development, cities and green infrastructure
- Assess the different experiences implemented by city networks and reference cities at the global level
- Raise awareness and empower students in the field of sustainable urban development

03

Course Management

This Postgraduate Certificate has a teaching team with an extensive background in Urban Green Infrastructures. In this sense, students will be guided by professionals who have excelled in their area leading leading companies in Environmental Intelligence or strategies against Climate Change, in addition to having also worked in the field of Architecture. In this way, students have the guarantees they need to specialize at an international level in a booming sector that will catapult them to professional success.

The teaching team has led leading companies in Environmental Intelligence or in strategies against Climate Change, pouring all their experience in each topic covered"

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

Mr. Ferrer Gisbert, José Miguel

- Innovation Director and Co-Founder of Green Urban Data
- CEO of study CeroCO2
- Architect and Collaborator in Landscaping and Gardening in several studies
- Graduate in Architecture from the Polytechnic University of Valencia
- Specialization in Urbanism
- Professional Master's Degree in and Landscaping from the Polytechnic University of Valencia
- Member of: Architecture and Environment Association (COACV), Forum for Sustainable Building in the Valencian Community and Association of Landscape Architects (Agrupación de Arquitectes pel Paisatge)

Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"

04

Structure and Content

The syllabus has been designed based on the requirements of Sustainable Urban Infrastructure Planning, following the guidelines proposed by the teaching team of this Postgraduate Certificate. Therefore, a syllabus has been designed for this program always thinking about the needs of its students and the requirements of the current labor market in which they perform their function. This results in an agile learning process where, through the innovative educational method of *Relearning*, concepts related to Sustainable Urban Development or the Urban Agenda are repeatedly deepened until they are fully assimilated by the students.

A syllabus developed by experts that facilitates the assimilation of the concepts thanks to the innovative educational method of Relearning"

Module 1. Sustainable Urban Infrastructure Planning

1.1. Sustainable Development The role of cities and green infrastructure
- 1.1.1. Sustainable development at the global level
- 1.1.2. The role of cities in sustainable development
- 1.1.3. The role of urban green infrastructure in sustainable development

1.2. Sustainable Development Goals (SDGs)
- 1.2.1. Context
- 1.2.2. The 17 Sustainable Development Goals
- 1.2.3. SDG Progress and Monitoring Reports

1.3. SDG 3. Health and Well-being
- 1.3.1. Context
- 1.3.2. Objectives and Goals
- 1.3.3. Relationship to the WHO Healthy Cities Program

1.4. SDG 11. Sustainable Citizens and Communities
- 1.4.1. Context
- 1.4.2. Objectives and Goals
- 1.4.3. Relationship with UN-Habitat, ICLEI programs

1.5. SDG 13. Climate Action
- 1.5.1. Context
- 1.5.2. Objectives and Goals
- 1.5.3. Relationship with the Covenant of Mayors program

1.6. SDG 15. Terrestrial Ecosystem Life
- 1.6.1. Context
- 1.6.2. Objectives and Goals
- 1.6.3. Relationship with UNEP, IUCN and IUCN Programs

1.7. UN-Habitat, the New Urban Agenda (NUA)
- 1.7.1. Sustainability and social, economic and environmental impact
- 1.7.2. Intervention mechanisms and action measures
- 1.7.3. Governance and monitoring indicators

1.8. Networks of cities and municipalities for Sustainability
- 1.8.1. Global Network of Local Governments for Sustainability (ICLEI)
- 1.8.2. Covenant of Mayors for Climate and Sustainable Energy (PACES).
- 1.8.3. Cities Alliance, C40 Cities, United Cities and Local Governments (UCLG)

1.9. Urban Development Trends Related to Sustainability
- 1.9.1. Intelligent Cities
- 1.9.2. 15-Minute Cities
- 1.9.3. Self-sufficient cities
- 1.9.4. Climate-neutral cities
- 1.9.5. Biophilic cities
- 1.9.6. Sponge cities

1.10. International Quality Distinctions in urban sustainability
- 1.10.1. BREEAM
- 1.10.2. LEED
- 1.10.3. WELL Communities

A program that includes all the keys to excel in your field"

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.

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

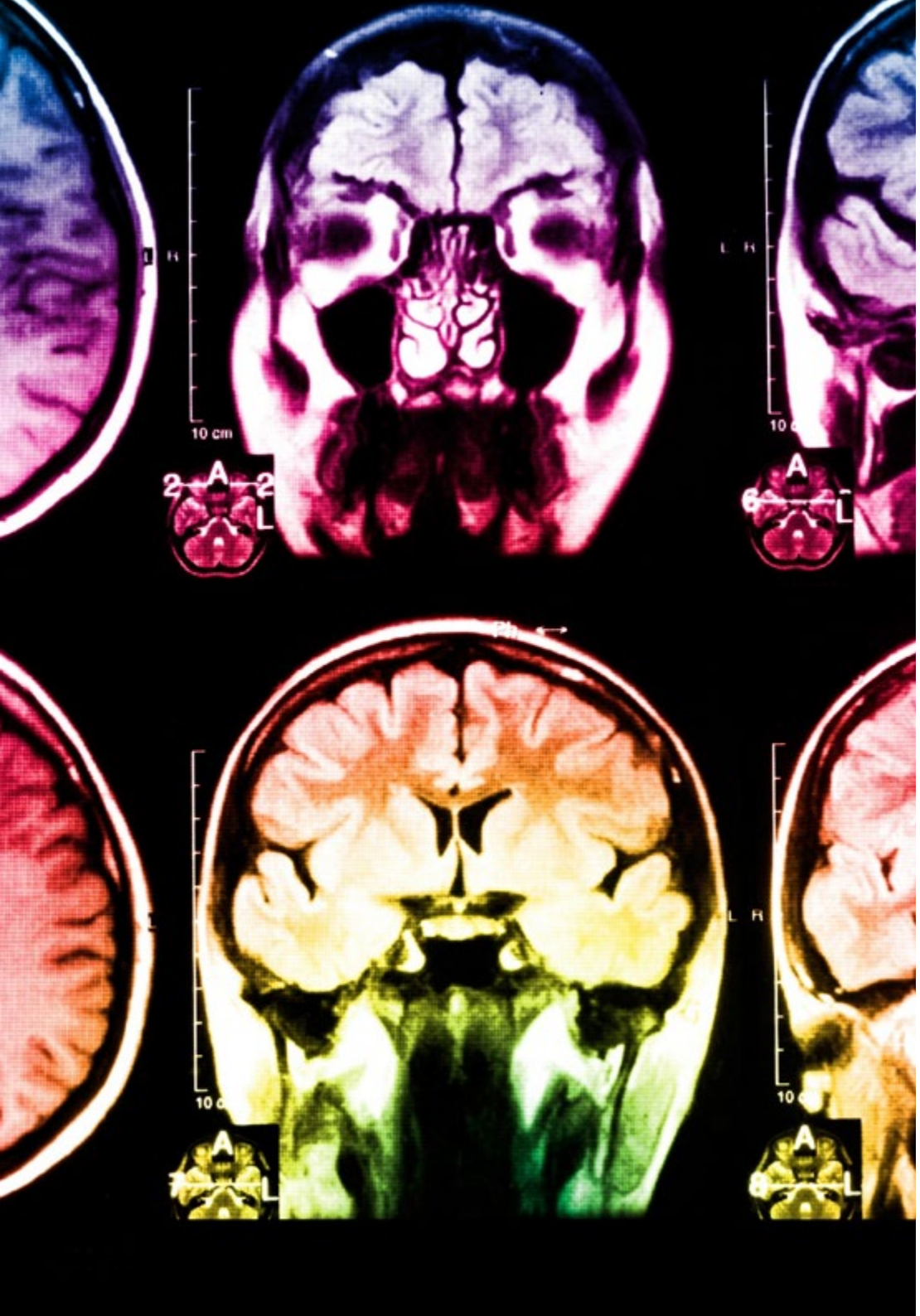
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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.

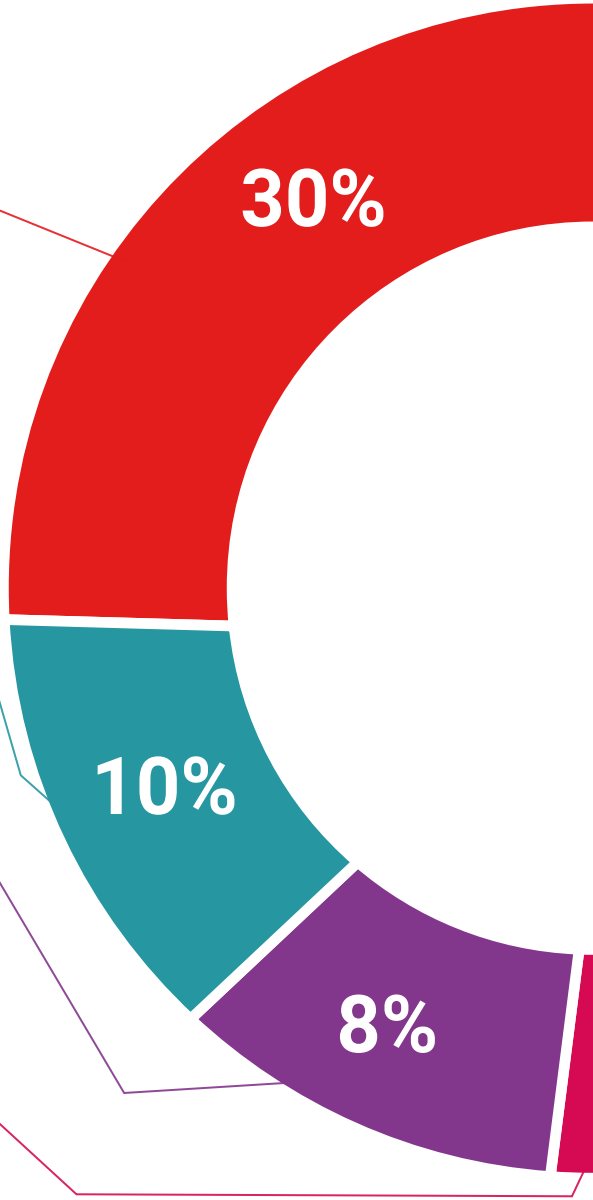
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

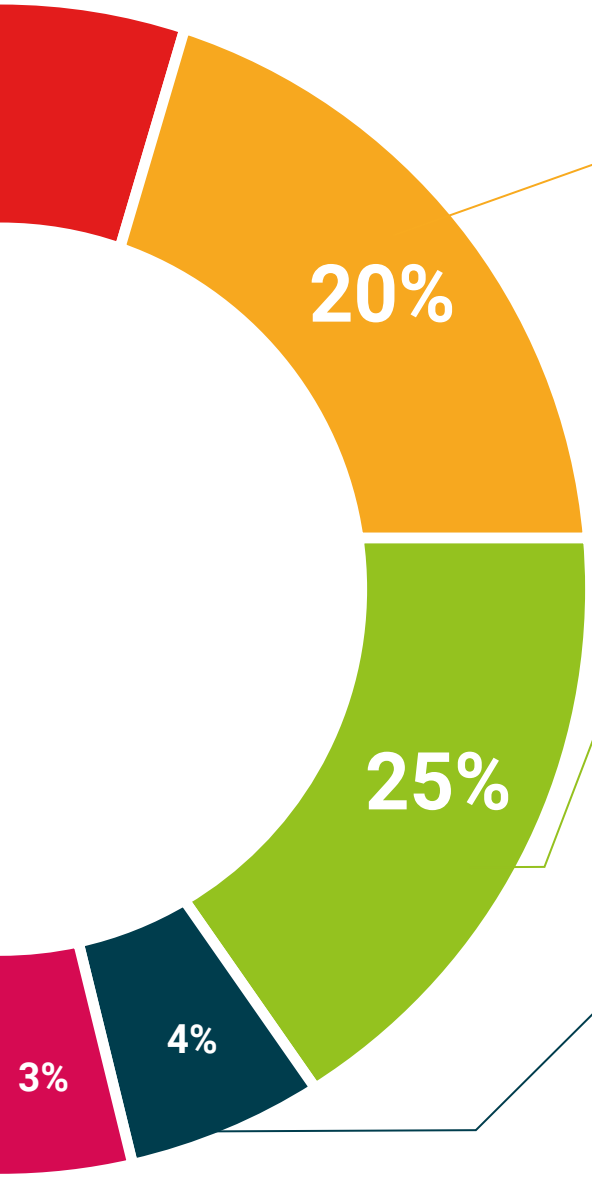
Practising Skills and Abilities

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 Sustainable Urban 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.

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

This program will allow you to obtain your **Postgraduate Certificate in Sustainable Urban 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 Sustainable Urban Infrastructure Planning**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**


tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Certificate in Sustainable Urban Infrastructure Planning

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*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.

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