

Postgraduate Certificate Expert Topography



Postgraduate Certificate Expert Topography

Course Modality: **Online**

Duration: **6 weeks**

Certificate: **TECH Technological University**

Official N° of hours: **150 h.**

Website: www.techtute.com/pk/engineering/postgraduate-certificate/expert-topography

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01

Introduction

The latest advances in the field of geomatics have allowed for the development of new professional profiles. Therefore, the expert surveyor begins to have great relevance in many areas, thanks to their work verifying cadastral data or deeds. However, this specialty requires professionals to constantly update their knowledge due to the new contributions made by the digital environment. For this reason, this degree offers the professional in this area the latest knowledge so that they can perform topographic surveys applying the most advanced techniques available. This will be done through an online teaching methodology that allows the student to decide how, when and where to study.





“

Gain in-depth knowledge of the latest surveying techniques thanks to this Postgraduate Certificate”

Expert Topography has experienced great advances in recent years. The incorporation of new digital tools in the field of geomatics has allowed this professional profile to advance greatly, so it is currently on the rise. Therefore, their services are required in numerous administrative and civil proceedings, as they are able to prepare reports on cadastral and land registry matters, including land use planning.

Therefore, this Postgraduate Certificate in Expert Topography delves into issues such as cartographic projections, prismless surveying, geopositioning, photogrammetry and LIDAR techniques, geodesy, property registration, expert reports and property-oriented topography.

All this, following an innovative 100% online learning system that adapts to the circumstances of the working professional, as it allows them to choose the time and place to study. They will be guided at all times by a first-class teacher who knows this area to perfection, and they will enjoy multimedia resources of great educational value based on carrying out practical exercises.

This **Postgraduate Certificate in Expert Topography** contains the most complete and up-to-date program on the market. The most important features include:

- ◆ Practical cases presented by experts in Geomatics
- ◆ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ◆ Practical exercises where self-assessment can be used to improve learning
- ◆ 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



Expert topography is the present and the future of geomatics. Specialize now and gain access to numerous professional opportunities”

“*TECH's online teaching system will allow you to specialize in Expert Topography while developing your professional career without interruptions”*

Geomatics is undergoing continuous transformations and this Postgraduate Certificate will bring you up to date with them.

Expert topography is a new professional profile for which it is convenient to specialize, and this program gives you the opportunity to achieve it.

The teaching staff of this program includes professionals from the industry, who contribute the experience of their work to this program, in addition to recognized specialists from reference 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 learning programmed to train 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 throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.



02

Objectives

The main objective of this Postgraduate Certificate in Expert Topography is to offer students the latest advances in this field of geometrics, in such a way that they can integrate the most innovative and effective expert tools into their daily professional practice. Therefore, upon finishing this program, they will be in the position to focus their career towards a currently growing field.



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Achieve your goal and update your knowledge in expert topography thanks to this top-level course”



General Objectives

- ◆ Plan, structure and develop expert reports
- ◆ Gather knowledge from different disciplines of topography and focus them towards the expert environment
- ◆ Determine expert topography as a branch of Geomatics



This Postgraduate Certificate is what you have been looking for. Don't wait any longer. Enroll now and access the latest innovations in Expert Topography"





Specific Objectives

- ◆ Analyze the elements of property-oriented surveying
- ◆ Develop the concept of expert evidence
- ◆ Determine the structure of an expert report
- ◆ Establish the requirements for being an expert
- ◆ Analyze the performance mode of an expert witness
- ◆ Identify the different actors in an expert procedure

03

Course Management

This Postgraduate Certificate in Expert Topography has a high-level teaching staff made up of active professionals who have a perfect knowledge of this complex area of geomatics. In this way, they will transmit to the students all the key aspects of this type of expertise, so that they can immediately integrate them into their work. They will therefore be able to work in this field once they have completed the program.



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The best experts in expert topography transmit all their knowledge to you so that you can incorporate it into your work immediately”

Management



Mr. Puértolas Salañer, Ángel Manuel

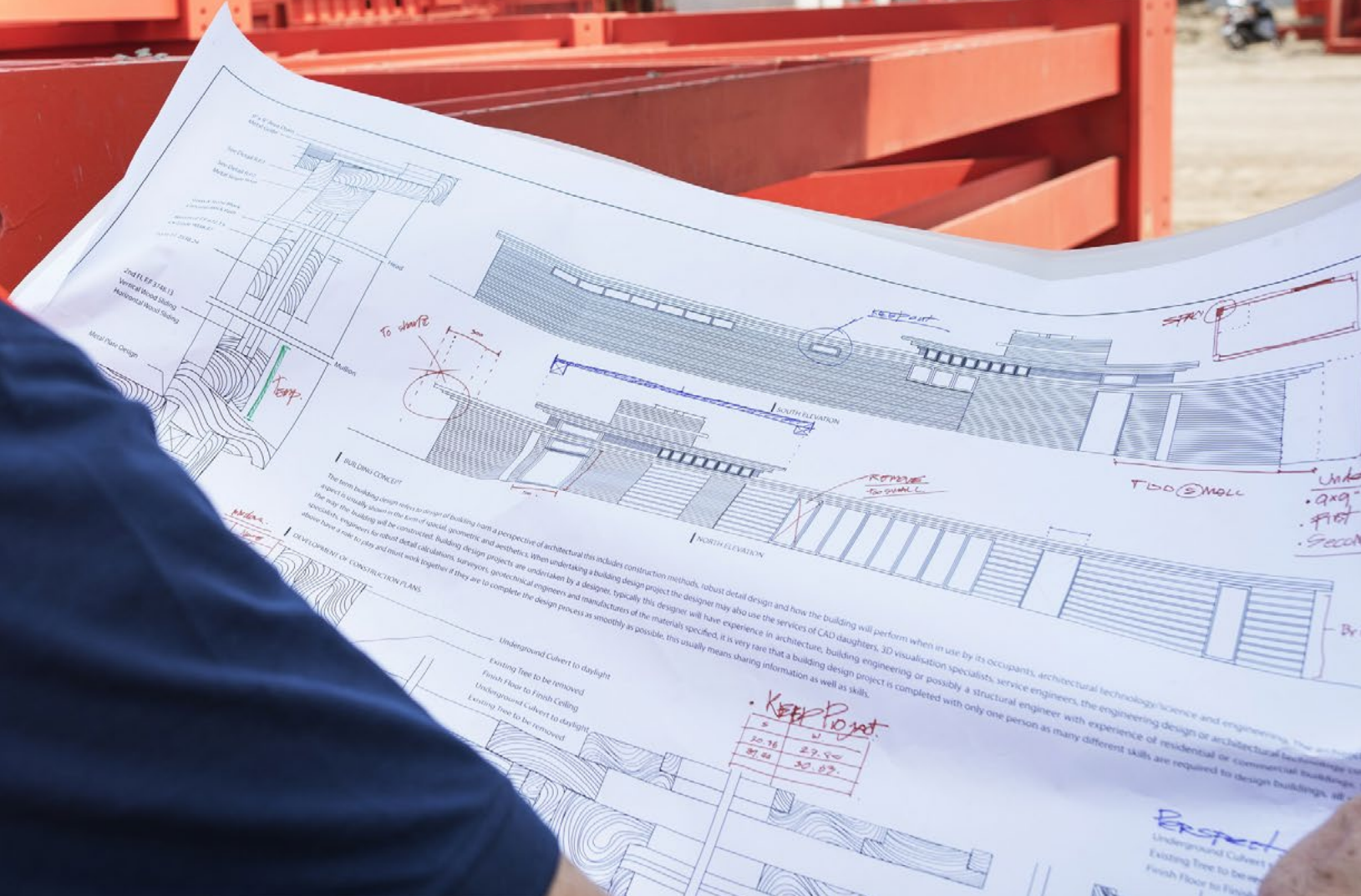
- ♦ Application development in .Net environment, Python development, SQL Server database management, system administration. ASISPA
- ♦ Topographical Surveyor Study and reconstruction of roads and accesses to towns. Ministry of Defence Embedded with UN forces in Lebanon
- ♦ Topographical Surveyor Topography per Project Ministry of Defence
- ♦ Topographical Surveyor Georeferencing of the old cadastre of the province of Murcia (Spain). Geoinformation and Systems S.L
- ♦ Technical Engineer in Topography from the Polytechnic University Valencia
- ♦ Master's Degree in Cybersecurity from MF Business School and the Camilo José Cela University
- ♦ Web management, server administration and task development and automatization in Python Milcom
- ♦ Development of applications in .Net environment. SQL Server management Own software support Ecomputer

Professors

Mr. Encinas Pérez, Daniel

- ♦ Enusa Advanced Industries Environmental Center Head of the Technical and Topographical Office
- ♦ Ortigosa dismantling and excavations Head of Projects and Topography
- ♦ Epsa Internacional. Head of Production and Topography
- ♦ Palazuelos de Eresma Town Hall Topographic survey for Administration for the Mojón Partial Plan

- ♦ Degree in Engineering in Geomatics and Topography from the University of Salamanca
- ♦ Master's Degree in Cartographic Geotechnologies applied to Engineering and Architecture from the University of Salamanca (in progress).
- ♦ Higher Technician in Development of Urban Planning Projects and Topographic Operations
- ♦ RPAS Professional Pilot (Issued by Aerocámaras - AESA)



04

Structure and Content

This Postgraduate Certificate in Expert Topography is structured in a specialized module in which the professional will be able to learn about the most recent advances in issues such as: total station, prismless measurement, orthometrics, geopositioning, digital elevation modeling, property-oriented surveying, the structure of an expert report or photogrammetry and LIDAR techniques. In this way, they will be able to face the current challenges of the profession with the greatest guarantees.





“

The best specialized content on expert topography is here. Don't miss this opportunity and come learn the expert techniques of the future”

Module 1. Expert Topography

- 1.1. Classic Topography
 - 1.1.1. Total Station
 - 1.1.1.1. Stationing
 - 1.1.1.2. Automatic Monitoring Total Station
 - 1.1.1.3. Measurement without a Prism
 - 1.1.2. Coordinate Transformation
 - 1.1.3. Topographic Methods
 - 1.1.3.1. Free Stationing
 - 1.1.3.2. Measuring Distance
 - 1.1.3.3. Stakeout
 - 1.1.3.4. Area Calculation
 - 1.1.3.5. Remote Height
- 1.2. Cartography
 - 1.2.1. Cartographic Projections
 - 1.2.2. UTM Projection
 - 1.2.3. System of UTM Coordinates
- 1.3. Geodesy
 - 1.3.1. Geoid and Ellipsoid
 - 1.3.2. The Datum
 - 1.3.3. System of Coordinates
 - 1.3.4. Types of Elevations
 - 1.3.4.1. Height of the Geoid
 - 1.3.4.2. Ellipsoid
 - 1.3.4.3. Orthometric
 - 1.3.5. Geodetic Reference Systems
 - 1.3.6. Leveling Networks
- 1.4. Geopositioning
 - 1.4.1. Satellite Positioning
 - 1.4.2. Errors
 - 1.4.3. GPS
 - 1.4.4. GLONAS
 - 1.4.5. Galileo
 - 1.4.6. Positioning Methods
 - 1.4.6.1. Static
 - 1.4.6.2. Static-Rapid
 - 1.4.6.3. RTK
 - 1.4.6.4. Real Time
- 1.5. Photogrammetry and LIDAR Techniques
 - 1.5.1. Photogrammetry
 - 1.5.2. Digital Elevation Model
 - 1.5.3. LIDAR
- 1.6. Property-Oriented Topography
 - 1.6.1. Measuring Systems
 - 1.6.2. Boundaries
 - 1.6.2.1. Types
 - 1.6.2.2. Administrative Boundaries
 - 1.6.3. Easements
 - 1.6.4. Segregation, Division, Grouping and Aggregation
- 1.7. Property Registration
 - 1.7.1. Cadaster
 - 1.7.2. Property Registration
 - 1.7.2.1. Organization
 - 1.7.2.2. Registration Discrepancies
 - 1.7.3. Notary



- 1.8. Expert Test
 - 1.8.1. Expert Evidence
 - 1.8.2. Requirements for Being an Expert
 - 1.8.3. Types
 - 1.8.4. Expert Role
 - 1.8.5. Property Delimitation Tests
- 1.9. Expert Report
 - 1.9.1. Steps Before the Report
 - 1.9.2. People Involved in the Expert Procedure
 - 1.9.2.1. Judge-Magistrate
 - 1.9.2.2. Judicial Secretary
 - 1.9.2.3. Procurators
 - 1.9.2.4. Lawyers
 - 1.9.2.5. Plaintiff and Defendant
 - 1.9.3. Parts of the Expert Report

“*All the developments in the field of expert topography are now at your fingertips*”

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.



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 student will learn to solve complex situations in real business environments through collaborative activities and real cases.

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 Expert Topography guarantees, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Expert Topography** contains the most complete and up-to-date program on the market.

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

The 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 Certificate in Expert Topography**

Official N° of Hours: **150 h.**



*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.

future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present quality
development languages
virtual classroom



Postgraduate Certificate
Expert Topography

Course Modality: Online

Duration: 6 weeks

Certificate: TECH Technological University

Official N° of hours: 150 h.

Postgraduate Certificate Expert Topography

