Postgraduate Certificate
Software Documentation

tech technological university

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Postgraduate Certificate

Software Documentation

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

Website: www.techtitute.com/us/information-technology/postgraduate-certificate/software-documentation

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01

Introduction

Software project management requires an in-depth understanding of the different phases into which it is broken down and knowledge of how to choose the appropriate methodology to be used for its correct performance and sustainability over time. At the same time, the professional requires tools that provide practicality and agility in the processes, but always maintaining high quality standards. To facilitate this process, we have created a program dedicated exclusively to generating the right criteria in terms of software documentation, where the professional will acquire all the skills to develop successfully, through the study of exclusive content, 100% online, and guided by experts who will support throughout the learning process.

Acquire the skills you need for quality software development and become qualified in just 6 weeks, 100% online"

Understanding the phases of software project development is essential when it comes to managing processes that provide quality responses to the end user. Similarly, knowing the methodologies to be implemented, understanding the importance of reducing risks and their behavior with the rest of the existing applications, will allow the professional to obtain favorable results in all his performance.

In order to delve deeper into these specific topics, TECH Technological University has designed this Postgraduate Certificate in Software Documentation, where the student will obtain specialized knowledge on the management of a project, focused on the exhaustive analysis of the different phases within it and determine the necessary functional and technical documentation required in each phase of the project.

This is how the professional will be able to efficiently develop the project, from the first phase in which the requirements to be met are identified, through the analysis phase and everything that is included in it, to the construction phase where the technical documentation to be provided, automation and preparation of the data model are estimated.

All this framed in an online format study system, which will provide students with the flexibility they need to adapt the knowledge acquired to their current performance. With the guidance of professional experts in the field of software development, who have carefully selected all the content and made it available to the student through different multimedia resources, based on the most innovative methodology: Relearning.

This **Postgraduate Certificate in Software Documentation** contains the most complete and up-to-date program on the market. Its most notable features are:

- Case studies presented by experts in software development
- 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
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions for experts and individual reflection work
- Content that is accessible from any fixed or portable device with an Internet connection

TECH Technological University provides you with the best content on Project Management and Software Documentation. Enroll now and qualify in 6 weeks"

Mastering each of the phases within the development of a software will make you obtain efficient results. Professionalize yourself with this Postgraduate Certificate"

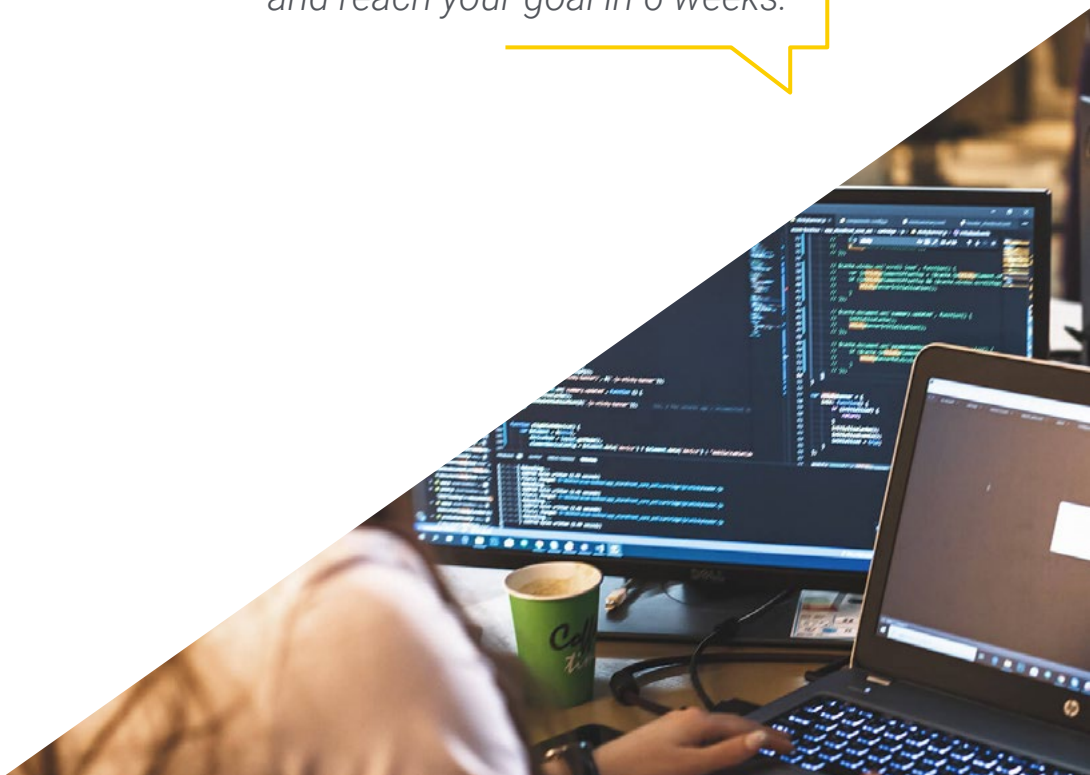
Learn how to identify the documents to be delivered and the content of each of them in the project management process.

TECH offers you the most modern virtual campus so that you can graduate in a comfortable and agile way. Enroll now and reach your goal in 6 weeks.

The program's teaching staff includes professionals from the sector who contribute their work experience to this training 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 training programmed to train 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

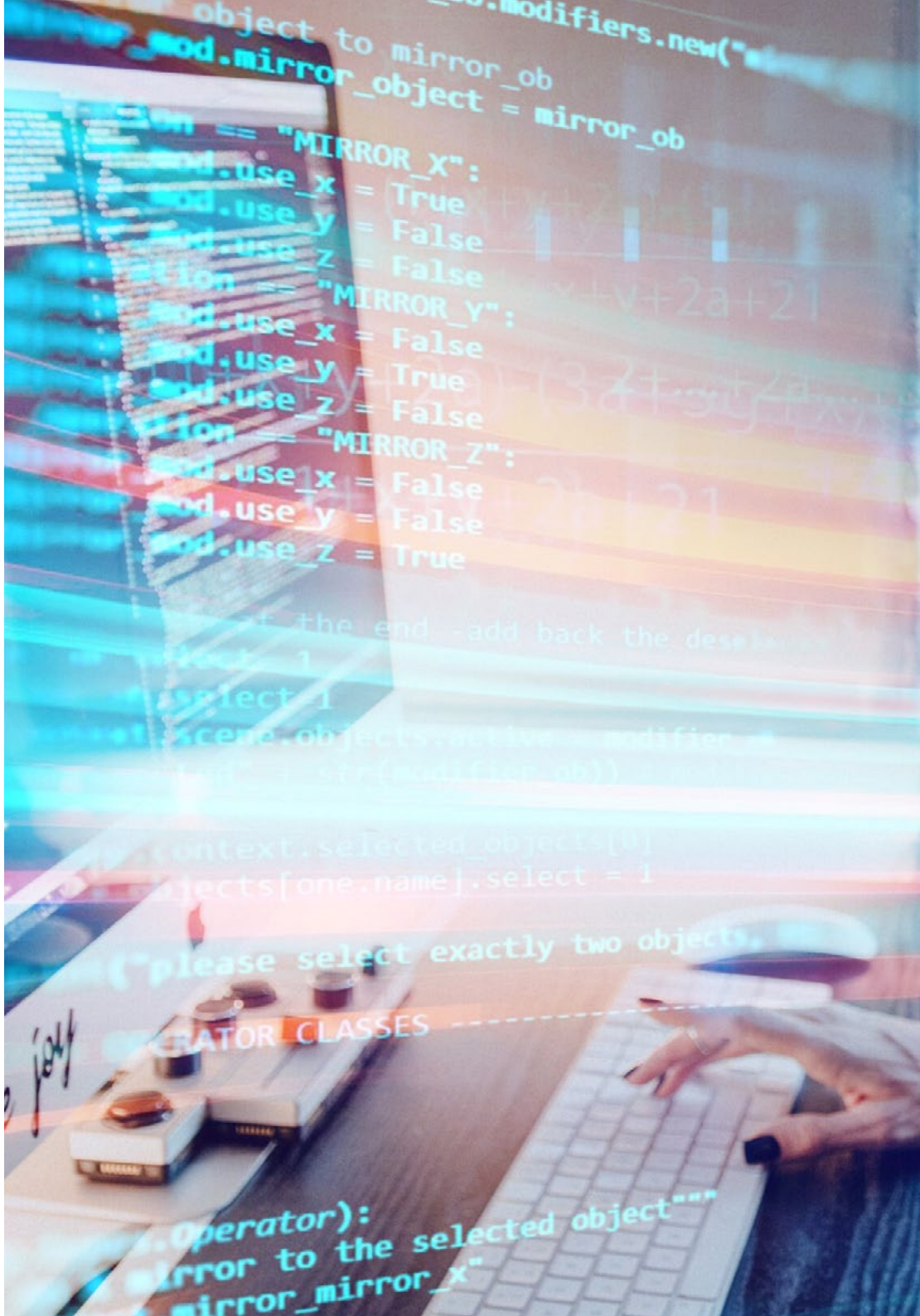
Objectives

The main objective of this program is for the professional to develop the ability to efficiently manage a project, taking into account all the phases into which it is broken down and its importance within the software quality management process. Understanding the methodologies to be implemented in each case, thanks to a specialized study of a syllabus chosen by experts in the development of IT solutions and software, who will accompany the student throughout the process. As a result, a better position in the work environment or market can be achieved.

Focus on learning everything you need to advance your career"

General Objectives

- Develop the criteria, tasks and advanced methodologies to understand the relevance of quality-oriented work
- Analyze the key factors in the quality of a software project
- Develop the relevant regulatory aspects
- Implement DevOps and systems processes for Quality Assurance
- Reduce the technical debt of projects with a quality approach rather than an approach based on economics and short deadlines
- Provide the student with specialized knowledge to be able to measure and quantify the quality of a software project
- Defend the economic proposals of projects on the basis of the Quality approach



Specific Objectives

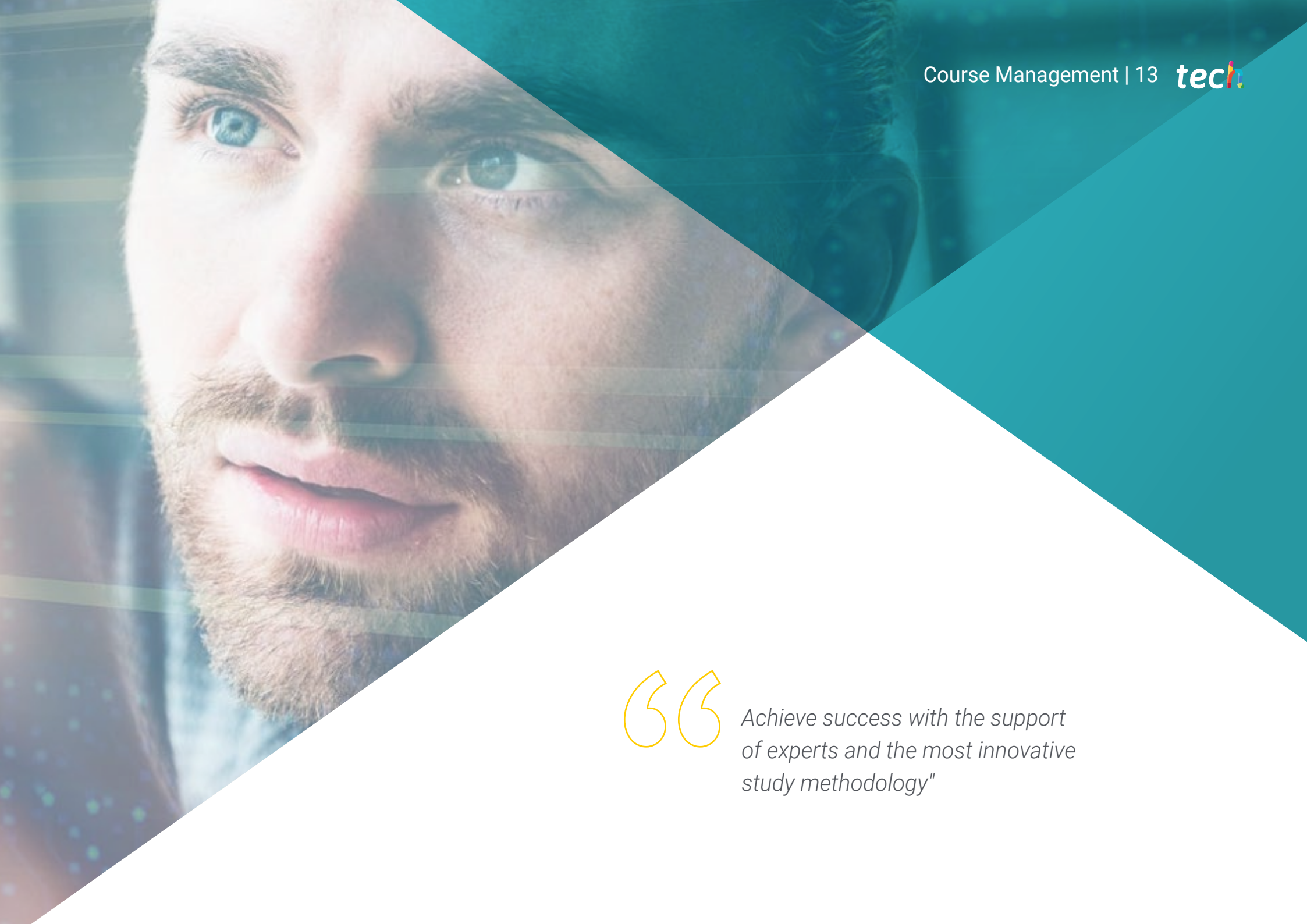
- Determine the influence of project management on quality
- Develop the different phases of a project
- Differentiate the quality concepts inherent to functional and technical documentation
- Analyze the requirements gathering phase, the analysis phase, team management and the construction phase
- Establish the different software project management methodologies
- Generate criteria to decide which is the most appropriate methodology according to the type of project

You will overcome all the phases in software project development, thanks to what you will learn in this Postgraduate Certificate"

03

Course Management

The team of professionals that make up the teaching staff and are in charge of this program have a high level of education in the development of IT solutions and software development and research, which provides an unquestionable level of quality to the teaching load. They will be in charge of providing the necessary tools and knowledge to the future graduate, following the most avant-garde methodology implemented by TECH.



Achieve success with the support of experts and the most innovative study methodology"

International Guest Director

With an extensive professional career of more than 30 years in the technology sector, Daniel St. John is a prestigious **Computer Engineer** highly specialized in **Software Quality.** In this same line, he has established himself as a true leader in this field due to his pragmatic approach based on continuous improvement and innovation.

Throughout his career, he has been part of international reference institutions such as **General Electric Healthcare** in Illinois. In this way, his work has focused on optimizing the **digital infrastructures** of organizations with the aim of significantly improving the **user experience**. Thanks to this, multiple patients have enjoyed more personalized and agile care, with faster access to both clinical results and health follow-ups. At the same time, it has implemented technological solutions that have enabled professionals to make more informed **strategic decisions** based on large volumes of data.

He has also balanced this work with the creation of cutting-edge technological projects to maximize the effectiveness of the institutions' operational processes. In this regard, he has led the **digital transformation** of numerous companies belonging to different industries. As such, he has implemented emerging tools such as **Artificial Intelligence, Big Data or Machine Learning** to automate complex daily tasks. As a result, these organizations have managed to adapt to market trends with immediacy and ensure their long-term sustainability.

It is worth noting that Daniel St. John has participated as a speaker at various scientific congresses on a global scale. In this way, he has shared his vast knowledge in areas such as the adoption of **Agile Methodologies, Application Testing** to ensure the reliability of systems or implementation of innovative **Blockchain** techniques that guarantee the protection of confidential data.

Mr. St. John, Daniel

- Director of Software Engineering at General Electric Healthcare of Wisconsin, United States
- Head of Software Engineering at Siemens Healthineers, Illinois
- Director of Software Engineering at Natus Medical Incorporated, Illinois
- Senior Software Engineer at WMS Gaming of Chicago
- Senior Software Engineer at Siemens Medical Solutions, Illinois
- M.S. in Data Strategy and Analytics from Lake Forest Graduate School of Management
  B.S. in Computer Science from the University of Wisconsin-Parkside
- Illinois Institute of Technology Advisory Board Member
- Certifications in: Python for Data Science, Artificial Intelligence and Development, SAFe SCRUM, and Project Management.

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

Management

Mr. Molina Molina, Jerónimo

- AI Engineer & Software Architect. NASSAT - Internet Satellite in Motion
- Sr. Consultant at Hexa Ingenieros. Introducer of Artificial Intelligence (ML and CV)
- Expert in artificial intelligence based solutions in the fields of Computer Vision, ML/DL and NLP. Currently investigating application possibilities of Transformers and Reinforcement Learning in a personal research project
- University Expert in Business Creation and Development. Bancaixa – FUNDEUN Alicante
- Computer Engineer. University of Alicante
- Master in Artificial Intelligence. Catholic University of Avila
- Executive MBA. European Business Campus Forum

Professors

Mr. Pi Morell, Oriol

- Hosting and Mail Product Owner. CDMON
- Functional Analyst and Software Engineer in different organizations such as Fihoca, Atmira, CapGemini
- Teacher of different courses such as BPM in CapGemini, ORACLE Forms CapGemini, Business Processes Atmira
- Degree in Technical Engineering in Computer Management from the Autonomous University of Madrid
- Master's Degree in Artificial Intelligence
- Master's Degree in Business Administration MBA
- Master's Degree in Information Systems Management Teaching Experience
- Postgraduate, Postgraduate Design Patterns. Open University of Catalonia

mirror_mod.use_y = True
mirror_mod.use_z = False
elif operation == "MIRROR_Z":
mirror_mod.use_x = False
mirror_mod.use_y = False
mirror_mod.use_z = True
#selection at the end -add back the deselected mirror modifier object
mirror_ob.select= 1
modifier_ob.select=1
bpy.context.scene.objects.active = modifier_ob
print("Selected" + str(modifier_ob)) # modifier ob is the active ob
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

04

Structure and Content

The methodology implemented by TECH Technological University, which is 100% online, allows the diversity of audiovisual content and other formats, which generate in the student a dynamic learning process, based on new models and with quality content. The professional is guaranteed a progressive and natural education in the most important terms and concepts related to Software Documentation, with real examples provided by the teaching team. This translates into a first-class academic program, one that is rigorous, exhaustive and adapted to the current reality of IT.

Knowing the most specific content on Software Documentation will provide a unique background to your professional profile"

Module 1. Software Project Development. Functional and Technical Documentation

1.1 Project Management
- 1.1.1. Project Management in Software Quality
- 1.1.2. Project Management Advantages
- 1.1.3. Project Management Typology

1.2. Methodology in Project Management
- 1.2.1. Methodology in Project Management
- 1.2.2. Project Methodologies. Typology
- 1.2.3. Methodologies in Project Management. Application

1.3. Requirements Identification Phase
- 1.3.1. Identification of Project Requirements
- 1.3.2. Management of Project Meetings
- 1.3.3. Documentation to Be Provided

1.4. Models
- 1.4.1. Initial Phase
- 1.4.2. Analysis Phase
- 1.4.3. Construction Phase
- 1.4.4. Testing Phase
- 1.4.5. Delivery

1.5. Data Model to Be Used
- 1.5.1. Determination of the New Data Model
- 1.5.2. Identification of the Data Migration Plan
- 1.5.3. Data Set

1.6. Impact on Other Projects
- 1.6.1. Impact of a Project. Examples
- 1.6.2. Risk in the Project
- 1.6.3. Risk Management

1.7. Project MUST
- 1.7.1. Project MUST
- 1.7.2. Identification of Project MUST
- 1.7.3. Identification of the Execution Points for Project Delivery

1.8. The Project Construction Team
- 1.8.1. Roles to be Involved According to the Project
- 1.8.2. Contact with HR for Recruitment
- 1.8.3. Project Deliverables and Schedule

1.9. Technical Aspects of a Software Project
- 1.9.1. Project Architect. Technical Aspects
- 1.9.2. Technical Leaders
- 1.9.3. Construction of the Project Software
- 1.9.4. Code Quality Assessment, Sonar

1.10. Project Deliverables
- 1.10.1. Functional Analysis
- 1.10.2. Data Model
- 1.10.3. State Diagram
- 1.10.4. Technical Documentation

You are just a click from moving on to a new experience in your profession. Don't think twice and advance to the next level"

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 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

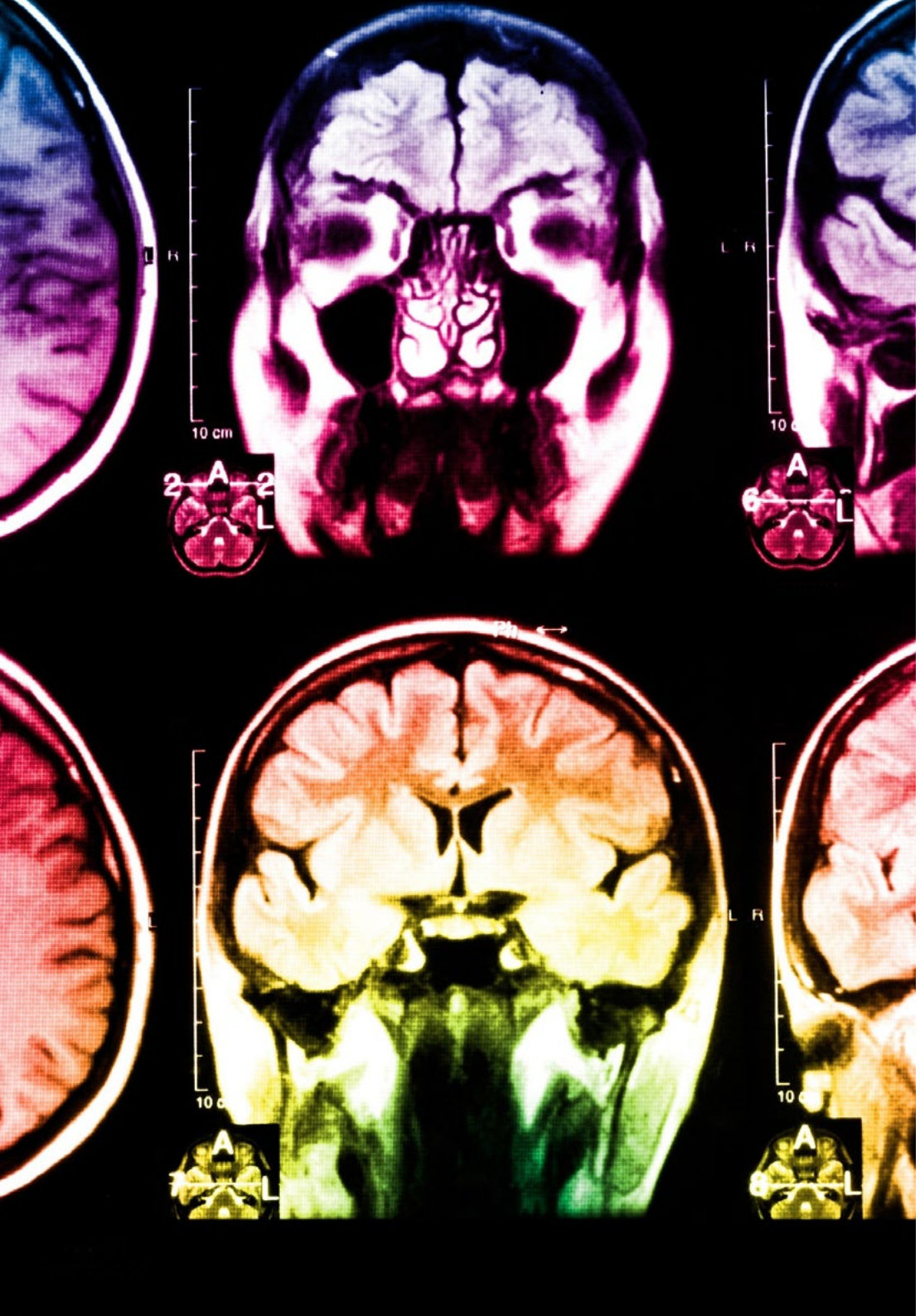
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

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.

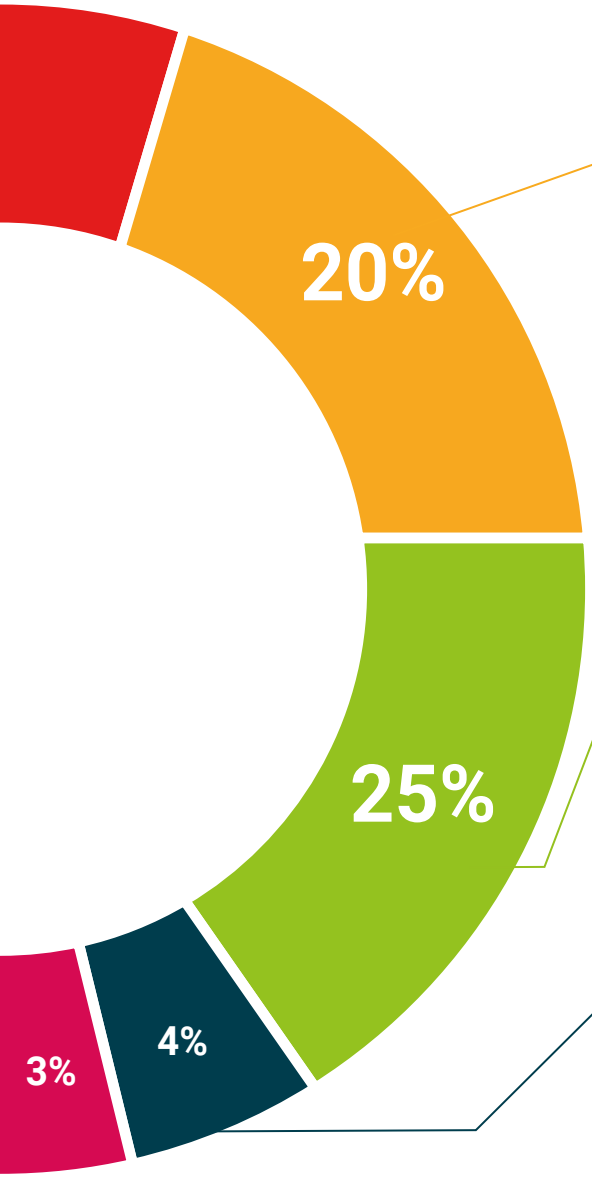
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

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.

06

Certificate

The Postgraduate Certificate in Software Documentation 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 Software Security** contains the most complete and up-to-date educational 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 Software Documentation**

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

Software Documentation

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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