Postgraduate Certificate
Drafting and Information Systems

tech *technological university*

Postgraduate Certificate
Drafting and Information Systems

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

Website: **www.techtitute.com/in/engineering/postgraduate-certificate/drafting-information-systems**

Index

01

Introduction

For engineers and workers in the industrial branch, being able to develop, interpret, analyze and understand different types of sketches, in order to make decisions in their daily work is fundamental, that is why graphic methods are of vital interest given their value in the practice of interpreting graphic ideas of any design. Basically, through the study and implementation of technical language methods, it is possible to meet the demands of the industrial sector. For this reason, more and more qualified professionals are needed and that is why this specific program arises, which aims to provide the student with the basic principles in the area. With a 100% online modality, based on the most innovative *relearning* methodology, achievable in 6 weeks.

Acquire advanced knowledge with this Postgraduate Certificate in Drafting and Information Systems 100% online and get your diploma in 6 weeks"

The knowledge and mastery of the graphic language, called standardization of technical drawing by the engineer is essential, to be able to understand the set of drawings that reflect exactly and unequivocally what should be done, how to do it, where to do it and how it has to be for its perfect operation, is part of the day to day for the development of innovative solutions.

Every engineering project requires an exhaustive graphic representation of all the elements involved. Knowing how to develop the graphic document made to scale and following the drawing standards already established. As well as representing parts and equipment using 2D and 3D representation techniques, among other important aspects will be studied in this Postgraduate Certificate.

A program that includes the importance of graphics for an engineer in industrial organization, computer-aided design systems, basic elements of descriptive geometry, representation systems and geometric constructions in the plane, the basics of perspective and the axonometric system, projection methods, the European system and the American system, as well as the drawing of assemblies, dimensional and geometric tolerances, among other aspects.

A total of 150 hours of learning, 100% online based on the relearning methodology, with a variety of multimedia resources and formats of theoretical and practical content, available from the first day for consultation or download that allows a continuous and comfortable learning process adjusted to the needs of today's professional.

This **Postgraduate Certificate in Drafting and Information Systems** 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 industrial engineering
- 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
- 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

Get qualified in Drafting and Information Systems and a wide range of job possibilities will open up for you. Enroll now and stand out"

With this Postgraduate Certificate you will master the fundamental aspects of graphic engineering"

You will learn to represent parts and equipment using 2D and 3D representation techniques.

TECH offers you an innovative study methodology that allows you to learn quickly and comfortably.

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 professional with situated and contextual learning, i.e., a simulated environment that will provide an immersion education programmed to learn in real situations.

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

02
Objectives

The purpose of this program in Drafting and Information Systems is to enable the student to identify the fundamental aspects of engineering graphics and to be able to apply the systems of graphic representation for engineering in proposed situations. Through the most advanced content, combining the most advanced technology and methodology of study 100% online.
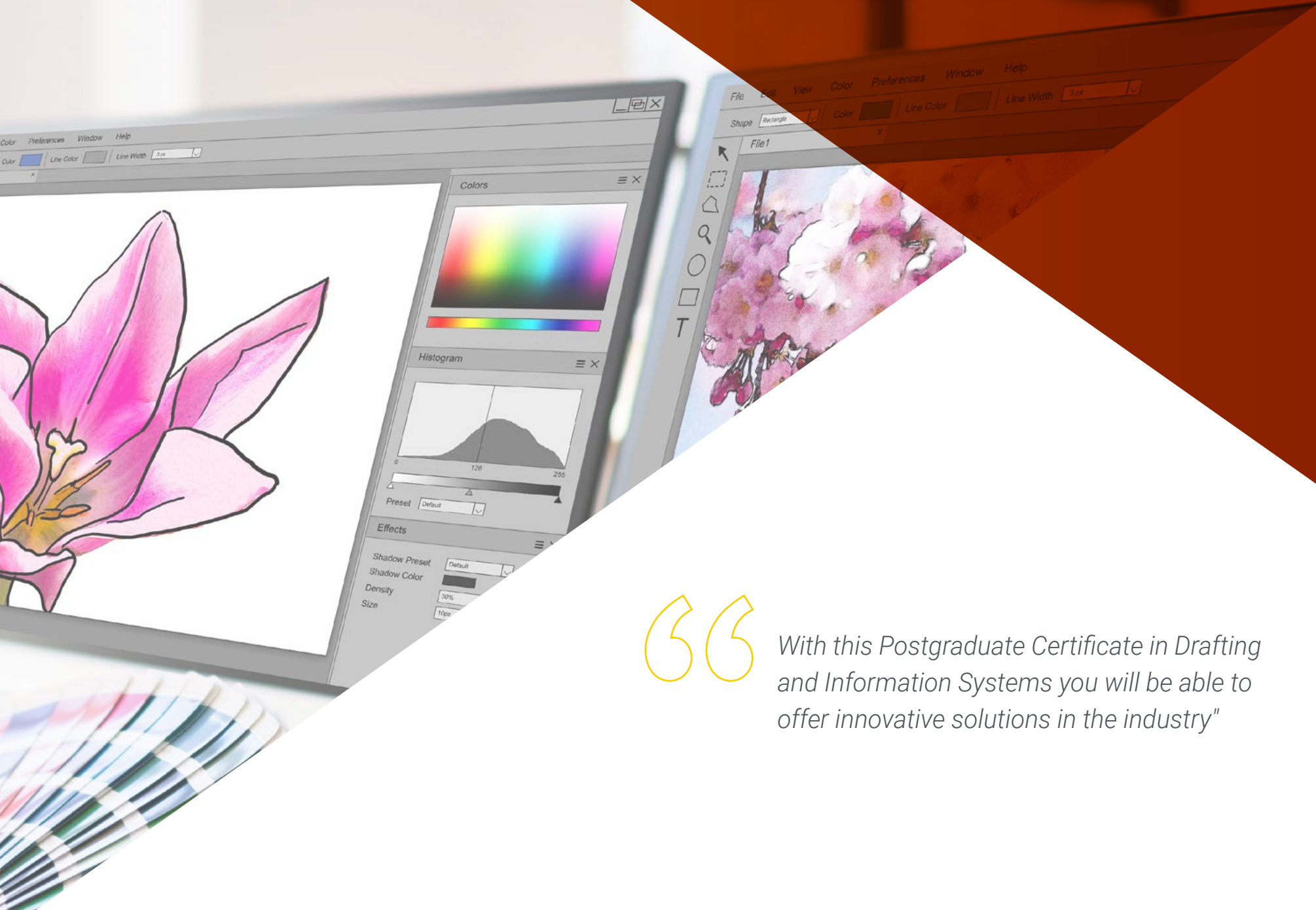
With this Postgraduate Certificate in Drafting and Information Systems you will be able to offer innovative solutions in the industry"

General Objectives

- Study the fundamental aspects of graphic engineering in the development of solutions for specific situations
- Analyze various formats for graphic communication of designs and projects
- Understand the basic elements of descriptive geometry
- Identify the systems of representation and geometric transformations

Understand the basics of the cavalier perspective and the axonometric system. Enroll now"

Specific Objectives

- Identify the fundamental aspects of engineering graphics
- Apply engineering graphic representation systems to proposed situations
- Represent parts and equipment using 2D and 3D representation techniques
- Represent installations using traditional graphic expression techniques and computers
- Identify the fundamentals of the dihedral system
- Interpret plans, models and other formats of graphic communication of designs and projects
- Use computer aided design software applications

03
Structure and Content

With the premise of offering quality programs to today's professionals, TECH promotes an innovative methodology based on *relearning,* which has been recognized as an efficient method to understand and memorize knowledge, so it is a breakthrough in the current university system focused on professionals who wish to continue preparing academically. This, together with a syllabus of 10 specialized aspects developed to understand the fundamental aspects of engineering graphics.

TECH's study platform has a variety of multimedia resources that facilitate the understanding of the content, connecting from any device"

Module 1. Drafting and Information Systems

1.1.   Introduction to Engineering Graphic Expression
    1.1.1.   Importance of graphics for an engineer in Industrial Organization
    1.1.2.   Exchange of design information
    1.1.3.   Classification of drawings
    1.1.4.   Standardization
    1.1.5.   Technical vocabulary

1.2.   Computer-Assisted Design
    1.2.1.   CAD/CAM/CIM/CAE
    1.2.2.   CAD Systems
    1.2.3.   Structure of a CAD program
    1.2.4.   2D and 3D design of isolated parts

1.3.   Elements of descriptive geometry
    1.3.1.   Basic elements of descriptive geometry
    1.3.2.   2D geometric elements
    1.3.3.   Volumetric geometric figures
    1.3.4.   Relationships between geometric elements

1.4.   Geometric constructions in the plane. Technical Representation Systems
    1.4.1.   Projection systems
    1.4.2.   Classification of projection systems
    1.4.3.   The Shot
    1.4.4.   Geometric Transformations
    1.4.5.   Technical Representation Systems

1.5.   Dihedral System
    1.5.1.   Dihedral System
    1.5.2.   Point
    1.5.3.   The straight line
    1.5.4.   The Shot
    1.5.5.   Procedure for the dihedral representation of a part. Direct Method

1.6.   Fundamentals of the cavalier perspective and the axonometric system
    1.6.1.   Principles of the cavalier perspective
    1.6.2.   Representation of the triangle and circle in perspective
    1.6.3.   Principles of the axonometric system
    1.6.4.   Isometric, dimetric and trimetric system
    1.6.5.   Isometric system. Taking measurements

1.7.   Normalized views

    1.7.1.   Projection methods. European system. American System

    1.7.2.   Criteria for the selection of views: scales

    1.7.3.   Other types of views: auxiliary, particular, partial and local views

    1.7.4.   Single and double auxiliary views. Construction

    1.7.5.   Regulations

1.8.   Sectional views

    1.8.1.   Standards in cuts and sections

    1.8.2.   Most frequent cuts and sections

    1.8.3.   Particular representations

    1.8.4.   Examples

1.9.   Dimensioned drawing system. Dimensioning

    1.9.1.   Introduction to the dimensioned drawing system

    1.9.2.   General principles of dimensioning. Standards

    1.9.3.   Dimensioning methods

    1.9.4.   Equidistant and repetitive elements

1.10.   Drawing of assemblies. Dimensional and geometric tolerances. Unions

    1.10.1.   Drawing of assemblies. List of elements

    1.10.2.   Drawing of exploded views. Drawing box. Drawing numbering

    1.10.3.   Dimensional and geometric tolerances. Definitions

    1.10.4.   Types of joints. Fixed and dismountable

    1.10.5.   Regulations

Enroll now and get your Postgraduate Certificate in Drafting and Information Systems in only 6 weeks and 100% online"

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.

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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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.

30%

10%

8%

20%

25%

4%

3%

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

The Postgraduate Certificate in Drafting and Information Systems guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

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

This **Postgraduate Certificate in Drafting and Information Systems** 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 Drafting and Information Systems**

Official Nº of Hours: **150 h.**

tech technological university

Awards the following
CERTIFICATE
to
Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE CERTIFICATE
in
Drafting and Information Systems

This is a qualification awarded by this University, equivalent to 300 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

Unique TECH Code: AFWORD23S   techtitute.com/certificates

*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.

Postgraduate Certificate
Drafting and Information Systems

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

Postgraduate Certificate

Drafting and Information Systems

tech *technological university*