Postgraduate Diploma Initiation and Management of Technology Projects



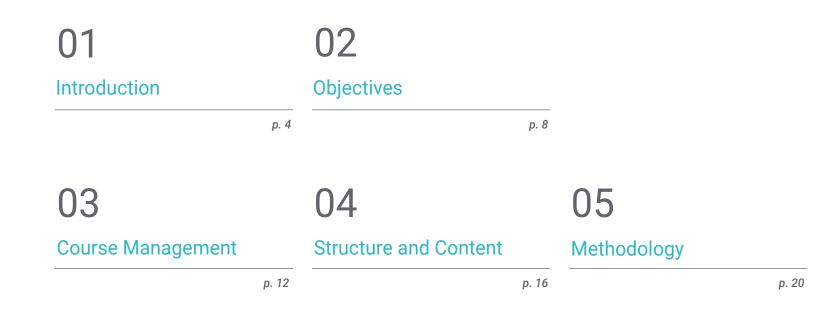


# **Postgraduate Diploma** Initiation and Management of Technology Projects

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

Website: www.techtitute.com/pk/information-technology/postgraduate-diploma/postgraduate-diploma-initiation-management-technology-projects

# Index



# 06 Certificate

# 01 Introduction

When an Information Technology (IT) team is asked to start developing a project that will improve a company's service or performance, many do not know where to begin. Undertaking tasks of this magnitude can be complex and the best way to achieve the expected results is through specialization. For this reason, this program has been designed to provide students with knowledge that is essential to develop their expertise in the area. They will learn to understand the regulations and good practices of project management, as well as to develop communication and active listening skills, which will turn them into empathetic professionals with persuasive skills.



# tech 06 | Introduction

In this Postgraduate Diploma, students will be able to develop a set of skills that are essential to manage a technology project. To do this, they should be aware of the different tasks that are assigned depending on their role in the team, starting with the position of the manager. They will also understand which regulations apply to this work, such as PRINCE2, which is a structured method that helps to divide the project into manageable phases, ensuring better control of the outcome.

On the other hand, the planning of Technology Projects must include all the indispensable processes to ensure its successful completion. For this purpose, "scope management" must be performed by means of some methodologies such as Scope Creep and Gold Plating. In this program, students will learn how to create a work breakdown structure to identify each of these tasks.

Likewise, after identifying each task, it will be time to communicate them orally and in writing. To achieve this objective, the syllabus addresses the importance of developing a communications plan and the dimensions it should achieve. Then, more technical aspects related to conscious broadcasting and active listening will be discussed, skills that will help create an empathetic, respectful, persuasive and credible message.

With the knowledge provided in this Postgraduate Diploma, the student will be able to make accurate, fast and effective decisions, which will be supported by a series of concrete data on the reality of the job. This **Postgraduate Diploma in Initiation and Management of Technology Projects** contains the most complete and up to date program on the market. The most important features include:

- The development of case studies presented by experts in Technology Project Management
- The graphic, schematic and practical contents of the system provide business and practical information on those 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

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Execute successful work in Technology Project Management, validated by the knowledge provided in this Postgraduate Diploma"

## Introduction | 07 tech

At TECH Technological University, you will be provided with the best tools and a unique methodology to learn how to become a better Technology Project Manager" Get ready to step up to one of the most in demand positions in the industry: a team leader.

> Learn different communication styles and be a role model for your peers.

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**

For TECH Technological University, it is essential to provide quality education. Therefore, it always sets a series of objectives that will help guide students' learning. As a result, with this program, the student will acquire a wealth of content and knowledge that will help them enhance a series of skills that are indispensable in the sector, such as knowing how to organize a work team and effectively communicate the tasks to be carried out by the team.

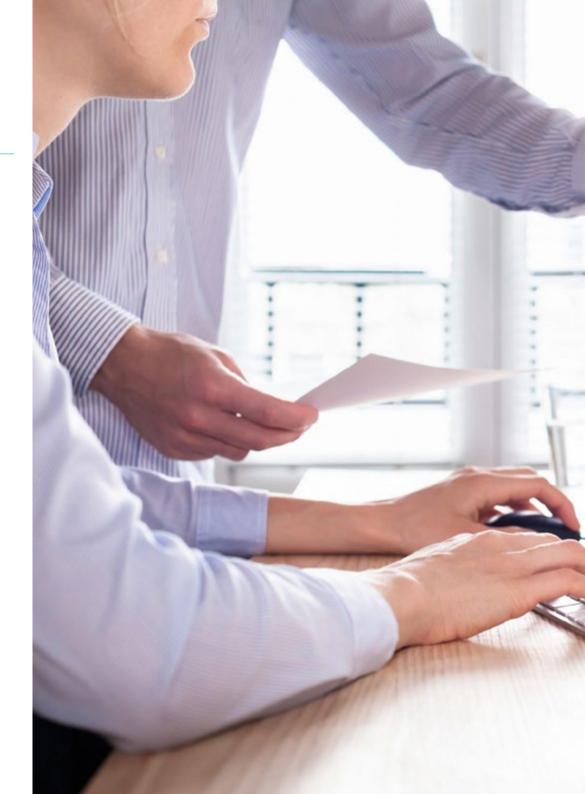
*If you want to be a leader who makes a difference, you must learn to communicate your ideas assertively"* 

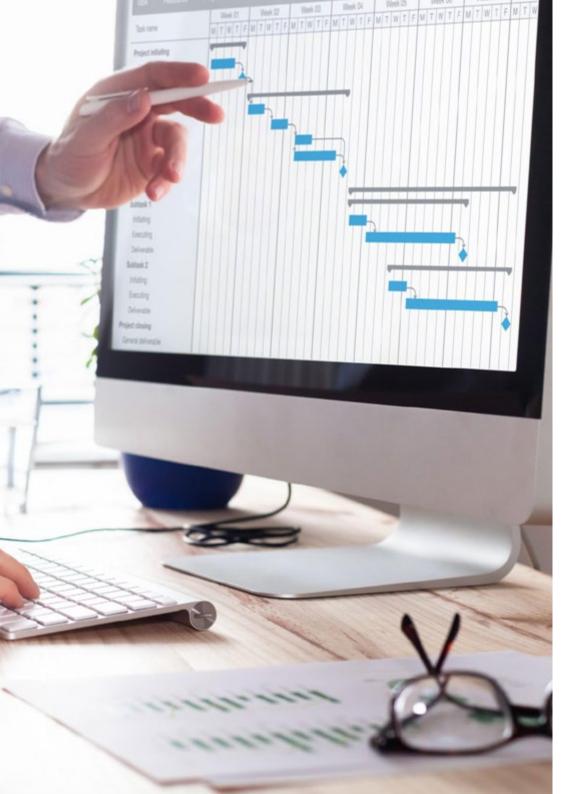
# tech 10 | Objectives



### **General Objectives**

- Develop skills and abilities required to make decisions in all types of projects, especially in technological projects and those developed in multidisciplinary contexts and environments
- Acquire the ability to analyze and diagnose business and management problems
- Master advanced business management tools
- Provide a global and strategic vision of all operational departments of the company
- Take responsibility and think in a transversal and integrative way to analyze and solve situations in uncertain environments
- Develop acts of incorporation of Technology Projects
- Carry out a comprehensive control of all projects
- Knowing how to estimate time in each process of project design and development
- Evaluate the processes and estimate the cost of developing a technology project
- Give importance to the quality of the projects
- Understanding the cost of failing to meet project quality
- Perform quality controls at each stage of the project
- Gain skills and techniques to manage human resources and be able to resolve conflicts in the team
- Knowing the emerging trends in the market
- Develop communication skills with which to disseminate project results
- Understand and manage the risks of technology projects





# Objectives | 11 tech



### Specific Objectives

# Module 1. Introduction to Technology Project Design and Management and Technology Project Integration Management

- Introduce students to the basic concepts of Technology Project Management, such as the role of the manager and the definition of the project
- Know the regulations and best practices of technology project management, PRINCE2, PMP and ISO 21500:2012
- Define the plan for the design and management of Technology Projects

#### Module 2. Technology project scope management

- Perform scope analysis of a technology project and product
- Know the basic concepts for estimating the scope of a technological project
- Identify the benefits of a project by means of Scope Creep and Gold Plating
- Creating the Work Breakdown Structure (WBS)

# Module 3. Communications and Stakeholder Management for Technology Projects

- Understand the importance of a communications management plan, performing the relevant analysis
- Improve the student's communication skills
- Conduct practical exercises on the use of communication types in a project
- Apply emerging trends and practices in the field of communication

# 03 Course Management

TIME

HR

NICATION

PR

QL

The faculty of this program is made up of a group of highly qualified and qualified experts with years of experience in the sector, who will become a reference for the students of the program. They will provide the best content, in a practical and dynamic way, to guarantee that it can be applied almost immediately. This will represent a great improvement opportunity for those who wish to test their skills and capabilities in a technology team.

Course Management | 13 tech

# **OJECT** AGEMENT

SCOPE

PROCUREMENT

RISK

TZOD

JALITY

With the support of this teaching faculty, you will carve a path for yourself in a future technology project"

# tech 14 | Course Management

#### Management



#### Dr. Romero Mariño, Brunil Dalila

- Database Administrator, OCREM Association, Granada, Spain
- Software Projects and Technology Architecture Consultant for different companies, Venezuela
- University Professor of Computer Science. Department of Processes and Systems, Simón Bolívar University (USB), Venezuela
- Researcher in Software Engineering and related areas, Department of Processes and Systems, Simón Bolívar University (USB), Venezuela
- · Systems Engineer from Bicentenaria de Aragua University (UBA), Venezuela
- Doctorate in Information and Communication Technologies from the University of Granada (UGR), Spain
- Master's Degree in Systems Engineering, Simón Bolívar University (USB), Venezuela
- Expert in Communications and Data Communication Networks, Central University of Venezuela (UCV)

# 04 Structure and Content

The content of this Postgraduate Diploma has been designed to enhance students' communication skills, which are essential to ensure team harmony and lead a project towards excellence. Therefore, the program begins by outlining the role of the team manager. Then, you will learn about different types of communication by conducting a stakeholder analysis.

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Discover the latest trends and practices that have emerged in the field of technology project communication"

## tech 18 | Structure and Content

# **Module 1.** Introduction to Technology Project Design and Management and Technology Project Integration Management

- 1.1. Introduction to Technology Project Management
  - 1.1.1. The Role of the Project Manager
  - 1.1.2. Project Definition
  - 1.1.3. Organizational Structure
- 1.2. Project Management, Program Management, and Portfolio Management
  - 1.2.1. Portfolios, Programs and Projects
  - 1.2.2. Strategic Management
- 1.3. Standards and Good Practices for Technology Project Management
  - 1.3.1. PRINCE2
  - 1.3.2. PMP
  - 1.3.3. ISO 21500:2012
- 1.4. Organizational Influences on Technology Project Design and Management
  - 1.4.1. Environmental Factors of a Company
  - 1.4.2. Assets of an Organization's Processes
- 1.5. Technology Project Management Processes
  - 1.5.1. Technology Project Life Cycle
  - 1.5.2. Process Groups
  - 1.5.3. Dynamics of Process Groups
- 1.6. Development of the Technology Projects Constitution Act
  - 1.6.1. Definition of the Technology Projects Constitution Act
  - 1.6.2. Tools and Techniques
- 1.7. Development of the Plan for Technology Project Design and Management
  - 1.7.1. Definition of the Plan for Technology Project Design and Management
  - 1.7.2. Tools and Techniques
- 1.8. Knowledge Management of Technological Projects
  - 1.8.1. Importance of Knowledge Management in Technology Projects
  - 1.8.2. Tools and Techniques
- 1.9. Monitoring the Technology Projects Work
  - 1.9.1. Work Monitoring and Control
  - 1.9.2. Follow up Reports on Technological Projects
  - 1.9.3. Tools and Techniques

- 1.10. Integrated Control of Changes in Technological Projects
  - 1.10.1. Objectives and Benefits of Project Change Control
  - 1.10.2. CCB (Change Control Board)
  - 1.10.3. Tools and Techniques
- 1.11. Delivery and Closing of Technology Projects
  - 1.11.1. Objectives and Benefits of Project Closure
  - 1.11.2. Tools and Techniques

#### Module 2. Technology project scope management

- 2.1. Introduction to Scope Management
  - 2.1.1. Project Scope
  - 2.1.2. Product Scope
- 2.2. Fundamentals of Scope Management
  - 2.2.1. Basic Concepts
  - 2.2.2. Scope Baseline
- 2.3. Benefits of Scope Management
  - 2.3.1. Stakeholder Expectation Management
  - 2.3.2. Scope Creep & Gold Plating
- 2.4. Considerations for Adaptive Environments
  - 2.4.1. Types of Adaptive Projects
  - 2.4.2. Scope Definition in Adaptive Projects
- 2.5. Scope Management Planning
  - 2.5.1. Scope Management Plan
  - 2.5.2. Requirements Management Plan
  - 2.5.3. Tools and Techniques
- 2.6. Gathering Requirements
  - 2.6.1. Gathering and Negotiation of Requirements
  - 2.6.2. Tools and Techniques
- 2.7. Scope Definition
  - 2.7.1. Project Scope Statement
  - 2.7.2. Tools and Techniques

### Structure and Content | 19 tech

#### 2.8. Creation of the Work Breakdown Structure (WBS)

- 2.8.1. Work Breakdown Structure (WBS)
- 2.8.2. Types of EDT
- 2.8.3. Rolling Wave
- 2.8.4. Tools and Techniques
- 2.9. Scope Validation
  - 2.9.1. Quality vs Validation
  - 2.9.2. Tools and Techniques
- 2.10. Scope Control
  - 2.10.1. Project Management Data and Information
  - 2.10.2. Types of Work Performance Reports
  - 2.10.3. Tools and Techniques

# **Module 3.** Communications and Stakeholder Management for Technology Projects

- 3.1. Communications Management Planning
  - 3.1.1. Why Is a Communications Management Plan Important?
  - 3.1.2. Introduction to Communications Management
  - 3.1.3. Communications Analysis and Requirements
  - 3.1.4. Dimensions of Communications
  - 3.1.5. Techniques and Tools
- 3.2. Communication Skills
  - 3.2.1. Conscious Emission
  - 3.2.2. Active Listening
  - 3.2.3. Empathy
  - 3.2.4. Avoid Bad Gestures
  - 3.2.5. Reading and Writing
  - 3.2.6. Respect
  - 3.2.7. Persuasion
  - 3.2.8. Credibility

- 3.3. Effective, Efficient Communication and Types of Communication
  - 3.3.1. Definition
  - 3.3.2. Effective Communication
  - 3.3.3. Efficient Communication
  - 3.3.4. Formal Communication
  - 3.3.5. Informal Communication
  - 3.3.6. Written Communication
  - 3.3.7. Verbal Communication
  - 3.3.8. Practical Exercises on the use of Communication Types in a Project
- 3.4. Communications Management and Control
  - 3.4.1. Project Communications Management
  - 3.4.2. Communication Models
  - 3.4.3. Communication Methods
  - 3.4.4. Project Communications Channels
- 3.5. Emerging Trends and Practices in the Field of Communication.
  - 3.5.1. Evaluation of Communication Styles
  - 3.5.2. Political Awareness
  - 3.5.3. Cultural Awareness
  - 3.5.4. Communication Technology
- 3.6. Stakeholder Identification and Analysis
  - 3.6.1. Why Is it Important to Manage Stakeholders?
  - 3.6.2. Stakeholder Analysis and Registration
  - 3.6.3. Stakeholder Interests and Concerns
  - 3.6.4. Considerations for Agile and Adaptive Environments
- 3.7. Stakeholder Management Planning
  - 3.7.1. Appropriate Management Strategies
  - 3.7.2. Tools and Techniques
- 3.8. Stakeholder Engagement Management. Management Strategy
  - 3.8.1. Methods for Increasing Support and Minimizing Resistance
  - 3.8.2. Tools and Techniques
- 3.9. Monitoring of Stakeholder Involvement
  - 3.9.1. Stakeholder Performance Report
  - 3.9.2. Tools and Techniques

# 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"

## tech 22 | Methodology

#### 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.

## Methodology | 23 tech



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.

## tech 24 | Methodology

#### **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.



### Methodology | 25 tech

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.



## tech 26 | Methodology

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.

30%

10%

8%

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.

### Methodology | 27 tech



#### **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.



4%

20%

25%

# 06 **Certificate**

The Postgraduate Diploma in Initiation and Management of Technology Projects guarantees students, in addition to the most rigorous and up to date education, access to a Postgraduate Diploma issued by TECH Technological University.



36 Successfully con receive your univ

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

## tech 30 | Certificate

This **Postgraduate Diploma in Initiation and Management of Technology Projects** 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 Diploma** issued by **TECH Technological University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the **Postgraduate Diploma**, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Diploma in Initiation and Management of Technology Projects Official N° of hours: 450 h.



technological university Postgraduate Diploma Initiation and Management of Technology Projects » Modality: online » Duration: 6 months » Certificate: TECH Technological University » Dedication: 16h/week

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Postgraduate Diploma Initiation and Management of Technology Projects

