Postgraduate Certificate
Human-Computer Interaction

tech technological university

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Postgraduate Certificate

Human-Computer Interaction

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

Website: www.techtitute.com/in/information-technology/postgraduate-certificate/human-computer-interaction

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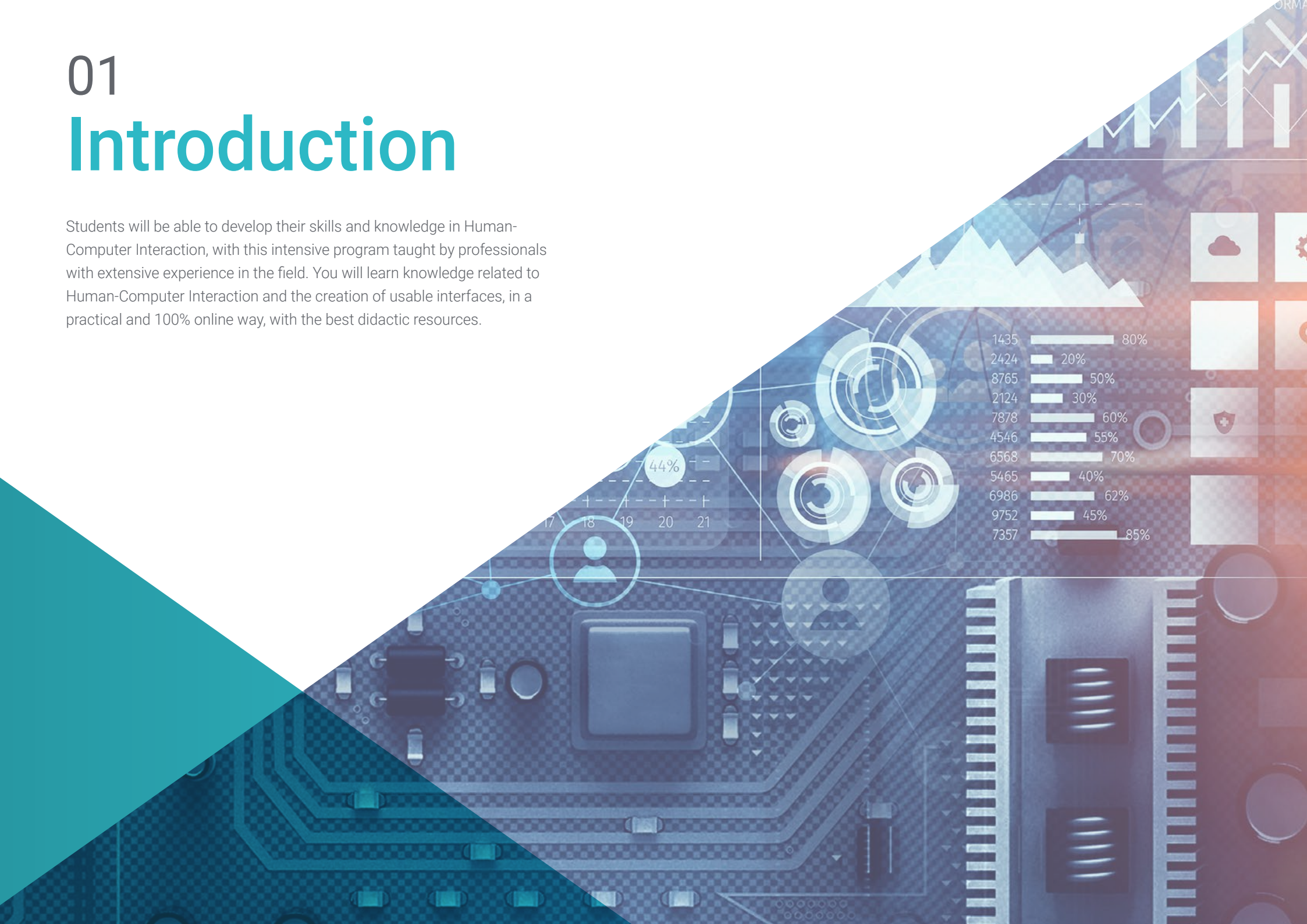
01

Introduction

Students will be able to develop their skills and knowledge in Human-Computer Interaction, with this intensive program taught by professionals with extensive experience in the field. You will learn knowledge related to Human-Computer Interaction and the creation of usable interfaces, in a practical and 100% online way, with the best didactic resources.



This Postgraduate Certificate will allow you to update your knowledge in Human-Computer Interaction in a practical way, 100% online, without renouncing to the maximum educational rigor"

This program is aimed at those interested in attaining a higher level of knowledge Human-Computer interaction. The main objective is for students to specialize their knowledge in simulated work environments and conditions in a rigorous and realistic manner so they can later apply it in the real world.

This program will prepare scientifically and technologically, as well as to develop the professional practice of software engineering, with a transversal and versatile approach adapted to the new technologies and innovations in this field. Students will gain extensive knowledge of Human-Computer Interaction from professionals in the field.

The students will be able to take the opportunity and study this program in a 100% online format, without neglecting their obligations.

This program will enhance skills and update knowledge in Human-Computer Interaction"

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

- Development of 100 simulated scenarios presented by experts in Human-Computer Interaction
- Its graphic, schematic and practical contents, with which they are conceived gather scientific and practical information on Human-Computer Interaction
- News on the latest developments in Human-Computer Interaction
- It contains practical exercises where the self-assessment process can be carried out to improve learning
- Interactive learning system based on the case method and its application to real practice
- All of this will be complemented by 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

Human-Computer Interaccion with this intensive program, from the comfort of your home"

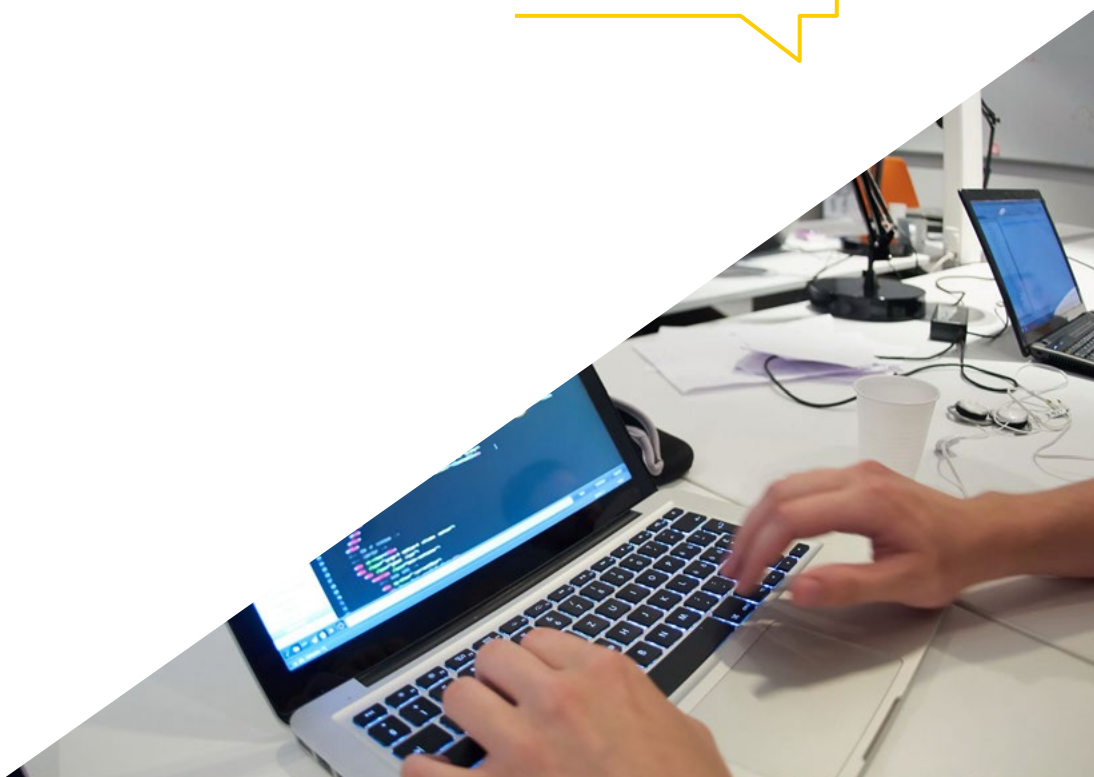
Take advantage of the latest educational technology to update on Human-Computer Interaction in the comfort of your home.

Learn about the latest techniques in Human-Computer Interaction from experts in the field.

It includes in its teaching staff professionals belonging to the field of IT engineering, who bring to this education their work experience, in addition to recognized specialists belonging to reference societies and prestigious universities.

Thanks to its multimedia content developed with the latest educational technology, this Postgraduate Certificate will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the teacher must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professionals will be assisted by an innovative interactive video system created by recognized experts in Human-Computer Interaction with extensive teaching experience.



02

Objectives

The objective of this program is to provide IT professionals with the knowledge and skills necessary to carry out their activity using the most advanced protocols and techniques of the moment. Through a work approach that is totally adaptable to the student, this Postgraduate Certificate will progressively lead the students to acquire the skills that will propel them to a upper professional level.

Achieve the level of knowledge you desire and master the fundamental concepts in Human-Computer Interaction with this high-level educational program"

General Objectives

- Prepare scientifically and technologically, as well as to develop the professional practice of software engineering, with a transversal and versatile approach adapted to the new technologies and innovations in this field
- Obtain wide knowledge in the field of computer engineering, structure of computers and in Human-Computer Interaction including the mathematical, statistical and physical basis which is essential in engineering

Enroll in the best Postgraduate Certificate in Human-Computer Interaction on the current university escenario"

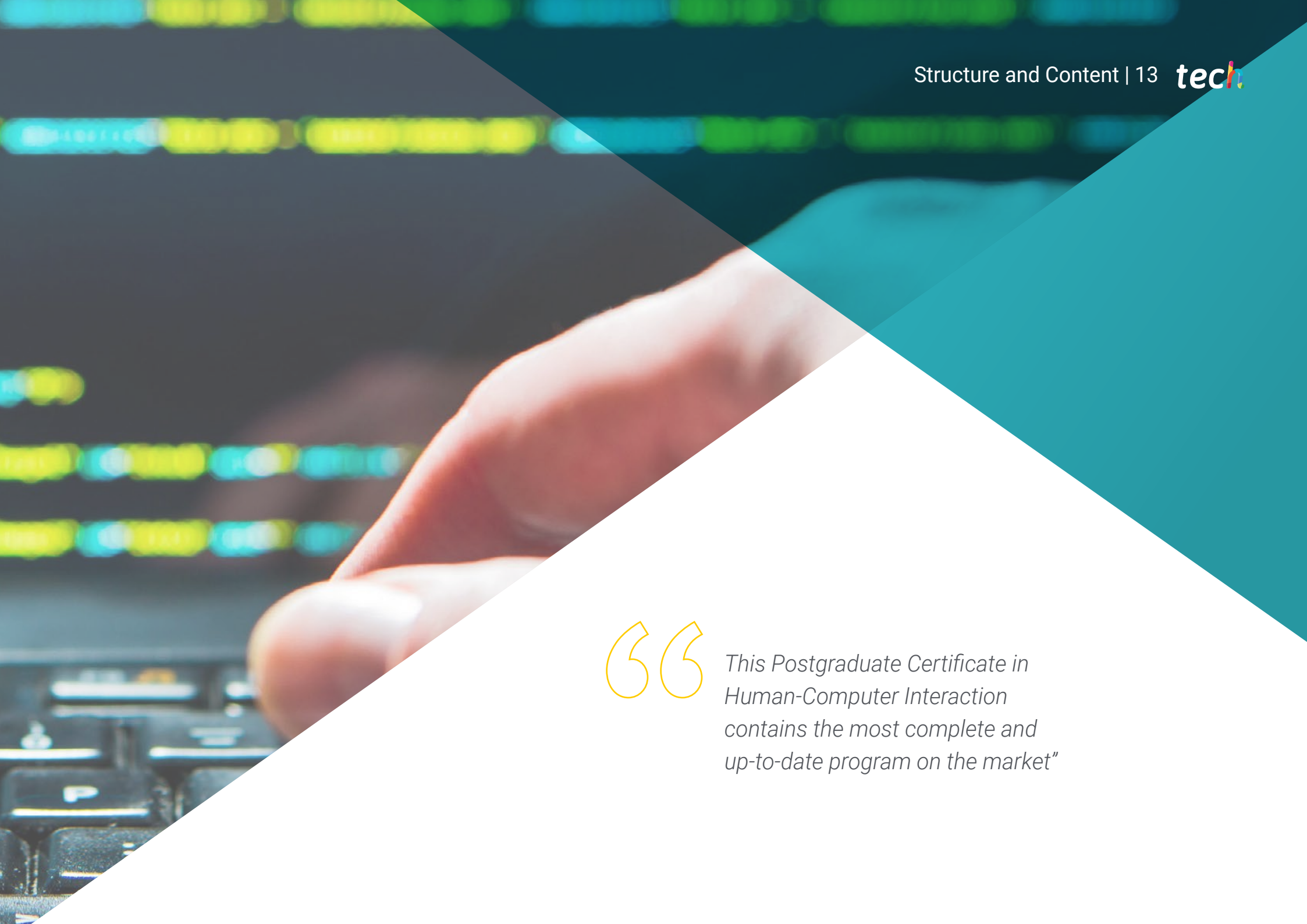
Specific Objectives

- Acquire solid knowledge related to human-computer interaction and the creation of usable interfaces
- Understand the importance of application usability and why it is important to take it into account when designing our software
- Understand the different types of human diversity, the limitations they imply and how to adapt the interfaces according to the specific needs of each one of them
- Learn the process of interface design, from requirements analysis to evaluation, going through the different intermediate stages necessary to carry out an adequate interface
- Know the different accessibility guidelines, the standards that establish them and the tools that allow to evaluate them
- Understand the different methods of interaction with the computer, by means of peripherals and devices

03

Structure and Content

The structure of the contents has been designed by a team of IT Engineering professionals, aware of the relevance of current education to delve into this field of knowledge, in order to humanistically enrich the student and raise the level of knowledge in Human-Computer Interaction through the latest educational technologies available.



This Postgraduate Certificate in Human-Computer Interaction contains the most complete and up-to-date program on the market"

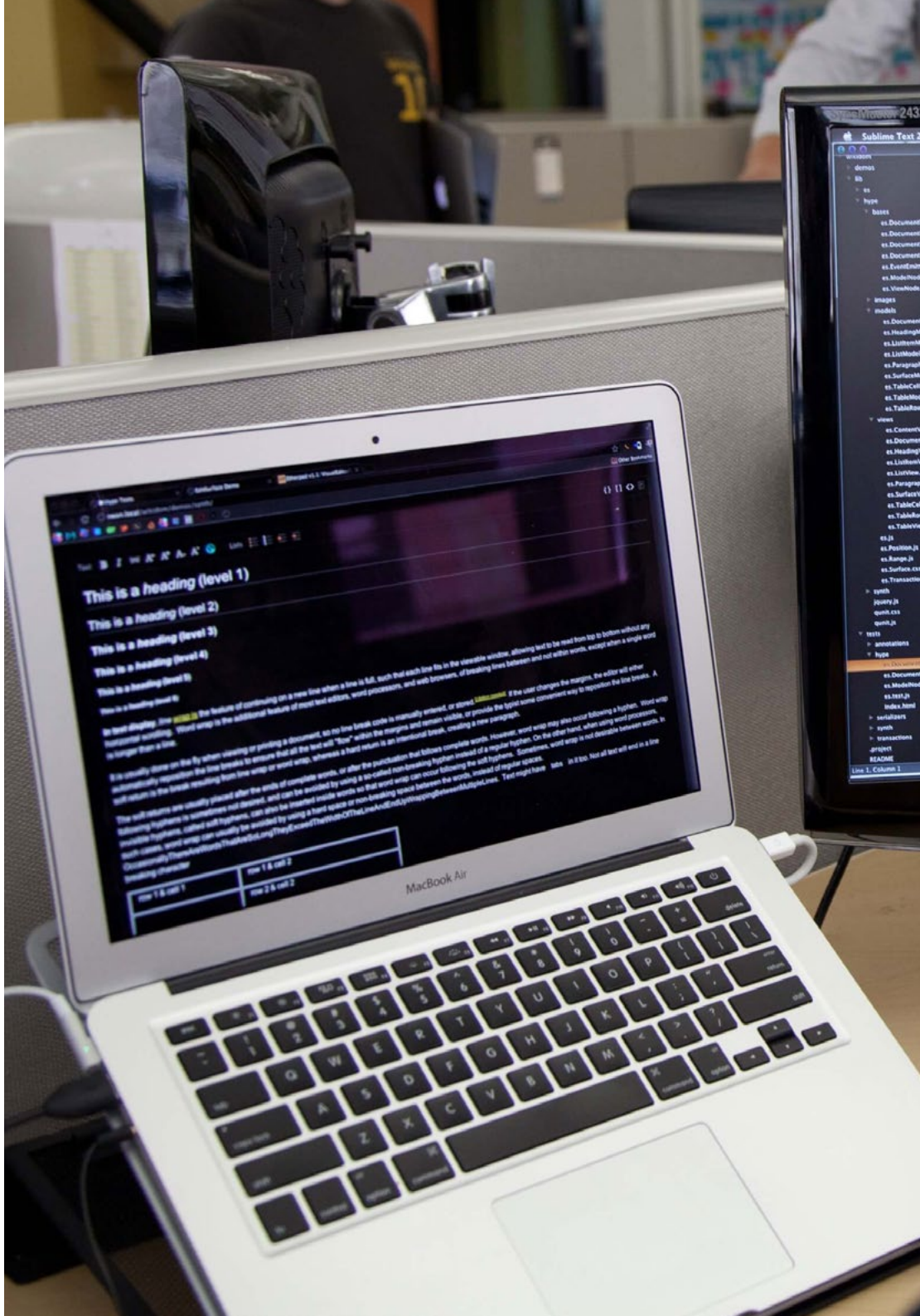
Module 1. Human-Computer Interaction

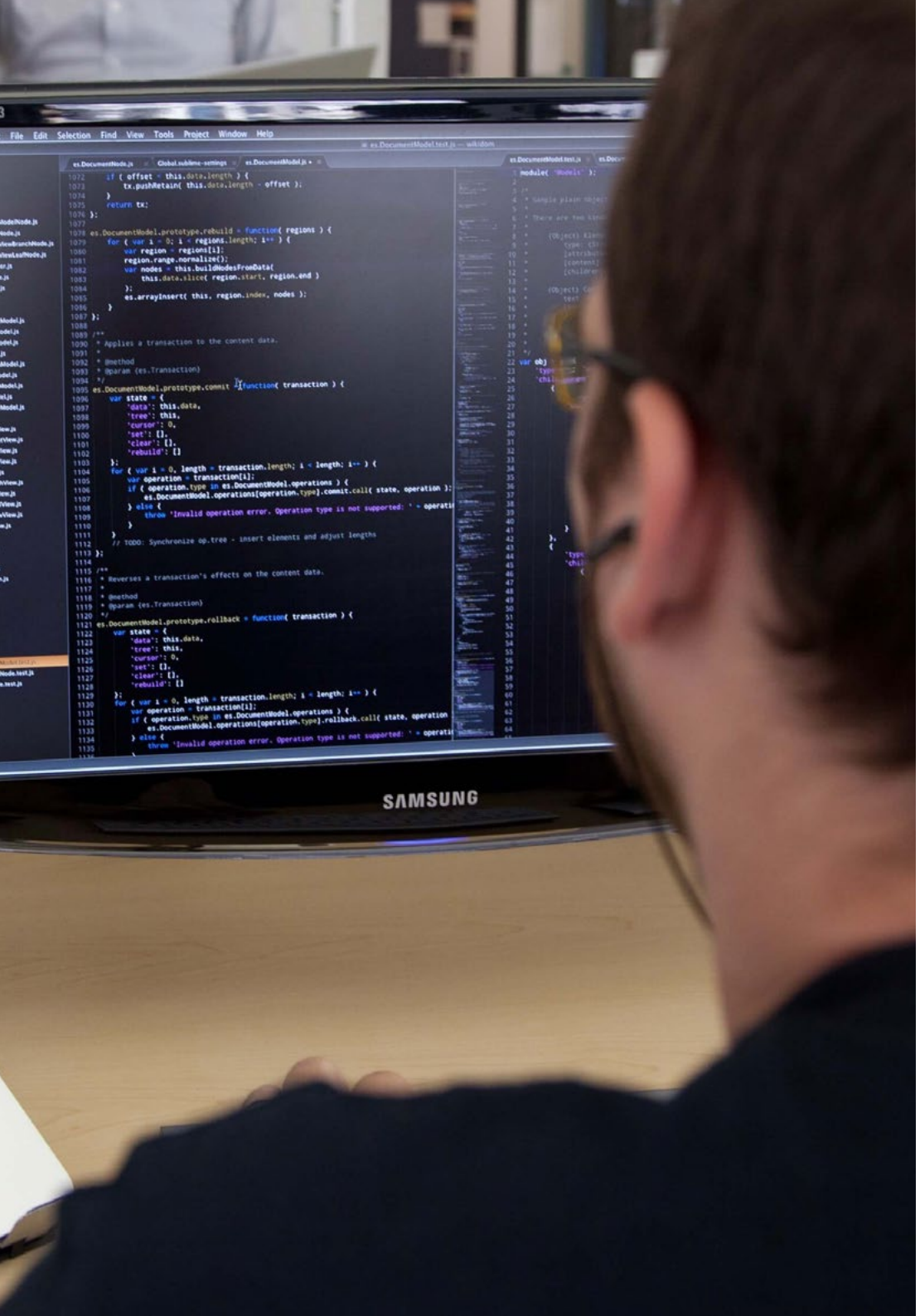
1.1. Introduction to Human-Computer Interaction
- 1.1.1. What is Human-Computer Interaction
- 1.1.2. Relationship of Human-Computer Interaction with Other Disciplines
- 1.1.3. The User Interface
- 1.1.4. Usability and Accessibility
- 1.1.5. User Experience and User-Centered Design

1.2. The Computer and Interaction: User Interface and Interaction Paradigms
- 1.2.1. Interaction
- 1.2.2. Paradigms and Styles of Interaction
- 1.2.3. Evolution of User Interfaces
- 1.2.4. Classic User Interfaces: WIMP/GUI, Commands, Voice, Virtual Reality.
- 1.2.5. Innovative User Interfaces: Mobile, Wearable, Collaborative, BCI

1.3. The Human Factor: Psychological and Cognitive Aspects
- 1.3.1. The Importance of the Human Factor in Interaction
- 1.3.2. Human Information Processing
- 1.3.3. The Input and Output of Information: Visual, Auditory, and Tactile
- 1.3.4. Perception and Attention
- 1.3.5. Knowledge and Mental Models: Representation, Organization, and Acquisition

1.4. The Human Factor: Sensory and Physical Limitations
- 1.4.1. Functional Diversity, Disability and Impairment
- 1.4.2. Visual Diversity
- 1.4.3. Hearing Diversity
- 1.4.4. Cognitive Diversity
- 1.4.5. Motor Diversity
- 1.4.6. The Case of Digital Immigrants





1.5. The Design Process (I): Requirements Analysis for User Interface Design
  1.5.1. User-Centered Design
  1.5.2. What is Requirements Analysis?
  1.5.3. Information Gathering
  1.5.4. Analysis and Interpretation of the Information
  1.5.5. Usability and Accessibility Analysis
1.6. The Design Process (II): Prototyping and Task Analysis
  1.6.1. Conceptual Design
  1.6.2. Prototyping
  1.6.3. Hierarchical Task Analysis
1.7. The Design Process (III): Evaluation
  1.7.1. Evaluation in the Design Process: Objectives and Methods
  1.7.2. Evaluation Methods Without Users
  1.7.3. Evaluation Methods with Users
  1.7.4. Evaluation Standards and Norms
1.8. Accessibility: Definition and Guidelines
  1.8.1. Accessibility and Universal Design
  1.8.2. The WAI Initiative and the WCAG Guidelines
  1.8.3. WCAG 2.0. and 2.1. Guidelines
1.9. Accessibility: Evaluation and Functional Diversity
  1.9.1. Web Accessibility Evaluation Tools
  1.9.2. Accessibility and Functional Diversity
1.10. The Computer and Interaction: Peripherals and Devices
  1.10.1. Traditional Devices and Peripherals
  1.10.2. Alternative Devices and Peripherals
  1.10.3. Cell Phones and Tablets
  1.10.4. Functional Diversity, Interaction and Peripherals

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 has been the most widely used learning system among the world's leading Information Technology schools for as long as they have existed. 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 course, students 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

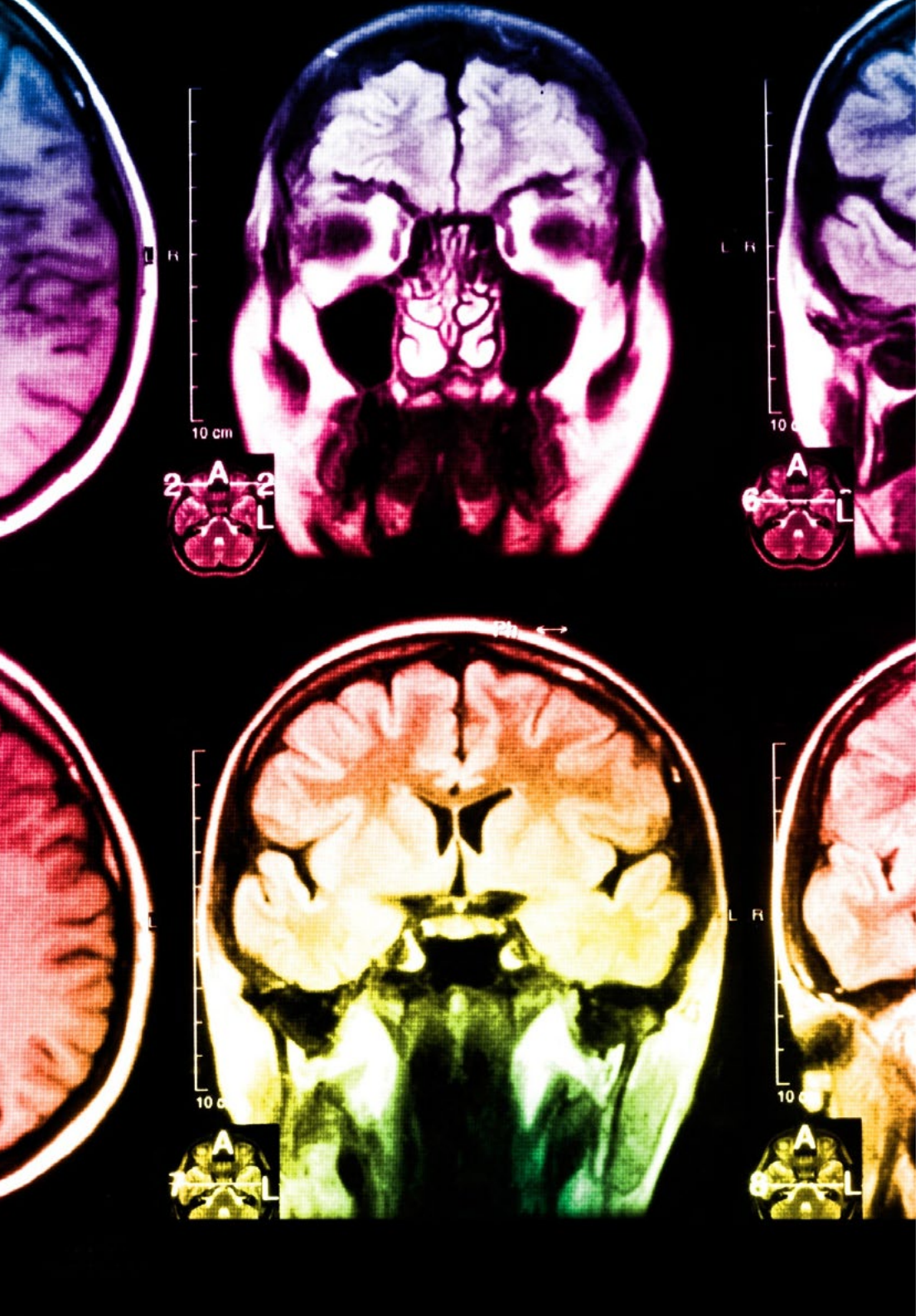
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

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.

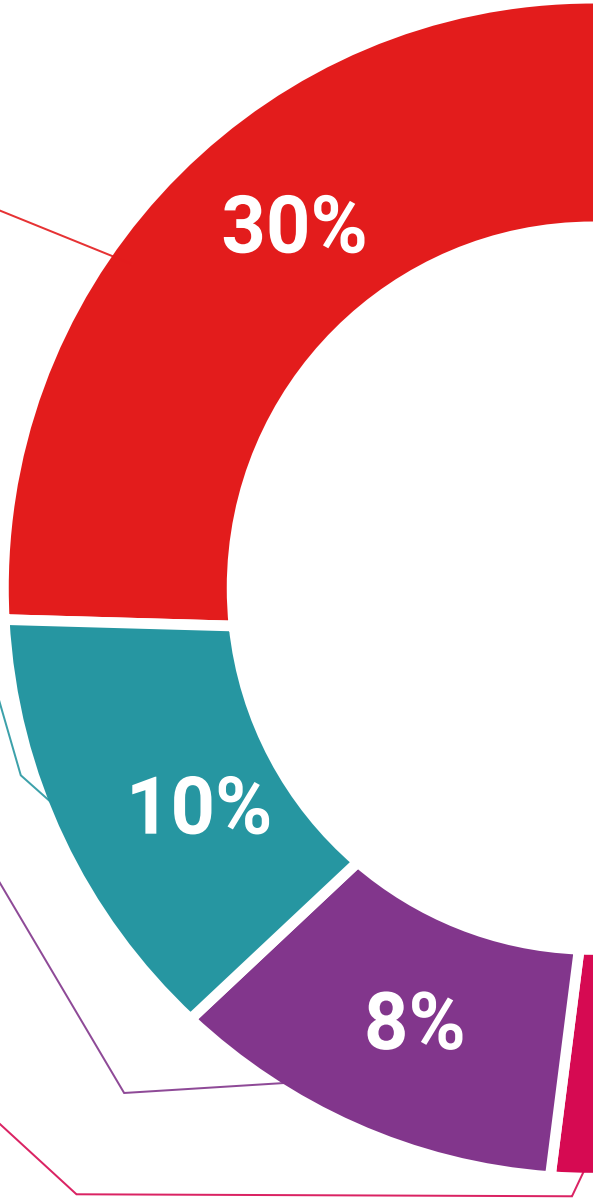
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

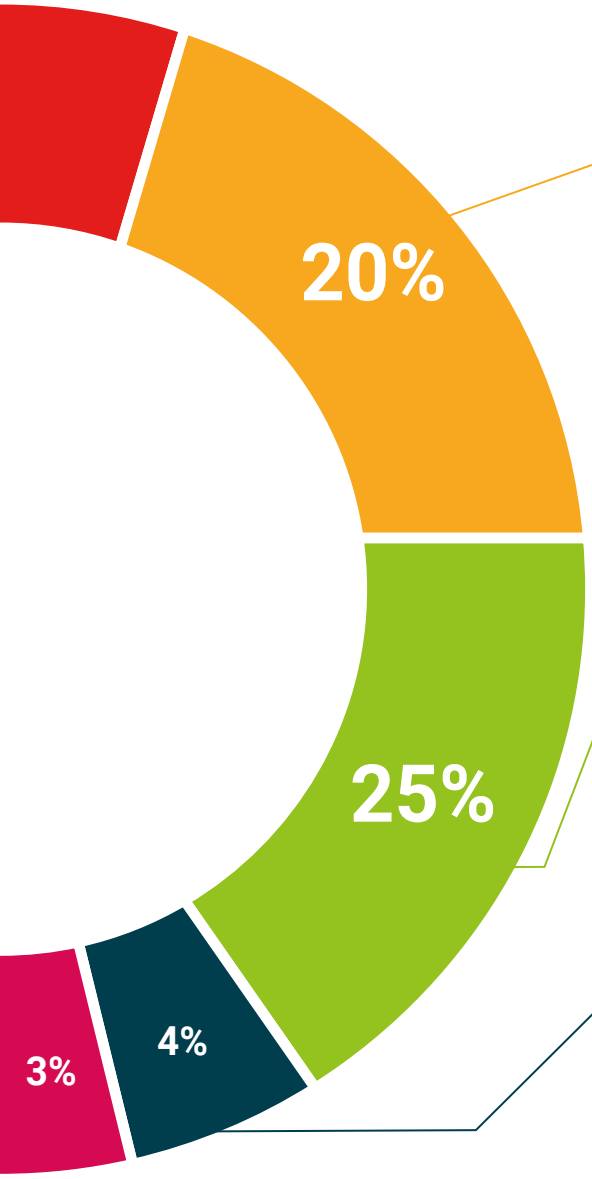
Practising Skills and Abilities

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.

05

Certificate

The Postgraduate Certificate in Human-Computer Interaction 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 Human-Computer Interaction** 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 Human-Computer Interaction**

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

Human-Computer Interaction

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

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.

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