Postgraduate Certificate

User Interface Design and Programming

tech *technological university*

Postgraduate Certificate
User Interface Design and Programming

- » 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/user-interface-design-programming**

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01
Introduction

Website and application users are the final recipients of all the work that goes into programming and designing all aspects of an online service. For this reason, it important that end users can comfortably use the website and understand how all the elements provided operate. Thus, a good grounding in user interface design and programming is essential to be able to offer clients and companies the best solutions to attract users and make digital service elements understandable and usable.

Interfaces are the visible face of a digital service: do not neglect them and become an expert with this Postgraduate Certificate"

Although the importance of a good interface for an online service such as a website or an application is often ignored, it is one of the most significant factors in making that service a success. Without an aesthetically pleasing, clean, tidy and user-friendly interface, the user navigating through it will not stay long enough to use the different options offered, or will not understand how they work.

Hence, the need for experts who know how to apply customized and specific solutions for website interface design. The elements that make up an interface are often designed without taking into account the use that people, without advanced knowledge in computer science or engineering, will make of them. Specialists may know their code, but that code needs to be translated into simple and intuitive options for ordinary users.

Thus, this Postgraduate Certificate in User Interface Design and Programming not only covers everything necessary for excellent interface design and programming, but also emphasizes the importance of usability.

The syllabus of this Postgraduate Certificate is comprehensive and in-depth, and has a practical slant that will allow the professional to quickly apply their learning, making the transfer of knowledge fluid and not just theoretical.

This **Postgraduate Certificate in User Interface Design and Programming** contains the most complete and up-to-date program on the market. The most important features include:

- Specialized content, highlighting the importance of Interfaces on the Internet
- A practical program, guided by the best teachers
- Practical exercises where self-assessment can be carried out to improve learning
- Content that is accessible from any fixed or portable device with an Internet connection

Your clients will keep coming back to you once they discover your mastery of Interface Design"

"You wouldn't use a website with a poorly designed interface either; learn how to improve this feature and be your clients' favorite professional"

The best contents, applied to practical cases.

Learn to program and design interfaces and become a fully-fledged web developer.

The teaching staff includes professionals from the sector who contribute their professional 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 student will be assisted by an innovative interactive video system created by renowned and experienced experts.

02
Objectives

This program is focused on teaching students the tools and knowledge that will help them to design and program the best user interfaces, so that they will gain professional recognition from clients and employers.
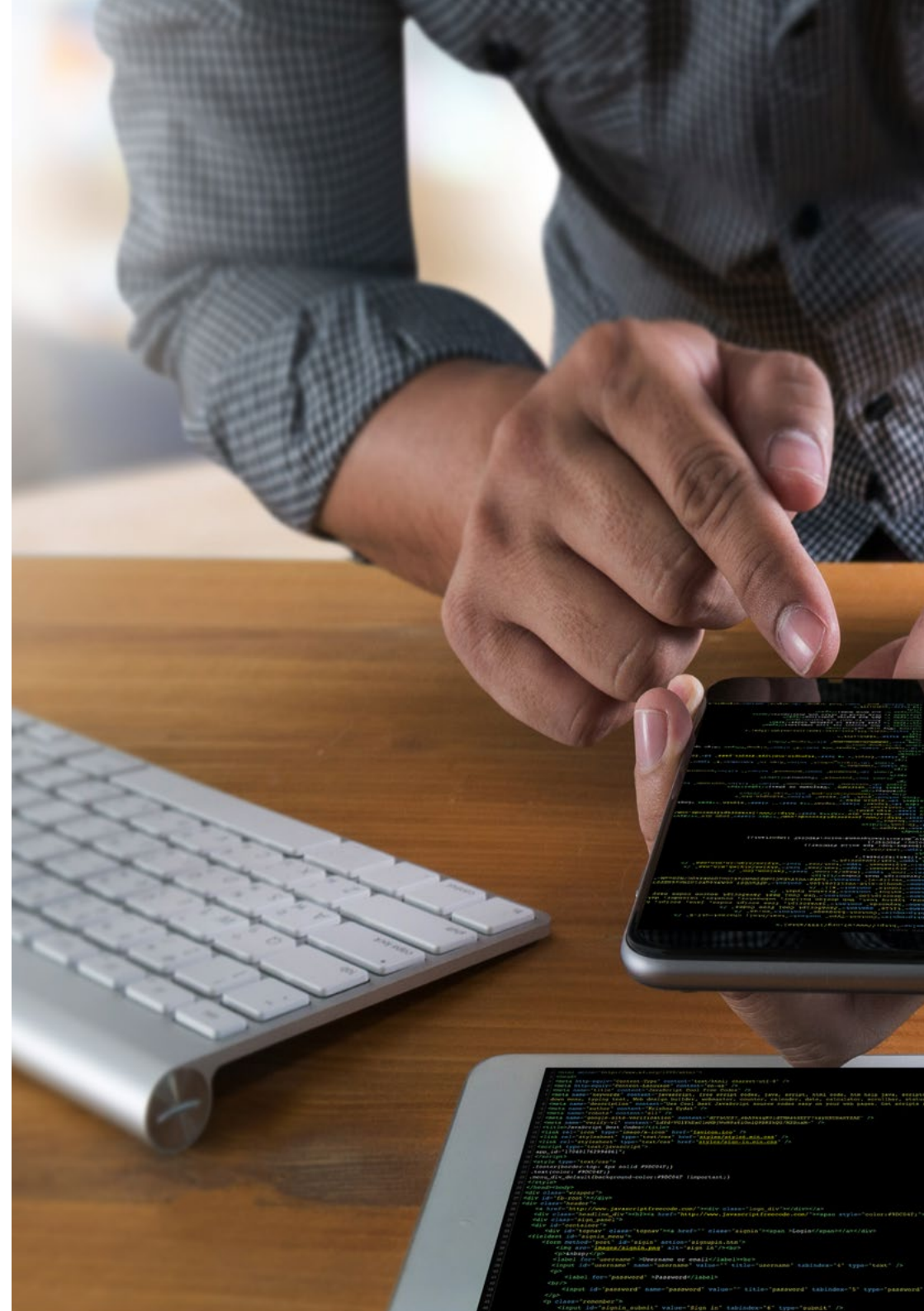
TECH knows you want to improve and cover more ground: this Postgraduate Certificate is the answer"

General Objectives

♦ Analyze the importance of user experience as an area that successfully encompasses technology, design and interaction

♦ Implement user experience design phases

♦ Apply the main research tools, methods and techniques to design user-centered digital experiences

♦ Create attractive, usable and accessible digital environments to offer satisfactory user experience

TECH helps you achieve your goals by offering you the best specialized teaching"

Specific Objectives

- Identify user needs and behavioral patterns on the web

- Interpret analytical data to make business decisions

- Apply different user-centric marketing methodologies and tools

- Identify and implement usability principles to design effective and efficient applications

- Consider potential user disabilities to provide an accessible environment

- Develop the different theories, principles and types of web design

- Detail the different prototyping methods

- Anticipate interface errors and learn how to react when they occur

- Organize and prioritize information on the web

- Offer an intuitive browsing experience to users

- Gain a vision of UX Writing beyond writing

- Establish the relationship between user experience and organic positioning (SEO)

- Determine the objectives and the process to develop style guides

03
Course Management

Leading teachers, with extensive professional experience in user interface design and development, provide students with the best tools and knowledge so that they can meet the challenges posed by the ever-changing and competitive environment of programming and, in particular, web programming.

Leading experts share their knowledge to help you achieve professional success"

Management

Mr. Gris Ramos, Alejandro

- Director of Persatrace, web development and digital marketing agency
- Director of Club de Talentos
- Computer Engineer UNED
- Master's Degree in Digital Teaching and Learning Tech Education
- Master's Degree in High Abilities and Inclusive Education
- Business Development Director at Alenda Golf
- Director of Web Applications Engineering Department at Brilogic
- Web programmer at Grupo Ibergest
- Software/web programmer at Reebok Spain

Professors

Mr. Méndez Martínez, Brandon

- Specialist in Web Services and Applications Development from the University of Alicante
- Web design and development - HIADIS Graduated in Multimedia Engineering, University of Alicante
- Natural Language Processing (NLP) - GPLSI (University of Alicante)
- Master's Degree in Web Services and Applications Development by the University of Alicante
- "Analysis of gamification techniques to learn complex subjects through collaborative applications" - Bulletin of the Technical Committee on Learning Technology

- "Grama: a web application for learning and generating creative language" - INTED Proceedings
- Research in Human Language Technologies (TLH) - GPLSI (University of Alicante)

Mr. Vicente Miralles, David

- (CSO) Head of Expansion Strategies at 'ICU Medical Technologies'
- (CEO) Executive Director / Co-Founder at 'CE Informática'
- Professor / Trainer in private entities
- Postgraduate Certificate in Technical Computer Engineering from Miguel Hernández University of Elche
- Development Engineer at 'Computer Elche' (COO)
- (COO) Operations Manager at 'VinoTrade'

Mr. Del Moral García, Francisco José

- Security Analyst at Page Group
- Degree in Telecommunication Technologies Engineering, University of Granada Specialism: Telecommunication Systems
- Master's Degree in IT Security, International University of La Rioja
- Roca Sanitario (Cyber Security Analyst)
- Allianz Technology (Information Security Analyst)
- Clover Technologies (IT Security Airbus Defense and Space)
- EVERIS (Solutions Assistant)

Mr. Boix Tremiño, Jorge

- Founder of HostingTG, professional web hosting services company
- Founder of GrupoTG, a digital marketing and web design services company
- Co-Founder of TiendaWebOnline, a Digital Dropshipping business creation company
- Nortempo, trainer in the field of programming and marketing strategies
- Intergon2000, Graphic designer
- Ibertex, Graphic designer
- Xion Animation, information technology project manager
- Kingest, Sales and marketing director
- Computer Engineer at UNED.
- Award for Business Excellence from the Institute for Professional Excellence
- European Medal of Merit in the Workplace for Professional Career Achievement from the European Association for Economics and Competitiveness
- Gold Star for Professional Excellence from the Institute for Professional Excellence

Mr. Alfaro, José

- Team Leader at DisneyLand Paris
- Journalism Graduate
- Course in Project Management Methodologies

Mr. Herrero García, Diego

- Computer Applications Analyst, Manager and Developer
- Industrial Technical Engineer, University of La Rioja
- Industrial Engineer, University of La Rioja
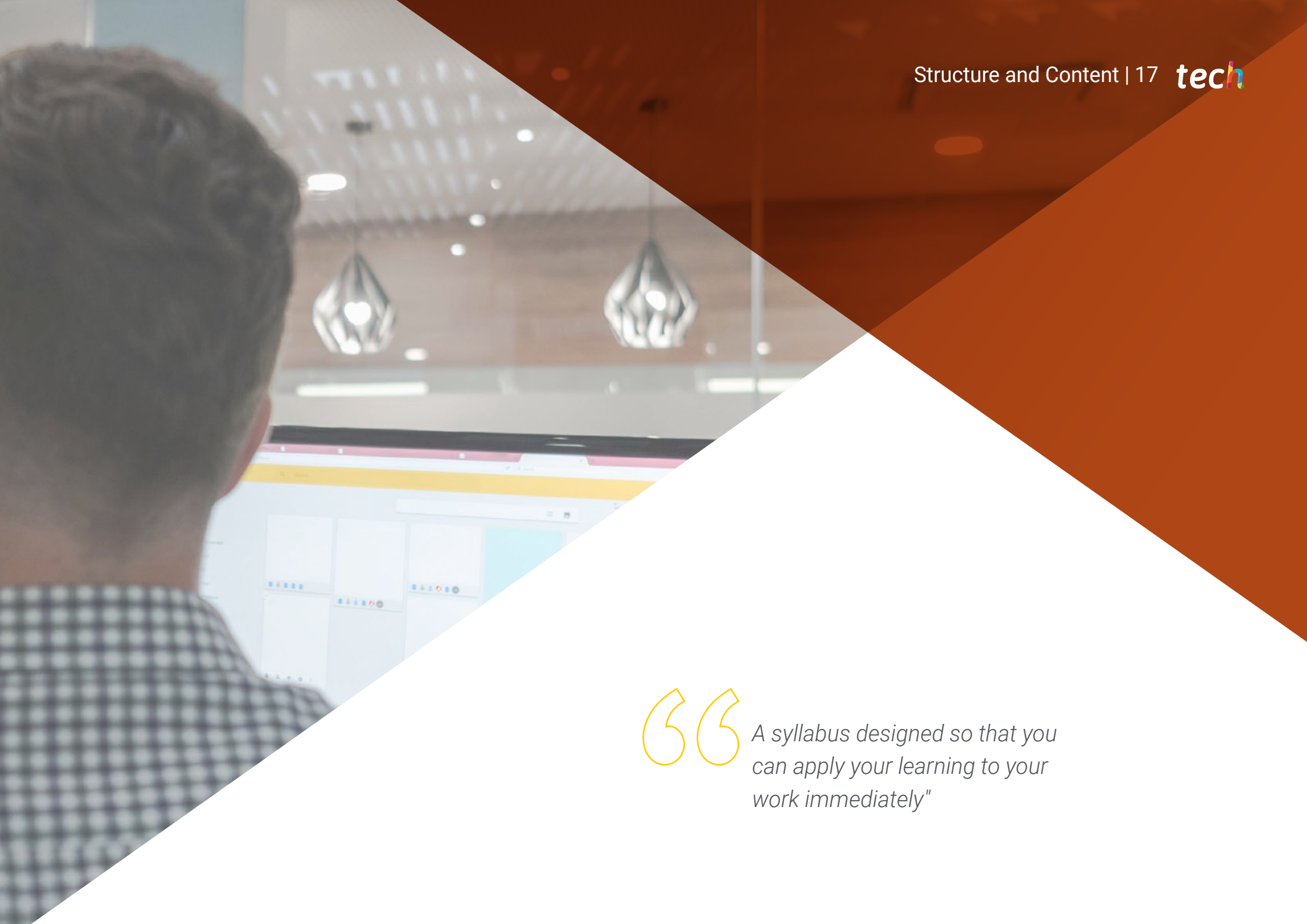- Postgraduate Diploma in Innovation Management, University of La Rioja

Take this opportunity to learn about the latest advances in this area in order to apply them to your daily practice"

04
Structure and Content

This program has been designed with practical application in mind, so that students can be confident that the knowledge acquired during this Postgraduate Certificate can be directly applied in their workplace. Furthermore, its structure, which goes from the general to the specific, helps to expand knowledge little by little until reaching very specific aspects of user interface design and programming.

" A syllabus designed so that you can apply your learning to your work immediately"

Module 1. User Interface Design and Programming

1.1.   User Experience
    1.1.1.   User Experience (UX)
    1.1.2.   Interface Design (UI)
    1.1.3.   Interaction Design (IxD)
    1.1.4.   Context and New Paradigms

1.2.   User Interface Design
    1.2.1.   Design and UX
    1.2.2.   Web Design Psychology
    1.2.3.   Design Thinking
    1.2.4.   Types of Web Design
        1.2.4.1. Fixed Design
        1.2.4.2. Elastic Design
        1.2.4.3. Liquid Design
        1.2.4.4. Responsive Design
        1.2.4.5. Flexible Design
    1.2.5.   Design System & Atomic Design

1.3.   UX or User Research
    1.3.1.   UX Research
    1.3.2.   Importance and Process
    1.3.3.   Research and Analysis
    1.3.4.   Heuristic Evaluation
    1.3.5.   Eye Tracking
    1.3.6.   Test A/B
    1.3.7.   Crazy Egg
    1.3.8.   Card Sorting
    1.3.9.   Customer Journey.
    1.3.10.   Other Techniques

1.4.   UX Writing
    1.4.1.   UX Writing
    1.4.2.   UX Writing vs. Copyrighting
    1.4.3.   Uses and Benefits
    1.4.4.   Microcopy
    1.4.5.   Web Structure

1.5.   Interaction Design and Web Prototyping
    1.5.1.   Prototyping Phase
    1.5.2.   Methods
        1.5.2.1. Sketches
        1.5.2.2. Wireframes
        1.5.2.3. Mockups
    1.5.3.   Browsing Flows
    1.5.4.   Interaction
    1.5.5.   Managing Online Tools

1.6.   Usability
    1.6.1.   Impact of Usability on User Experience
    1.6.2.   Metrics
    1.6.3.   Tests
        1.6.3.1. Internal Usability Test
        1.6.3.2. Unmoderated Remote Usability Testing
        1.6.3.3. Moderated Remote Usability Testing
    1.6.4.   Assessment Tools

1.7.   Accessibility
    1.7.1.   Web Accessibility
    1.7.2.   Beneficiaries
    1.7.3.   Disabilities
        1.7.3.1. Visual Impairment
        1.7.3.2. Hearing Impairment
        1.7.3.3. Motor Disability
        1.7.3.4. Speech Impairment
        1.7.3.5. Cognitive Impairment
    1.7.4.   Accessibility Guidelines
        1.7.4.1. WCAG 2.1 and Priorities
        1.7.4.2. Perceptible
        1.7.4.3. Operable
        1.7.4.4. Comprehensible
        1.7.4.5. Robust
    1.7.5.   Validation Tools and Techniques

Thanks to this program, users will not want to leave the websites you design"

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.

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.

06
Certificate

The Postgraduate Certificate in User Interface Design and Programming 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 Postgraduate Certificate without having to travel or fill out laborious paperwork"*

This **Postgraduate Certificate in User Interface Design and Programming** 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 User Interface Design and Programming**

Official N° 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

User Interface Design and Programming

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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