Postgraduate Certificate

Mechatronic Systems
Graphic Design

tech technological university

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Postgraduate Certificate
Mechatronic Systems Graphic Design

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

Website: **www.techtitute.com/us/engineering/postgraduate-certificate/mechatronic-systems-graphic-design**

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01

Introduction

In recent years, there have been numerous advances in the Mechatronic Systems Graphic Design, allowing the creation of detailed industrial models and prototypes. For this reason, sectors such as the automotive industry increasingly need specialized professionals who are able to visually plan the development of their products, parts and tools. In this context, TECH has designed this educational program to respond to the current demand for experts in this field. Therefore, this program stands out for its in-depth study of CAD design applied to mechatronic projects. In addition, its 100% online syllabus allows students to study comfortably, with 24-hour access to all teaching resources.

With this program you will master the most advanced Graphic Design tools applied to Mechatronic Systems"

With the advancement of technology, the Mechatronic Systems Graphic Design has driven the creation of high-precision industrial products. In turn, this has generated benefits such as increased efficiency and reduced costs and development times. For this reason, more and more institutions are demanding professionals in the Mechatronic Systems Graphic Design to increase their performance indicators.

In view of this situation, TECH has implemented an innovative syllabus focused on the design, analysis and optimization of integrated control systems. In this sense, the educational itinerary contains the most advanced concepts and activities related to the Mechatronic Systems Graphic Design. Also, with the 100% online methodology of this qualification, students will be able to comfortably complete the program. In order to study the subjects, you will only need a device with Internet access, since the schedules and assessment chronograms can be planned on an individual basis.

In addition, the syllabus will be supported the innovative Relearning teaching system that relies on repetition to guarantee the mastery of its different aspects. At the same time, it mixes the learning process with real situations so that the knowledge is acquired in a natural and progressive way.

This **Postgraduate Certificate in Mechatronic Systems Graphic 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 Mechatronic Systems Graphic Design
- The graphic, schematic, and practical contents which provide Therapeutics 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

Study in a 100% online format and give your professional career an immediate boost"

Don't miss the opportunity to boost your career through this cutting-edge educational program"

Thanks to TECH you will master the latest Graphic Design tools applied to Mechatronic Systems.

This qualification is specifically designed to enable you to progress professionally by providing you with the most advanced Graphic Design techniques.

The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading 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 education programmed to learn 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 during the academic year For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

02

Objectives

This Postgraduate Certificate will enable graduates to acquire the necessary competences to update their skills in the profession after delving into the key aspects of Mechatronic Systems Graphic Design. In addition, the latest generation tools for the visual creation of assemblies will be addressed. Along the same lines, the latest techniques for the creation and editing of surfaces will also be used. In this way, students will develop in a booming sector and will be qualified to make the leap to the most prestigious institutions.

The goal of TECH lies in you: give your career the boost it needs and specialize in Mechatronic Systems Graphic Design"

General Objectives

- Delve into CAD design methodology and apply it to mechatronic projects
- Generate well-defined sketches as a basis for design operations
- Use solid and surface design techniques effectively
- Create complex assemblies using position relationships

Enroll now and achieve your career goals with TECH, the world's best digital university according to Forbes"

Specific Objectives

- Define relationships and equations to create parametric models that adapt to design changes in an agile manner
- Find and utilize available resources from mechatronic element manufacturers or repositories, and include them in the design to increase productivity
- Develop bent sheet metal parts efficiently
- Generate technical drawings and detailed blueprints from 3D models of parts and assemblies

03

Course Management

In its commitment of offering an elite educational preparation, TECH relies on renowned professionals so that graduates acquires a solid knowledge in the specialty of Mechatronic Systems Graphic Design. For this purpose, this Postgraduate Certificate has a highly qualified team with extensive experience in the sector, which will offer the best tools for the student in the development of their skills during the program. 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.

Acquire the knowledge and skills you need to embark on the field of Mechatronic Systems Graphic Design"

International Guest Director

With an extensive background in the Technology industry, Hassan Showkot is a renowned Computer Engineer highly specialized in the implementation of advanced robotic solutions in a variety of fields. He also stands out for his strategic vision to manage multidisciplinary work teams and lead projects oriented to the specific needs of clients.

In this way, he has worked in international reference companies such as Huawei or Omron Robotics and Safety Technologies. Among his main achievements, he has created innovative techniques to improve both the reliability and safety of robotic systems. In turn, this has enabled many companies to improve their operational processes and automate complex routine tasks ranging from inventory management to component manufacturing. As a result, institutions have managed to reduce human errors in their work chains and significantly increase their productivity .

In addition, it has led the Digital Transformation of numerous entities that needed to increase their competitiveness in the market and ensure their long-term sustainability in the market. Consequently, it has integrated emerging technological tools such as Artificial Intelligence, Machine Learning, Big Data, Internet of Things or Blockchain. Thanks to this, organizations have used predictive analytics systems to anticipate both trends and needs, something fundamental to adapt to a constantly changing business environment. This has also contributed to optimize informed strategic decision making, based on large volumes of data and even patterns.

In addition, its ability to manage initiatives with interdisciplinary groups has been essential to boost collaboration between different corporate departments. As a result, he has fostered an institutional culture based on innovation, excellence and continuous improvement. Undoubtedly, this has given businesses a substantial competitive advantage.

Mr. Hassan, Showkot

- Director of Omron Robotics and Safety Technologies in Illinois, United States
- Program Manager at Seminet, San Jose, San Jose
- Systems Analyst at Corporación Miriam INC, Lima
- Software Engineer at Huawei, Shenzhen
- M.S. in Engineering Technology at Purdue University
- Master in Business Administration with specialization in Project Management from the
- Bachelor's Degree in Computer Science and Engineering from Shahjalal University of Science and Technology

Thanks to TECH, you will be able to learn with the best professionals in the world"

Management

Dr. López Campos, José Ángel

- Specialist in design and numerical simulation of mechanical systems
- Calculation Engineer at ITERA TÉCNICA S.L
- PhD in Industrial Engineering from the University of Vigo
- Master's Degree in Automotive Engineering from the University of Vigo
- Master's Degree in Competition Vehicle Engineering, Antonio de Nebrija University
- Postgraduate Diploma FEM from the Polytechnic University of Madrid
- Degree in Mechanical Engineering from the University of Vigo

Professors

Mr. Agudo del Río, David

- Mechanical, Energy and Sustainability Specialist
- Simulation Engineer at CTAG-IDIADA Safety Technology
- Simulation Engineer at Makross Simulation and Testing
- Industrial Technical Engineer at Centro Tecnológico del Granito
- Researcher at the University of Vigo
- Degree in Mechanical Engineering at the Catholic University of Ávila
- Specialization in Industrial and Mechanical Engineering at the University of Vigo
- Master's Degree in Energy and Sustainability at the University of Vigo

04

Structure and Content

The syllabus has been designed to meet the most demanding requirements in the area of Mechatronic Systems Graphic Design. Therefore, a syllabus has been established that offers contents based on the latest programs to optimize the design of mechatronic systems. In addition, it delves into the operations of mechanical design and standardization of design tables. All this in a 100% online format and with the most advanced multimedia resources.

You will have access to a syllabus developed by prestigious experts in Mechatronic Systems Graphic Design, which guarantees a successful learning process"

Module 1. Mechatronic Systems Design

1.1. CAD in engineering
- 1.1.1. CAD in engineering
- 1.1.2. 3D Parametric Design
- 1.1.3. Types of software on the market
- 1.1.4. SolidWorks. Inventor

1 2. Work Environment
- 1.2.1. Work Environment
- 1.2.2. Menus
- 1.2.3. Visualization
- 1.2.4. Default settings of the working environment

1.3. Layout and work structure
- 1.3.1. 3D computer-assisted design
- 1.3.2. Parametric design methodology
- 1.3.3. Methodology for the design of assemblies of parts. Assemblies

1.4. Sketching
- 1.4.1. Basis of Sketch design
- 1.4.2. 2D Sketch Creation
- 1.4.3. Sketch editing tools
- 1.4.4. Sketch dimensioning and relations
- 1.4.5. 3D Sketch Creation

1.5. Mechanical design operations
- 1.5.1. Mechanical design methodology
- 1.5.2. Mechanical design operations
- 1.5.3. Other operations

1.6. Surfaces
- 1.6.1. Creating surfaces
- 1.6.2. Tools for creating surfaces
- 1.6.3. Tools for surface editing

1.7. Assemblies
- 1.7.1. Creating Assemblies
- 1.7.2. Relationships of Position
- 1.7.3. Tools for creating Assemblies

1.8. Normalization and design tables. Variables
- 1.8.1. Component library. Toolbox
- 1.8.2. Online repositories/element manufacturers
- 1.8.3. Design tables

1.9. Folded sheet metal
- 1.9.1. Folded sheet metal module in CAD software
- 1.9.2. Sheet metal operations
- 1.9.3. Developments for sheet metal cutting

1.10. Generation of plans
- 1.10.1. Creation of Plans
- 1.10.2. Drawing Formats
- 1.10.3. Creation of views
- 1.10.4. Dimensioning
- 1.10.5. Annotations
- 1.10.6. Lists and tables

A program designed based on the latest trends and most advanced technologies. Enroll now!"

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

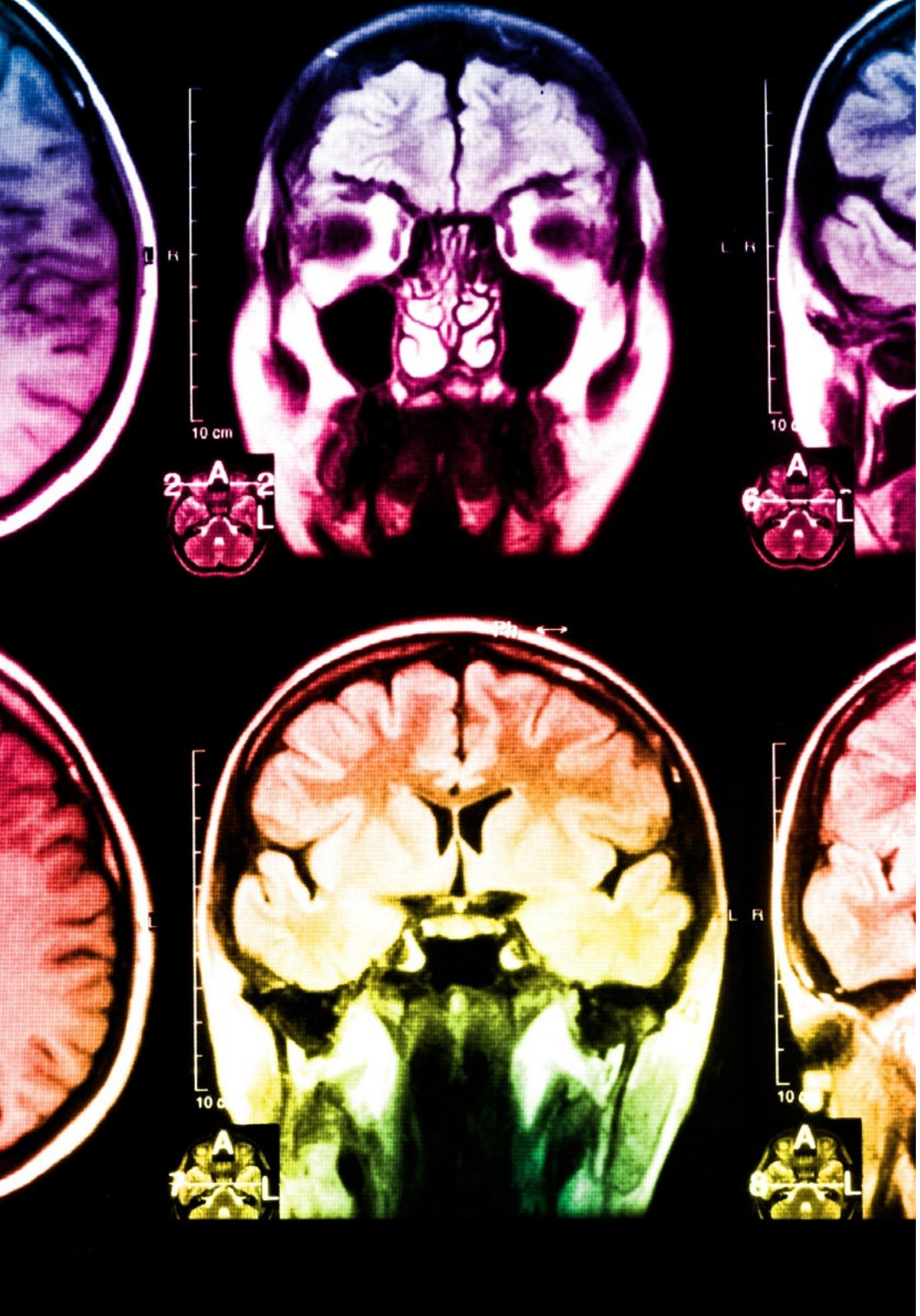
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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.

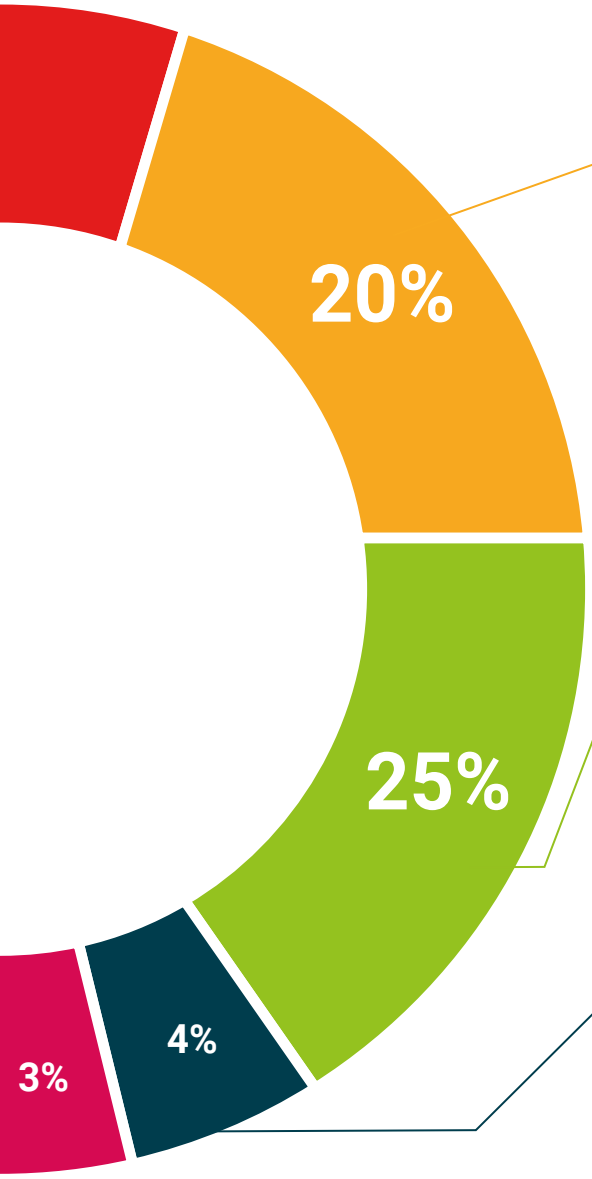
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

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 Mechatronic Systems Graphic Design 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 Mechatronic Systems Graphic 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 Certificate** issued by **TECH Technological University** via tracked delivery*.

The diploma 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 Mechatronic Systems Graphic Design**

Official Nº of Hours: **150 h.**


tech technological university

Awards the following

DIPLOMA

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Mechatronic Systems Graphic Design

This is a qualification awarded by this University, equivalent to 150 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

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 EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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