

# Postgraduate Certificate Technical Drawing





## Postgraduate Certificate Technical Drawing

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

Website: [www.techtute.com/pk/design/postgraduate-certificate/technical-drawing](http://www.techtute.com/pk/design/postgraduate-certificate/technical-drawing)

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# 01

# Introduction

Technical Drawing applied to the fashion industry plays a fundamental role, especially for creating sketches, but also for pattern making. Therefore, the geometric elements will allow to transfer those technical characteristics that the designer has proposed for a garment to paper or to the screen. To this purpose, TECH has created this program, prepared by professionals with extensive experience in the field, which includes the most relevant and indispensable information for professionals in the sector, who wish to obtain a higher qualification that will allow them to achieve success in this field.





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*Technical Drawing is essential for fashion design professionals, as it enables them to acquire the skills necessary for high-quality mock-ups and sketches”*

Fashion design professionals not only have to be creative and passionate about new trends, but they must also have a series of specific skills that allow them to successfully handle drawing, an essential technique for their daily work, since each planned idea must be transferred to paper or the computer in a clear and concise way, showing every detail that, later on, must be seen on fabric.

For this reason, Technical Drawing is an indispensable part of these professionals' knowledge. To meet this need for specialization in this area, TECH has designed this program, which brings together the most relevant information on the technical elements of drawing in a single program: geometry, plans, polygons, curves, or even sketches. A high-level program for professionals seeking a higher level of specialization in a short period of time.

In short, TECH aims to meet the high specialization objective demanded by fashion designers, who are looking for high quality programs to improve their skills and offer users garments that will become indispensable for their closet. And to achieve this goal, it offers students a cutting-edge program adapted to the latest developments in the sector, with an up-to-date syllabus developed by experienced professionals who are willing to put all their knowledge at the disposal of their students. It should be noted that since it is a 100% online program, students are not conditioned by fixed schedules or the need to move to another physical location, but can access the contents at any time of the day, balancing their professional and personal life with their academic life.

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

- ◆ Practical cases presented by experts in fashion
- ◆ 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.
- ◆ Special emphasis on innovative methodologies in Technical Drawing
- ◆ 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

“*Successfully handle Technical Drawing and manage to transfer your ideas to paper without any complications*”

“*TECH provides you with the latest educational technology so that you can specialize comfortably*”

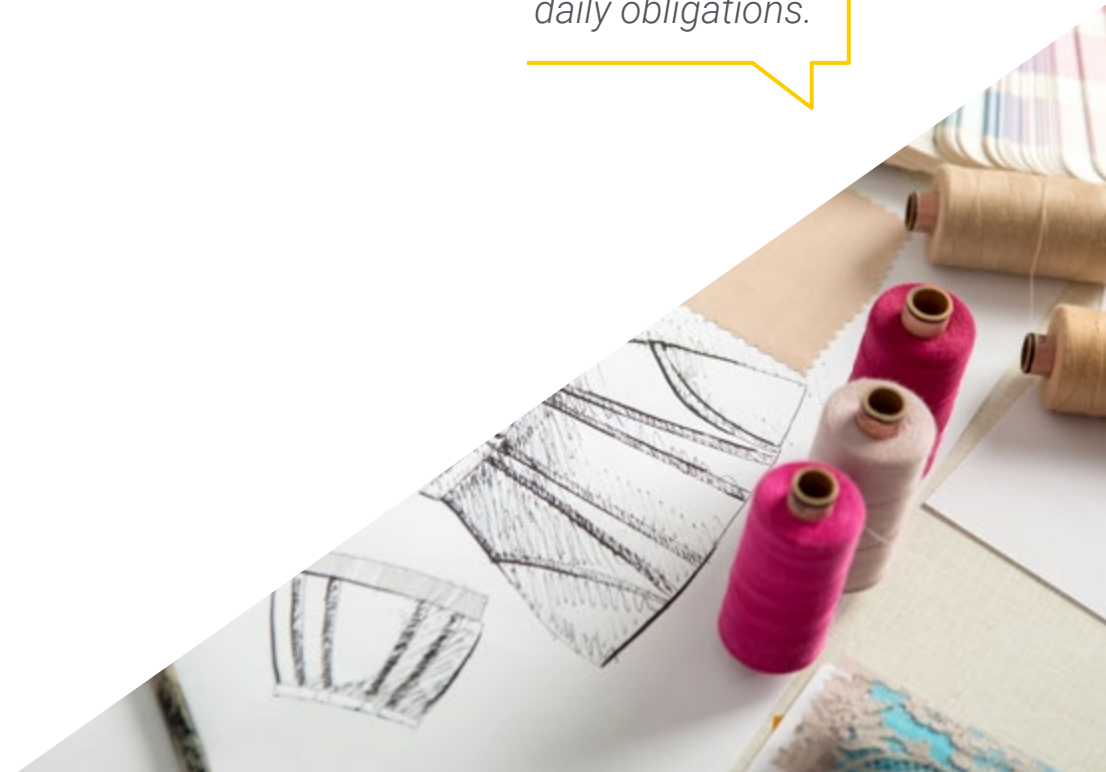
This program's teaching staff includes professionals from the field of Fashion, who bring their work experience to this program, as well as renowned specialists from leading communities and prestigious universities.

Its multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will deliver an immersive learning experience, programmed to prepare for real situations.

The design of this program focuses on Problem-Based Learning, by means of which professionals must try to solve the different professional practice situations that arise during the academic year. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*The multitude of case studies in this program will allow you to strengthen your skills in a short period of time.*

*One of the advantages of this Postgraduate Certificate is that it is 100% online, so you can combine your study time with the rest of your daily obligations.*



# 02 Objectives

This Postgraduate Certificate in Technical Drawing is oriented to facilitate professionals' performance in order for them to acquire and learn the main novelties in this field, which will allow them to practice their daily work with the highest quality and professionalism. This way, they will be better prepared to develop successfully in a booming sector, in which new concepts and trends are constantly emerging and must be recognized and applied by professionals.





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*Achieve your academic goals  
thanks to TECH's specialization in  
this program"*



## General Objectives

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- ◆ Acquire specific skills for sketching drawings that faithfully show the proposed design
- ◆ Be able to design's fashion projects that will gain public popularity
- ◆ Understand the main characteristics of Technical Drawing

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*Higher specialization in Technical Drawing will allow you to be more competitive in your daily work”*





## Specific Objectives

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- ◆ Use knowledge of representation systems as a tool in the search for solutions to design problems
- ◆ Develop conception and spatial vision, obtaining new tools that encourage the promotion and generation of ideas.
- ◆ Learn to represent objects in the dihedral, axonometric and conical systems as a means of conveying an idea of how to create them.
- ◆ Acquire theoretical and practical methodological knowledge necessary for the realization of technical projects.
- ◆ Directly deal with the representation of three-dimensional entities on the plane, improving the sense of perception.
- ◆ Develop skills and abilities to express oneself in the technical environment with precision, clarity and objectivity in graphic solutions.
- ◆ Understand three-dimensional models and visualize figures or parts from any point of view

# 03

## Structure and Content

This Postgraduate Certificate's content covers, in a structured way, all the areas of knowledge that fashion professionals need to know in-depth, including the most interesting developments and latest advances in the sector. A high-quality program that will allow students to compete proficiently and competently in a highly competitive industry. To this purpose, the syllabus has been designed by professionals with extensive experience, who have captured all their expertise in a program that will be indispensable in professionals' résumés in the 21st century.





“TECH has compiled the most relevant information on Technical Drawing for you to acquire the necessary skills to excel in this field”

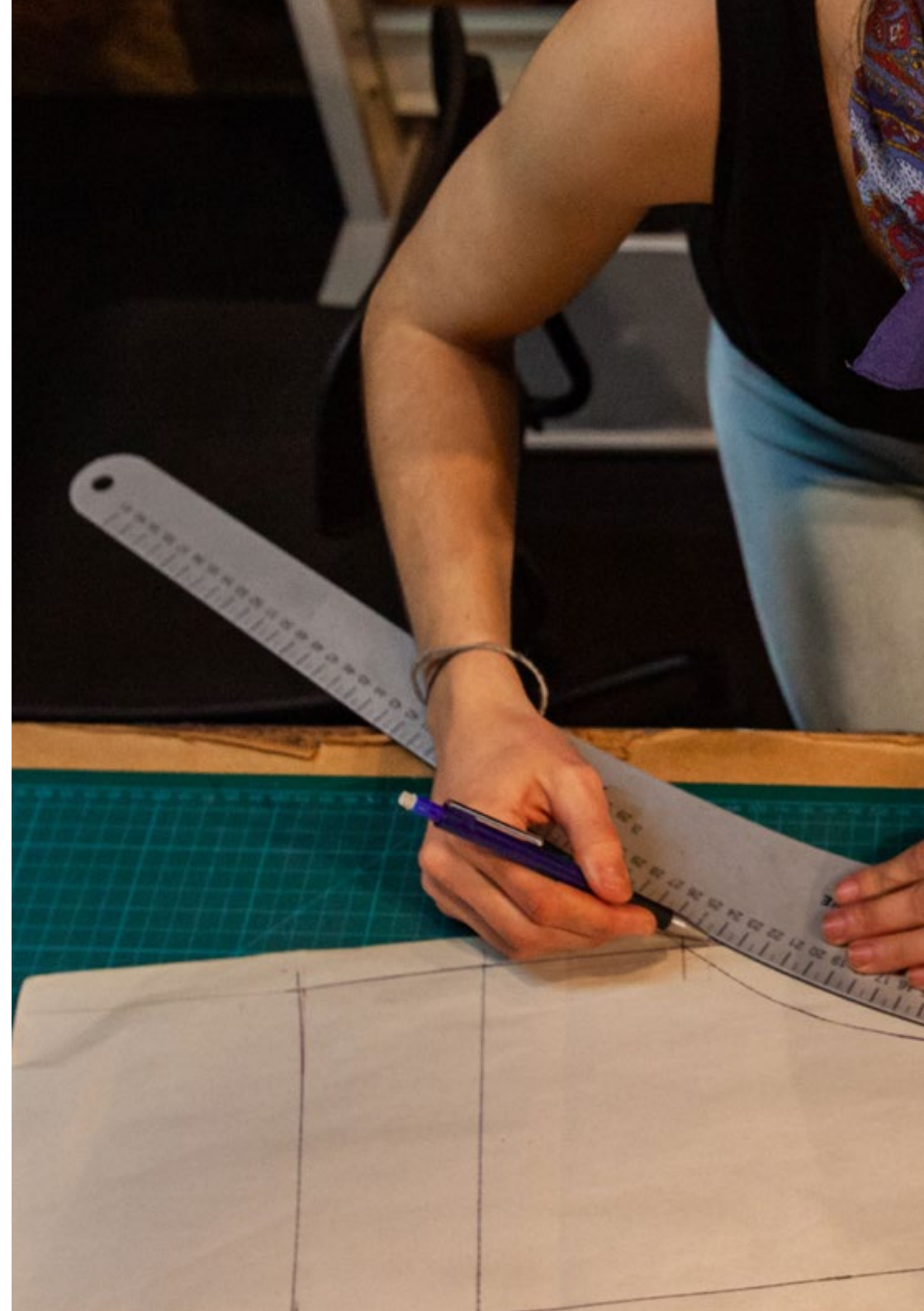
## Module 1. Technical Drawing

- 1.1. Introduction to Flat Geometry
  - 1.1.1. The Fundamental Material and Its Use
  - 1.1.2. Fundamental Tracings in the Plane
  - 1.1.3. Polygons. Metric Ratios
  - 1.1.4. Standardization, Lines, Writing and Formats
  - 1.1.5. Standardized Dimensioning
  - 1.1.6. Scales
  - 1.1.7. Technical Representation Systems
    - 1.1.7.1. Types of Projection
      - 1.1.7.1.1. Conical Projection
      - 1.1.7.1.2. Orthogonal Cylindrical Projection
      - 1.1.7.1.3. Oblique Cylindrical Projection
    - 1.1.7.2. Classes of Representation Systems
      - 1.1.7.2.1. Measuring Systems
      - 1.1.7.2.2. Perspective Systems
- 1.2. Fundamental Tracings in the Plane
  - 1.2.1. Fundamental Geometrical Elements
  - 1.2.2. Perpendicularity
  - 1.2.3. Parallelism
  - 1.2.4. Operations With Segments
  - 1.2.5. Angles
  - 1.2.6. Circumferences
  - 1.2.7. Geometric Places
- 1.3. Geometric Transformations
  - 1.3.1. Isometric
    - 1.3.1.1. Equality
    - 1.3.1.2. Translation
    - 1.3.1.3. Symmetry
    - 1.3.1.4. Turn
  - 1.3.2. Isomorphic
    - 1.3.2.1. Homothecary
    - 1.3.2.2. Similarities
  - 1.3.3. Anamorphic
    - 1.3.3.1. Equivalents
    - 1.3.3.1. Investments
  - 1.3.4. Projective
    - 1.3.4.1. Homology
    - 1.3.4.2. Affine Homology or Affinity
- 1.4. Polygons
  - 1.4.1. Polygon Lines
    - 1.4.1.1. Definition and Types
  - 1.4.2. Triangles
    - 1.4.2.1. Elements and Classification
    - 1.4.2.2. Construction of Triangles
    - 1.4.2.3. Notable Lines and Points
  - 1.4.3. Quadrilaterals
    - 1.4.3.1. Elements and Classification
    - 1.4.3.2. Parallelograms
  - 1.4.4. Regular Polygons
    - 1.4.4.1. Definition
    - 1.4.4.2. Construction
  - 1.4.5. Perimeters and Areas
    - 1.4.5.1. Definition: Measuring Areas
    - 1.4.5.2. Surface Units
  - 1.4.6. Polygon Areas
    - 1.4.6.1. Quadrilateral Areas
    - 1.4.6.2. Triangle Areas
    - 1.4.6.3. Regular Polygon Areas
    - 1.4.6.4. Irregular Areas



- 1.5. Tangents and Links: Technical and Conic Curves
  - 1.5.1. Tangents, Links and Polarity
    - 1.5.1.1. Tangents
      - 1.5.1.1.1. Tangency Theorems
      - 1.5.1.1.2. Drawings of Tangent Lines
      - 1.5.1.1.3. Straight and Curved Links
    - 1.5.1.2. Polarity at the Circumference
      - 1.5.1.2.1. Drawings of Tangent Lines
  - 1.5.2. Technical Curves
    - 1.5.2.1. Ovals
    - 1.5.2.2. Ovoids
    - 1.5.2.3. Spirals
  - 1.5.3. Conical Curves
    - 1.5.3.1. Ellipse
    - 1.5.3.2. Parabola
    - 1.5.3.3. Hyperbola
- 1.6. Dihedral System
  - 1.6.1. General Aspects
    - 1.6.1.1. Point and Line
    - 1.6.1.2. The Plane. Intersections
    - 1.6.1.3. Parallelism, Perpendicularity and Distances
    - 1.6.1.4. Plane Changes
    - 1.6.1.5. Turns
    - 1.6.1.6. Reductions
    - 1.6.1.7. Angles

- 1.6.2. Curves and Surfaces
  - 1.6.2.1. Curves
  - 1.6.2.2. Surfaces
  - 1.6.2.3. Polyhedra
  - 1.6.2.4. Pyramids
  - 1.6.2.5. Pryzm
  - 1.6.2.6 Cone
  - 1.6.2.7 Cylinder
  - 1.6.2.8 Revolution Surfaces
  - 1.6.2.9 Intersection of Surfaces
- 1.6.3. Shade
  - 1.6.3.1. General Aspects
- 1.7. System Boundary
  - 1.7.1. Point, Line and Plane
  - 1.7.2. Intersections and Reductions
    - 1.7.2.1. Reductions
    - 1.7.2.2. Applications
  - 1.7.3. Parallelism, Perpendicularity, Distance and Angles
    - 1.7.3.1. Perpendicularity
    - 1.7.3.2. Distances
    - 1.7.3.3. Angles
  - 1.7.4. Line, Surfaces and Terrains
    - 1.7.4.1. Terrains
  - 1.7.5. Applications
- 1.8. Axonometric System
  - 1.8.1. Orthogonal Axonometry: Point, Line and Plane
  - 1.8.2. Orthogonal Axonometry: Intersections, Reductions and Perpendicularity
    - 1.8.2.1. Reductions
    - 1.8.2.2. Perpendicularity
    - 1.8.2.3. Flat Shapes







- 1.8.3. Orthogonal Axonometry: Body Perspective
  - 1.8.3.1. Representation of Bodies
- 1.8.4. Oblique Axonometry: Abatisms, Perpendicularity
  - 1.8.4.1. Frontal Perspective
  - 1.8.4.2. Reduction and Perpendicularity
  - 1.8.4.3. Flat Figures
- 1.8.5. Oblique Axonometry: Body Perspective
  - 1.8.5.1. Shade
- 1.9. Conical System
  - 1.9.1. Conical or Central Projection
    - 1.9.1.1. Intersections
    - 1.9.1.2. Parallelisms
    - 1.9.1.3. Reductions
    - 1.9.1.4. Perpendicularity
    - 1.9.1.5. Angles
  - 1.9.2. Lineal Perspective
    - 1.9.2.1. Auxiliary Constructions
  - 1.9.3. Lines and Surfaces Perspective
    - 1.9.3.1. Practical Perspective
  - 1.9.4. Perspective Methods
    - 1.9.4.1. Tilted Frame
  - 1.9.5. Prospective Restitutions
    - 1.9.5.1. Reflexes
    - 1.9.5.2. Shade
- 1.10. The Sketch
  - 1.10.1. Objectives of the Sketch
  - 1.10.2. The Proportion
  - 1.10.3. Sketch Process
  - 1.10.4. Point of View
  - 1.10.5. Labeling and Graphic Symbols
  - 1.10.6. Measurement

# 04

# 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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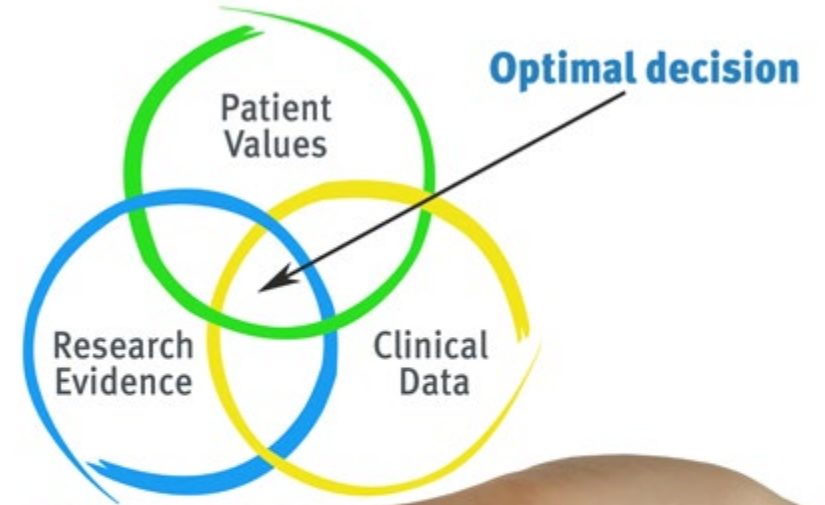
*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## 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.



*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 we face 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.

With this methodology we have 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, markets, and financial 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.



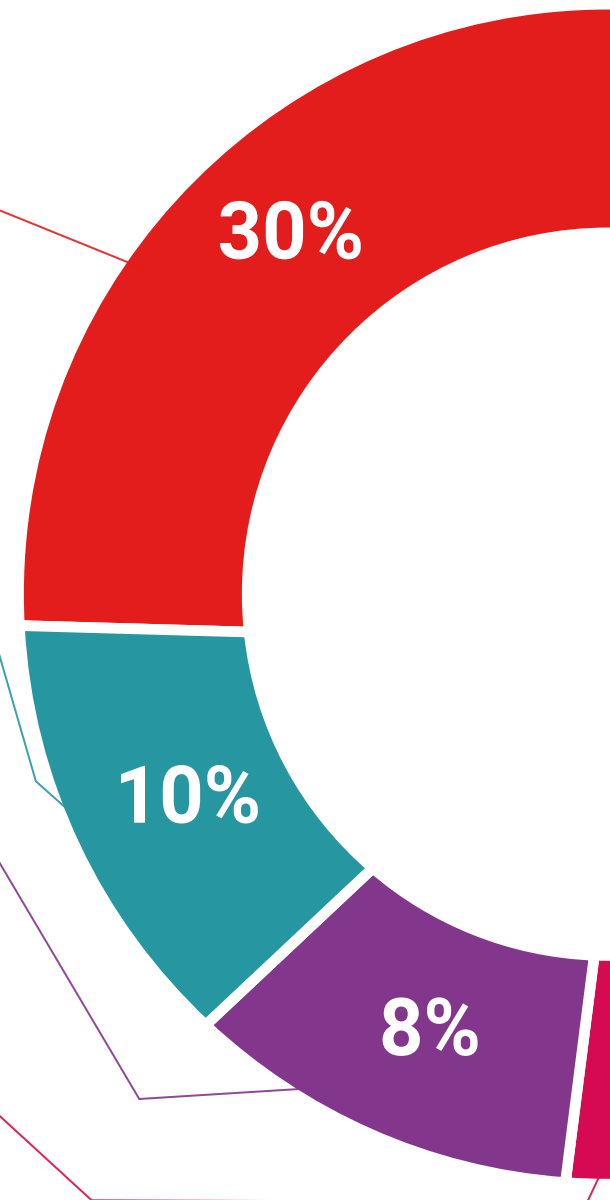
### Practising Skills and Abilities

They will carry out activities to develop specific competencies and skills in each thematic 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.



# 05 Certificate

This Postgraduate Certificate in Technical Drawing guarantees students, 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 Technical Drawing** 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 Technical Drawing**

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  
online treatment  
development language  
classroom



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