

Postgraduate Diploma

Urban Landscape Planning and Design





Postgraduate Diploma Urban Landscape Planning and Design

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

Website: www.techtitude.com/us/engineering/postgraduate-diploma/postgraduate-diploma-urban-landscape-planning-design

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01

Introduction

Computer-aided design has become one of the most versatile tools at the service of professionals dedicated to the development of landscape projects. Through this software, it is possible to organize large volumes of information on the characteristics of the terrain and integrate three-dimensional models that optimize decision-making in terms of materials and infrastructure. This skill, highly valued in the labor field, will be within reach of the graduates of this program, which has the most extensive syllabus in the university panorama. Therefore, they will delve into these technological resources and other innovations for cost planning and guaranteeing construction safety. All of them through the Relearning methodology and a very complete 100% online platform.





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Thanks to this 100% online program you will specialize in the tools and approaches that promote a transition to sustainability in Urban Landscape Planning and Design”

The connection between art and nature has become one of the most attractive and demanded approaches (Land-Art) for professionals in Urban Landscape Planning and Design. Although this movement has existed for several years, it has gained momentum nowadays. Especially in a context where societies pay more attention to the construction of green spaces that respect the conservation of the environment and at the same time have creative elements and works of high aesthetic value. To fully manage this new set of techniques, it requires excellent theoretical and practical skills, which guarantee the development of unique solutions that enrich the public's experience.

For this reason, TECH Technological University has devised this program where students will be able to incorporate all these skills in the fastest and most flexible way. To do so, they will have a very complete syllabus where they will approach different skills for the representation of artistic expression, including freehand technical drawing and the mastery of the latest generation of computer-assisted design software. On the other hand, you will analyze the most efficient methods for the coordination of teams when managing and planning landscape works. Specifically, they will examine the mechanisms to control costs, guarantee safety and quality of the works.

Additionally, graduates of this Postgraduate Diploma will delve into different landscaping styles, their historical evaluation and acquire the necessary knowledge to implement these characteristics in their individual projects. In this way, they will become great specialists in the integration of sustainable landscapes, adapted to the most pressing needs of humans and nature.

For this academic itinerary, participants will be supported by the unique Relearning methodology. Through it, they will be able to examine complex concepts and assimilate their daily application in an immediate way. They will also have access to multimedia materials, such as explanatory videos and infographics, through which they will be able to reinforce their learning. At the same time, the program is taught from an innovative 100% online learning platform that is not subject to set schedules or continuous evaluation chronograms.

This **Postgraduate Diploma in Urban Landscape Planning and Design** 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 Landscaping, Gardening, Botany, among others
- ♦ The graphic, schematic, and practical contents with which they are created, provide practical information on the disciplines that are essential for professional practice
- ♦ The practical exercises where the self-evaluation 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



Thanks to TECH Technological University and its Relearning methodology, you will be able to access the most disruptive techniques for the conservation of green spaces"

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Throughout the 24 hours of the day, you will have the opportunity to review the materials of the syllabus since TECH's Technological University's platform is not subject to rigid schedules or continuous evaluations”

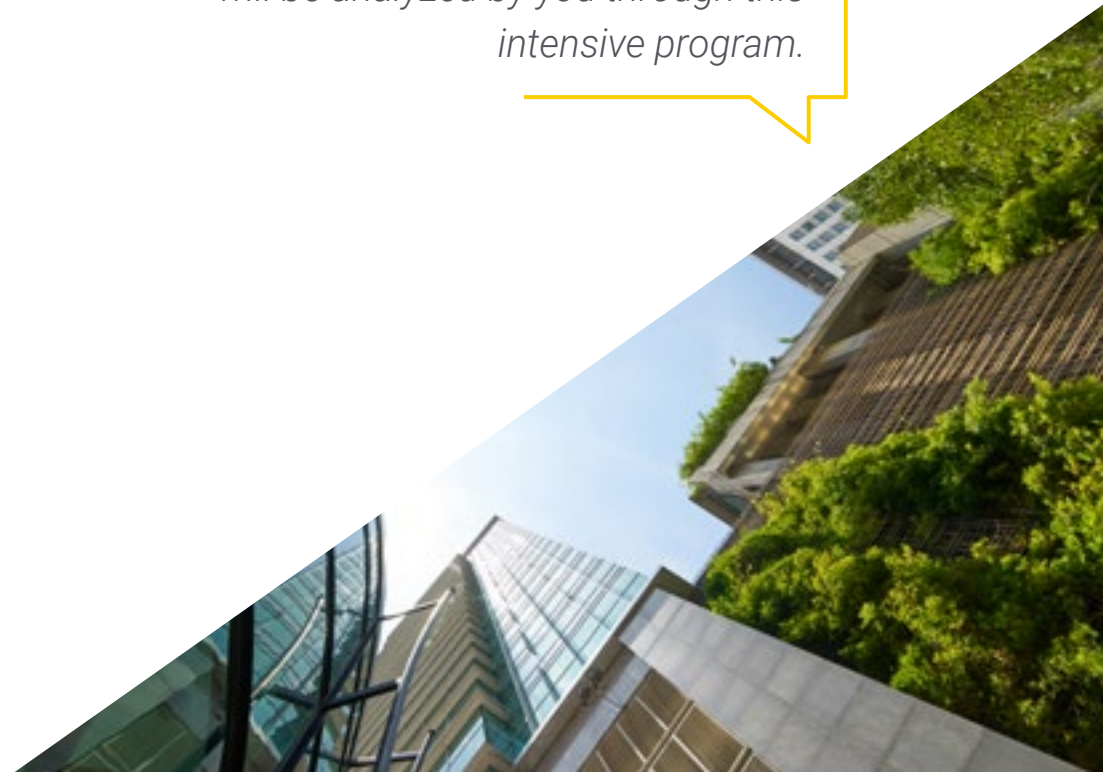
The program includes in its teaching staff professionals of the field who pour into this training the experience of their work, in addition to recognized specialists from reference societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will allow the professional a situated and contextual learning, that is, a simulated environment that will provide an immersive training programmed to train in real situations.

The design of this program focuses on Problem-Based Learning, in which the professional will have to try to solve the different professional practice situations that will arise throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

Environmental management in landscape construction is another skill you will have in your hands after this comprehensive 6-month program.

Land-Art and other creative expressions that can be integrated into the landscape will be analyzed by you through this intensive program.



02 Objectives

The main academic objective of this university program is to provide students with a comprehensive update on the latest tools and techniques in Urban Landscape Planning and Design. Particularly, architects and engineers participating in this program will be able to delve into the keys to graphic expression and how to implement it through computer technologies. Additionally, the syllabus will provide an analysis of the historical evolution of garden styles, as well as the methods to reproduce them in the contemporary context. All this through the most innovative 100% online methodology.



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After this Postgraduate Diploma, you will be up to date on the most innovative gardening styles and how to incorporate their characteristics into your landscape projects”



General Objectives

- ◆ Delve into the concepts and advanced principles of design applied to the landscape
- ◆ Develop visual representation and graphic communication skills in the field of Landscape Architecture
- ◆ Delve into the planning and execution of design projects in Landscape Architecture
- ◆ Approach different strategies for ecological conservation and restoration
- ◆ Differentiate and manage the processes of construction and execution of Landscape Architecture projects
- ◆ Integrate Landscape management strategies and practices to preserve the health and beauty of natural and built environments





Specific Objectives

Module 1. Graphic Expression

- ♦ Integrate the use of computer-aided design (CAD) and 3D modeling software and tools to create accurate digital representations
- ♦ Develop graphic communication skills to present and visualize Landscape Architecture designs
- ♦ Differentiate the main techniques for rendering materials and textures to enrich graphic representations
- ♦ Address the principles of visual composition in the graphic representation of landscape designs

Module 2. The Landscape Construction Construction and project management of landscape Architecture projects

- ♦ Analyze the construction techniques used in the implementation of Landscape Architecture projects
- ♦ Interpret plans and technical specifications for the construction of landscape elements
- ♦ Address the construction methods used in the implementation of walls, paths, pavements and other structural elements
- ♦ Delve into handling tools and machinery used in landscape construction

Module 3. Gardening Styles

- ♦ Master the different styles and trends in garden design, both historical and contemporary
- ♦ Differentiate all the characteristics and principles of each style, such as the formal garden, the English garden, the Japanese garden, among others
- ♦ Define the key elements of each style and their application in garden design and composition
- ♦ Deepen in the influence of cultural, geographic and climatic factors in the choice and development of styles in gardening



Master the software and auxiliary computer tools that facilitate landscape design for an architect or engineer"

03

Course Management

The professors of this Postgraduate Diploma have extensive backgrounds and expertise. Their commitment to innovation and educational excellence is reflected in their dynamic and up-to-date approach to the syllabus, incorporating the latest trends and technologies relevant to urban landscape design. Their experiences have been reflected with excellence in the program where, additionally, simulated cases and the analysis of real situations are integrated so that students reach an advanced praxis, allowing them to face the most urgent professional challenges in the field of planning and creation of green spaces.



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*Leading experts in Landscape Architecture
and urban planning teach this rigorous
Postgraduate Diploma”*

Management



Dr. Schiavo, Fiorella

- ♦ Landscape Architect & Digital Landscape Leader at OVE ARUP & PARTNERS
- ♦ BIM Implementation Consultant at LAND Italia
- ♦ PhD in Geography from the University of Barcelona
- ♦ Master's Degree in Landscape Architecture by the Polytechnic University of Catalonia
- ♦ Master's Degree in Territorial Planning and Environmental Management by the University of Barcelona
- ♦ Master's Degree in BIM Programming from the University Isabel II
- ♦ Diploma in Architecture

Professors

Mr. Arroyo Parras, Juan Gabriel

- ♦ Earth Observation Expert at INNECO
- ♦ Technical Surveying Engineer specialized in Satellite Geodesy
- ♦ GNSS technical consultant at ESSP SAS
- ♦ R+D+i project engineer at the Technological Center of Components.
- ♦ Master's Degree in Satellite Geodesy and Geophysics applied to Engineering and Geology by the University of Jaén
- ♦ Degree in Technical Engineering in Topography from the University of Jaén

Ms. Nadal Ferrer, Margalida

- ♦ Founder and Landscape Architect at Estudio Paisajismo y Diseño.
- ♦ Architect specialized in Landscape and Garden Design
- ♦ Senior Architect by the I.E. University
- ♦ Expert in Digital Landscaping
- ♦ Expert in Energy Efficiency in Building Construction
- ♦ Expert in Vertical Garden Design and Construction by Urban Landscape Architecture



04

Structure and Content

This Postgraduate Diploma addresses multiple innovative topics through its academic modules. First of all, the syllabus refers in an exhaustive manner to technical and computer drawing techniques, facilitating the development of landscape projects. Additionally, it delves into aspects related to the direction and management of Landscape Architecture initiatives, cost control, health and safety coordination. Finally, the program delves into the history and evolution of gardens from antiquity to the 21st century and how the reproduction of different styles can be applied in current initiatives in this field.





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No predefined schedules or continuous evaluations: TECH Technological University guarantees you the fastest and most flexible access to its academic content”

Module 1. Graphic Expression

- 1.1. Technical Drawing. Linear Elements
 - 1.1.1. Comparison of Straight Lines
 - 1.1.2. Perpendicularity
 - 1.1.3. Parallelism and Angular Measurement
 - 1.1.4. Division of Circumferences into Equal Parts
- 1.2. Technical Drawing. Polygonal Shapes
 - 1.2.1. Construction of Polygons in General
 - 1.2.2. Construction of Regular Polygons
 - 1.2.3. Construction of Convex Polygons
 - 1.2.4. Construction of Stellated Polygons
- 1.3. Technical Drawing. Composition of Curved Shapes
 - 1.3.1. Combination of Lines by Contact. Tangents
 - 1.3.2. Shapes Based on Arcs of Tangent Circles: Ovals
 - 1.3.3. Drawing of Spirals. Archimedean Spiral
 - 1.3.4. Drawing of Ellipses. Gardener's Ellipse
 - 1.3.5. Plotting a Hyperbola
 - 1.3.6. Tracing Cycloids and Epicycloids
- 1.4. Technical Drawing. Shape Comparison
 - 1.4.1. Equality
 - 1.4.2. Symmetry
 - 1.4.3. Similarities
- 1.5. Technical Drawing. Graphic Form Structure
 - 1.5.1. Radial Structure
 - 1.5.2. Perpendicular Structure
 - 1.5.3. Parallel Structure
 - 1.5.4. Independent Structure
 - 1.5.5. Networks by Polygon Decomposition
 - 1.5.6. Networks by Polygon Composition
 - 1.5.7. Radial Networks
- 1.6. The Outlook
 - 1.6.1. Conic Perspective
 - 1.6.2. Axonometric Orthogonal Perspective
 - 1.6.3. Oblique Axonometric Perspective

- 1.7. Freehand Drawing
 - 1.7.1. Most Common Representation Techniques
 - 1.7.2. Materials. Pencil, Markers, Watercolor
 - 1.7.3. Sketches
 - 1.7.4. Software to Support Manual Drawing. Morpholio as an Example
- 1.8. Computer-Assisted Drawing
 - 1.8.1. From the Beginnings of Computer Aided Drafting to BIN
 - 1.8.2. Basic Software for Gardens, Without Drawing Knowledge SketchUp
 - 1.8.3. Description of the Most Common CAD Programs
- 1.9. CAD Associated with Databases
 - 1.9.1. Most Common Architectural BIN programs: REVIT
 - 1.9.2. VectorWorks. Features
 - 1.9.3. ArchiCad. Features
 - 1.9.4. GIS (Geographic Information Systems) programs. Differences with CAD
- 1.10. The Presentation of Projects
 - 1.10.1. Final Art
 - 1.10.2. Graphic Design Software for the Generation of Photorealistic Images
 - 1.10.3. Rendering Most Used Software in Landscaping

Module 2. The Landscape Construction Construction management and project management of landscape architecture projects

- 2.1. Project Management and Technical Management of Landscaping Works
 - 2.1.1. Definitions
 - 2.1.2. Differences
 - 2.1.3. Book of orders
- 2.2. Equipment Coordination and Vendor Supplies
 - 2.2.1. Activity Inspection Forms
 - 2.2.2. Staff Control
 - 2.2.3. Supply Logistics
 - 2.2.4. Stockpile Area Management

- 2.3. Planning
 - 2.3.1. Planning Software Use
 - 2.3.2. Gantt Chart
 - 2.3.3. Milestones
- 2.4. Control of Economic Costs of the Project
 - 2.4.1. Certifications
 - 2.4.2. Budget Control
 - 2.4.3. Cost Estimation
- 2.5. Financial Settlement
 - 2.5.1. Cost Review
 - 2.5.2. Extras Evaluation
 - 2.5.3. Payment Management
- 2.6. Provisional and Final Settlement Documents
 - 2.6.1. Warranty Periods
 - 2.6.2. Provisional Work Settlement Act
 - 2.6.3. Cost Justification Documents
- 2.7. Health and Safety Coordination
 - 2.7.1. Identification and Risk Assessment
 - 2.7.2. Health and Safety Plan
 - 2.7.3. Coordination with the Different Agents
- 2.8. Quality Control and Environmental Management in Landscape Construction
 - 2.8.1. Establishment of Standards
 - 2.8.2. Inspection and Follow-up
 - 2.8.3. Tests and Trials
- 2.9. Sequence of Works
 - 2.9.1. Protection of Elements to Remain. Trees, Buildings, Infrastructures, Singular Elements
 - 2.9.2. Clearing, Land Clearing and Demolitions
 - 2.9.3. Topographic Stakeout
 - 2.9.4. Earthworks and Drainage Works
 - 2.9.5. Layout of Facilities and Civil Works

- 2.9.6. Construction of Civil Works Elements
 - 2.9.6.1. Masonry works, Ponds, Swimming Pools and Fountains, Sport Areas and Playgrounds, Foundations for Furniture, etc
 - 2.9.6.2. Drainage Infrastructure Installation
 - 2.9.6.3. Installation of Irrigation Infrastructures (Buried Elements)
 - 2.9.6.4. Installation of Electrical Infrastructure
 - 2.9.6.5. Layout and Construction of Roads
 - 2.9.6.6. Land Preparation for Planting
 - 2.9.6.7. Definitive Staking Out of the Ground Plans
 - 2.9.6.8. Installation of Rotors or Sprinklers and Overhead Drip Irrigation System
 - 2.9.6.9. Installation of Fountains, Pergolas, Statues, Walkways on Previous Foundations
 - 2.9.6.10. Opening of Holes and Planting
 - 2.9.6.11. Protection of Planted Elements and Distribution of the Drip Irrigation System
 - 2.9.6.12. Leveling and Cleaning of the Soil
 - 2.9.6.13. Placement of Weed Control Netting and Sprayed Mulch
 - 2.9.6.14. Site Cleanup
- 2.10. Ideal Planning of Works According to the Time of the Year
 - 2.10.1. Summer
 - 2.10.2. Autumn
 - 2.10.3. Spring
 - 2.10.4. Winter

Module 3. Gardening Styles

- 3.1. Ancient Gardens
 - 3.1.1. The Origins of the Garden
 - 3.1.2. Egypt
 - 3.1.3. Persia
 - 3.1.4. Greece:
 - 3.1.5. The Garden in Rome
- 3.2. The Arabic Garden
 - 3.2.1. Paradise Concept
 - 3.2.2. The Hispanic-Muslim Garden
 - 3.2.3. The Asian Islamic Garden

- 3.3. The Medieval Christian Garden
 - 3.3.1. The Cloistered Garden
 - 3.3.2. Monastic Gardens
 - 3.3.3. Symbolism
- 3.4. Gardens from Renaissance to Baroque
 - 3.4.1. The Evolution of the Italian Villas
 - 3.4.2. Mannerism
 - 3.4.3. Baroque Garden
 - 3.4.4. Spain and Portugal, the Beginning of Botanical Expeditions and the Globalization of Species
- 3.5. French Rationalism
 - 3.5.1. From the Middle Ages to Le Nôtre
 - 3.5.2. The Garden as a Court Setting
 - 3.5.3. Parterre
 - 3.5.4. The Sources
- 3.6. The Landscape Revolution
 - 3.6.1. Breaking with Cartesian
 - 3.6.2. Evolution of the Landscape Garden
 - 3.6.3. Pope to Capability Brown
 - 3.6.4. Origins of Public Parks. Central Park
- 3.7. Oriental Gardens, a Separate Concept
 - 3.7.1. The Conception of Chinese Landscaping. Evolution
 - 3.7.2. Japanese Garden
 - 3.7.3. Sublimation of the Zen Garden
 - 3.7.4. Oriental Gardening Techniques
- 3.8. 20th Century Eclecticism
 - 3.8.1. From the Mix of Styles to Minimalism
 - 3.8.2. Unique Movements of the 20th Century
 - 3.8.3. Universalization of Public Green Spaces. From the Plaza to the Metropolitan Park
 - 3.8.4. Expansion of Natural Parks and Deterrents
 - 3.8.5. New Urban Leisure Spaces: Theme Parks, Aquariums, Children's Playgrounds, etc





- 3.9. Art as an Element of Landscape
 - 3.9.1. Historical Evolution of Garden Art
 - 3.9.2. The Land-Art as an integrating concept of Landscape
 - 3.9.3. Modern Sculpture
 - 3.9.4. The Garden
- 3.10. Sustainability as the Basis for 21st Century Design
 - 3.10.1. Evolution of Landscaping Towards Sustainability
 - 3.10.2. The Concept of Green Infrastructure in Cities
 - 3.10.3. Technical Development Evolves Garden Concepts
 - 3.10.4. From Hydroponics to Green Roofs

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Take advantage of this rigorous and comprehensive opportunity to expand your landscape design skills through TECH Technological University, the world's best online university”

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.



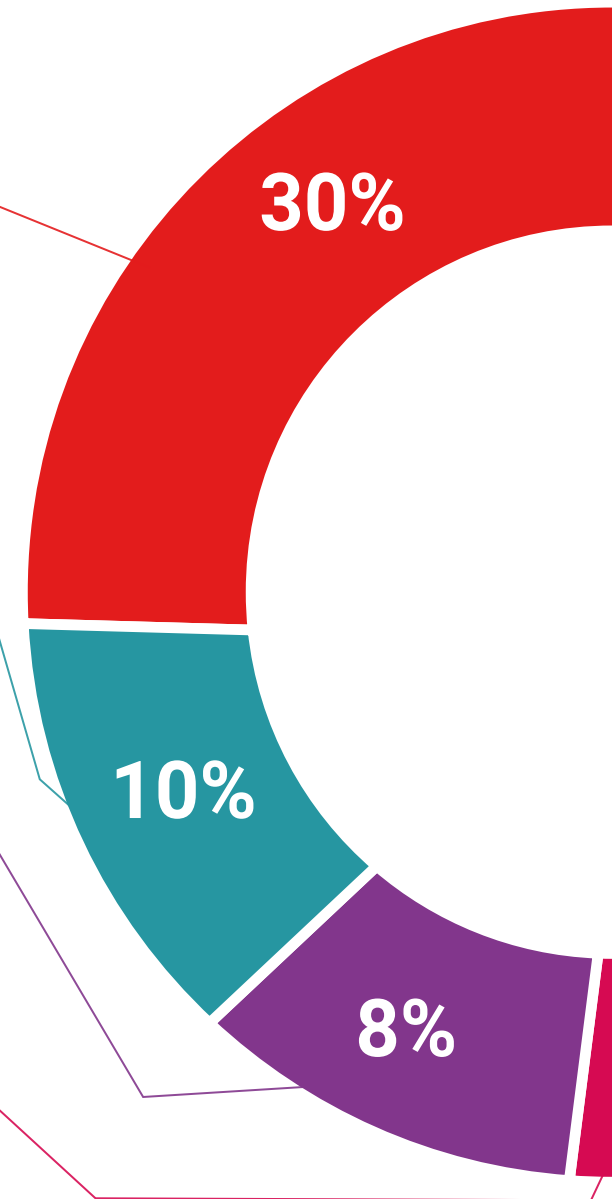
Practising Skills and Abilities

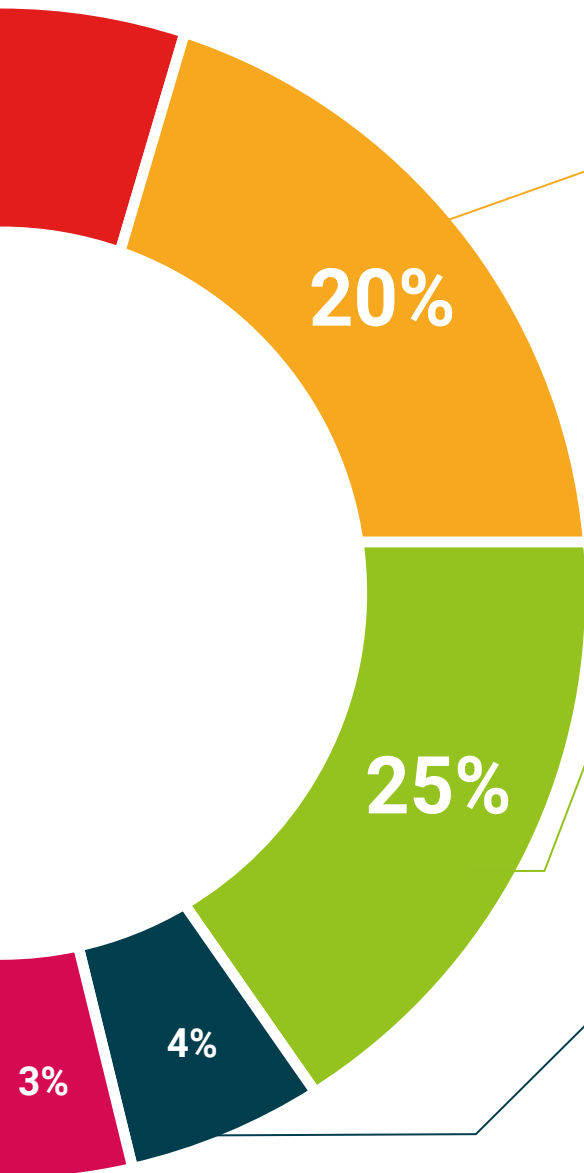
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



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 Diploma in Urban Landscape Planning and Design guarantees, in addition to the most rigorous and updated training, access to a Postgraduate Diploma 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”*

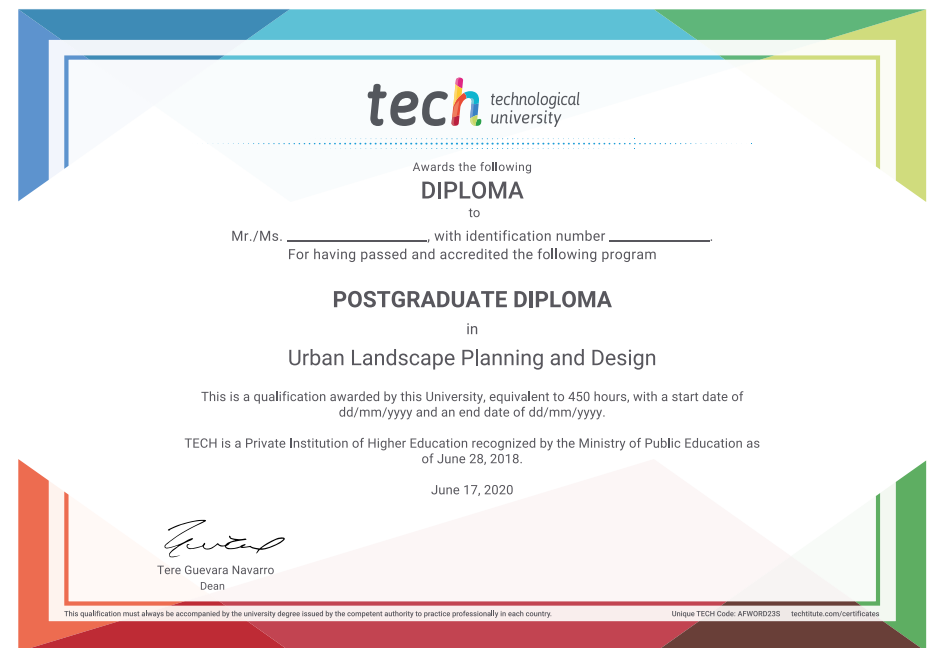
This **Postgraduate Diploma in Urban Landscape Planning and Design** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Urban Landscape Planning and Design**

Official N° of Hours: **450 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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