

# Postgraduate Diploma IT Project and Team Management in Technological Environments



## Postgraduate Diploma IT Project and Team Management in Technological Environments

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/information-technology/postgraduate-diploma/postgraduate-diploma-it-project-team-management-technological-environments](http://www.techtute.com/us/information-technology/postgraduate-diploma/postgraduate-diploma-it-project-team-management-technological-environments)

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# 01

# Introduction

Leading a team in technological environments is not only a complex administrative task, but it also requires an important level of technical and specific knowledge as the work performed is sophisticated.

Thus, project managers are required to have a broad portfolio of knowledge, not only in terms of purely administrative issues, but also in talent management skills, communication and team members wellbeing. TECH has developed this program with the aim of molding students into an attractive and powerful leadership figure, with a multitude of tools to deal with various situations.





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*To be a great leader you need great knowledge. This Postgraduate Diploma will give you all the important keys to effectively manage the team you aspire to lead”*



The technology sector is highly demanding. Not only must professionals be well qualified and prepared, but those who distinguish themselves as coordinators and project managers must also acquire a series of additional knowledge to get the most out of their team.

That is why this Postgraduate Diploma teaches its students the knowledge and skills they will need to cope with the day-to-day work in IT Project Management. The various work methods such as Kanban or Scrum are studied to organize staff, as well as the analysis and collection of relevant data to speed up decision making. Finally, we also delve into the actual human management of the team, with mediation and conflict resolution techniques, as well as *Coaching and Business Mentoring*.

With all this knowledge, students will be able to manage any kind of IT Project with greater skill, knowing which work methodology to use at any given moment and being able to solve internal work team problems. All these skills make students ideal candidates for any company seeking to incorporate or promote its members to positions of greater responsibility.

To all this we must add the advantage that it is a 100% online program, which makes it easier for students to study because it eliminates the obligation to attend a physical center and the fixed schedules that this entails. All the didactic material is accessible from any device with an Internet connection, which allows for the necessary flexibility to adapt study materials to the student's own rhythms and obligations.

This **Postgraduate Diploma in IT Project and Team Management in Technological Environments** includes the most complete and updated educational program on the market.

Its most notable features are:

- ◆ Analysis of everything involved in the Management and Direction of an IT Project, both in a productive and human sense
- ◆ Specific knowledge in the field of Team Management, with Innovative Methodologies adapted to New Technological Realities
- ◆ Extensive audiovisual content throughout the learning process, which makes study work easier and more enjoyable
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



*This Postgraduate Diploma will be the turning point for companies and institutions in the sector to consider you for their best projects"*

“

*You will be the spearhead of the most desirable IT projects. Enroll now and direct your career towards Management and Direction in Technological Environments”*

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.

*Haven't you ever imagined yourself working for one of the big tech companies, with a prestigious position? It's time to stop imagining and make it happen.*

*From the way you work to the well-being of your team. You will cover all the the knowledge you need to be a good leader by enrolling in this Postgraduate Diploma.*

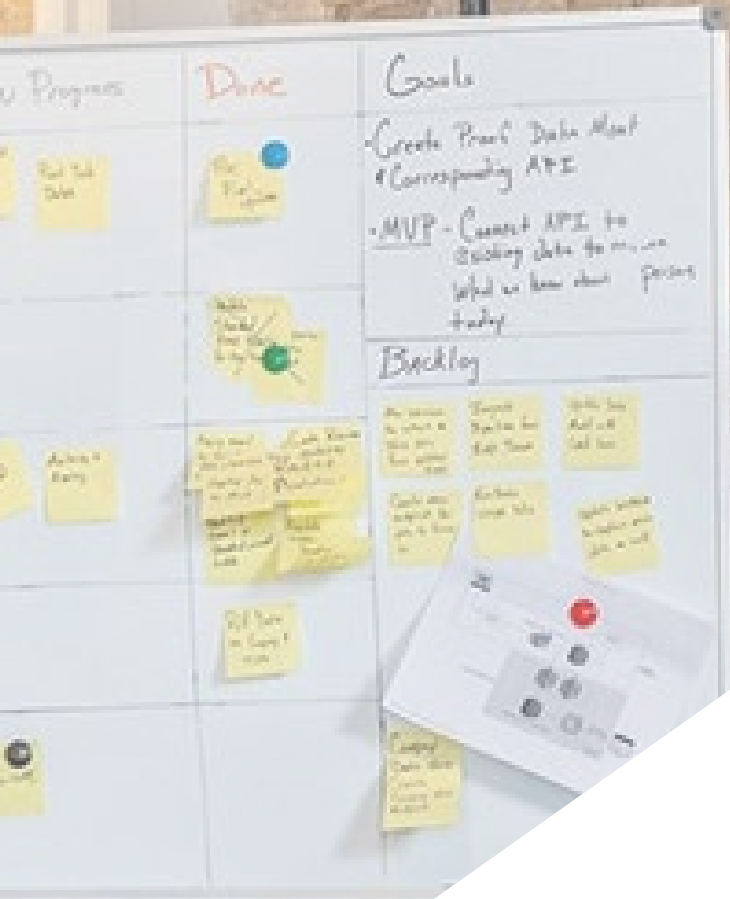


# 02 Objectives

The objective of this Postgraduate Diploma in IT Project and Team Management in Technological Environments is to provide students with the most cutting-edge tools for managing and coordinating large work teams. Thus, upon graduation, students will see how their possibilities for professional and personal growth will be increased by having highly demanded skills in any company in the technology sector.







“

*You're ready to step up to leadership. Enroll in this Postgraduate Diploma and make the transition to IT Project Management simple and smooth for yourself”*



## General Objectives

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- ◆ Generate specialized knowledge on project management and Agile project management
- ◆ Analyze Agile Methodologies for Project Management
- ◆ Integrate Process Analysis and requirements within Project Management Methodologies
- ◆ Develop practical examples based on Business
- ◆ Study Human Resources in the company as a way of growth
- ◆ Adapt the Technological Company to the Society of Change

“

*With all the knowledge you will learn in this program, there will be no professional goal that can resist you”*





## Specific Objectives

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### Module 1. Agile Technology Project Direction and Management

- ◆ Develop expertise in Project Management and Agile Methodology for Project Management
- ◆ Analyze the context of Agile Methodologies for Project Management
- ◆ Establish the *Scrum Framework* for Agile Project Management
- ◆ Analyze the *Kanban Framework* for Agile Project Management

### Module 2. Requirements Management and Process Analysis in Software Development Projects

- ◆ Analyze the different "roles" and functions of a New Information Systems Analyst
- ◆ Examine the different Data Collection Methods
- ◆ Develop DFD examples and E-R examples for Databases
- ◆ Develop Practical Business Models

### Module 3. Team Management in IT Projects

- ◆ Develop Management Skills to maximize performance in a Technology Company
- ◆ Determine Leadership as a support model with respect to Traditional Authoritarian Methodologies
- ◆ Contemplate Emotional Intelligence as a basic tool to optimize company results
- ◆ Develop strategies for Favorable Conflict Resolution and Negotiation Techniques

# 03

# Course Management

TECH has assembled a great professional team for this Postgraduate Diploma. With extensive proven experience in the field of IT project and team management, the professor on the program will support students at all times with their own knowledge and professional expertise. The didactic material contains everything students need to know in order to focus their career on IT project management and coordination.





“

*Top management at major technology companies are waiting for great professionals like you. Don't miss the opportunity to make the leap in quality that your career needs”*

## Management



### Dr. Peralta Martín-Palomino, Arturo

- CEO and CTO at Prometheus Global Solutions
- CTO en Corporate Technologies in Corporate Technologies
- CTO in AI Shephers GmbH
- Doctorate in Psychology from the University of CastillaLa
- PhD in Economics, Business and Finance from the Camilo José Cela University. Outstanding Award in her PhD
- PhD in Psychology, University of CastillaLa Mancha
- Master's Degree in Advanced Information Technologies from the University of Castilla la Mancha
- Master MBA+E (Master's Degree in Business Administration and Organisational Engineering) from the University of Castilla la Mancha.
- Associate lecturer, teaching Undergraduate and Master's Degrees in Computer Engineering at the University of Castilla la Mancha
- Professor of the Master in Big Data and Data Science at the International University of Valencia.
- Lecturer on the Master's Degree in Industry 4.0 and the Master's Degree in Industrial Design and Product Development
- Member of the SMILe Research Group of the University of Castilla la Mancha.

## Professors

### Mr. Gómez Esteban, Enrique

- ◆ Oracle database administrator at NATO, Alten, ViewNext, Everis and Psa Group (Peugeot)
- ◆ Project Manager at Telefónica
- ◆ Head of Safety at FNMT
- ◆ Technical Advisor at IBM Sterling and IBM Aspera
- ◆ Software Engineer at NCR Corporation
- ◆ Computer Expertise in Commercial/Civil, Criminal and Extrajudicial areas in the Community of Madrid
- ◆ Computer Engineer, Polytechnical University of Madrid
- ◆ Master's Degree in IT Safety and Communication, Polytechnic University of Madrid

### Mr. Tato Sánchez, Rafael

- ◆ Project Management and Technical Director at Indra Sistemas
- ◆ Head of the Control Center and Traffic Management in the Directorate General for Traffic in Madrid
- ◆ Systems Engineer in ENA Tráfico
- ◆ Degree in Industrial Electronics and Automation Engineering from the European University of Madrid.
- ◆ Industrial Technical Engineer in Electricity from the Polytechnic University Madrid
- ◆ Master's Degree in Industry 4.0 from the International University of La Rioja

### Ms. García La O, Marta

- ◆ Management, Administration and Account management at Think Planning and Development
- ◆ Organisation, supervision and mentoring of senior management training courses in Think Planning and Development
- ◆ Accountant-administrator at Tabacos Santiago and Zaraiche-Stan Roller
- ◆ Marketing Specialist at Versas Consultores
- ◆ Diploma in Business Studies from the University of Murcia.
- ◆ Master's Degree in Sales and Marketing Management, Fundesem Business School

# 04

## Structure and Content

The contents of this Postgraduate Diploma in IT Project and Team Management in Technological Environments show students the most innovative methodologies and tools in the field, used by thousands of leading companies around the world. The syllabus is largely supported by audiovisual and practical content, which facilitates the acquisition of all this knowledge. The program is structured in three modules, divided into 10 topics each, and students can access any of them at any time while they are taking the course.







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*A good future awaits you at the head of the best IT teams. You just need the right skills to reach that future”*

## Module 1. Agile Technology Project Direction and Management

- 1.1. Project Management
  - 1.1.1. Project Management
  - 1.1.2. Phases to a Project
- 1.2. Project Management according to the *Project Management Institute*
  - 1.2.1. PMI and PMBOK
  - 1.2.2. Project, Program and Project Portfolio
  - 1.2.3. Evolution and Process Assets at Organizations That Work with Projects
- 1.3. Process Management according to the *Process Management Institute*
  - 1.3.1. Process Groups and Knowledge Areas
  - 1.3.2. Process Matrix
- 1.4. Agile Methodologies for Project Management
  - 1.4.1. Application Motivation
  - 1.4.2. Agile Values and Principles in the Agile Manifesto
  - 1.4.3. Application Scenarios
- 1.5. Scrum for Agile Project Management: *Framework Description*
  - 1.5.1. Agile Management *Framework*
  - 1.5.2. Scrum Pillars and Values
- 1.6. Scrum for Agile Project Management: Application Models
  - 1.6.1. *Framework* Application
  - 1.6.2. People, Roles and Responsibilities on Scrum
  - 1.6.3. *Sprint Planning, Daily Scrum, Sprint Review, Sprint Retrospective and Sprint Refinement*
- 1.7. Scrum for Agile Project Management
  - 1.7.1. *Product Backlog, Sprint Backlog* and Incremental Backlog
  - 1.7.2. Scrum Team Agreements
  - 1.7.3. Performance Assessment
- 1.8. Kanban for Agile Project Management
  - 1.8.1. The Model
  - 1.8.2. Kanban Method, Elements and Benefits
  - 1.8.3. Typical Usage Scenarios

- 1.9. Kanban for Agile Project Management: Model Implementation
  - 1.9.1. Fundame
  - 1.9.2. Application
  - 1.9.3. Performance Assessment
- 1.10. Project Management Model Selection
  - 1.10.1. Criteria for Selecting a Management Model Type
  - 1.10.2. Traditional Methods vs. Agile Methods
  - 1.10.3. Conclusions

## Module 2. Requirements Management and Process Analysis in Software Development Projects

- 2.1. Systems Analysis
  - 2.1.1. Systems Analyst Functions
  - 2.1.2. Software Development Cycle: SDLC and OO Agile
  - 2.1.3. SDLC, OO and Agile
- 2.2. Importance of System Analysis and Design
  - 2.2.1. Information Systems
  - 2.2.2. Integrating IT Technologies: HW and Software
  - 2.2.3. Methodology Selection
- 2.3. Software Development Life Cycle
  - 2.3.1. Campaigns and Types
  - 2.3.2. Redemption and Drive
  - 2.3.3. Types of Strategies
  - 2.3.4. Digital Marketing Plans
- 2.4. Systems Model and Design: Integration.
  - 2.4.1. Dependencies with Other Operating Systems in the Organization
  - 2.4.2. Integration with Project Management Methodologies such as PMBOOK
  - 2.4.3. Integration with Agile Methodologies
- 2.5. Requirements
  - 2.5.1. Interactive Methods: Interviews, JAD and Questionnaires
  - 2.5.2. Non-interactive Methods: Observation, Document Review
  - 2.5.3. Sampling Techniques: *Sampling*

- 2.6. Processes Analysis: DFD
  - 2.6.1. Multilevel DFD Development
  - 2.6.2. DFD Types: Physical and Logical, Based on Events
  - 2.6.3. DFD Partitioning
- 2.7. Processes Analysis: Data Dictionary
  - 2.7.1. Creating Data Dictionaries Based on Previous DAFD
  - 2.7.2. Data Dictionary Nomenclature
  - 2.7.3. XML Creation for Data Exchange with Other Systems
- 2.8. Processes Analysis: Processes Specifications
  - 2.8.1. Structured and Semi-structured Decisions
  - 2.8.2. *If-The-Else*
  - 2.8.3. Decision Tables and Trees
- 2.9. Importance of Design
  - 2.9.1. Output Design
  - 2.9.2. Input Design
  - 2.9.3. Validating Design
- 2.10. Database Design
  - 2.10.1. Data Standardization
  - 2.10.2. E-R Diagrams: One-to-many and Many-to-many Relations
  - 2.10.3. Destandardization

### Module 3. Team Management in IT Projects

- 3.1. Group Management
  - 3.1.1. Management Skills
  - 3.1.2. Human Capital Management and Managerial Functions
  - 3.1.3. Classification and Types of Management Skills
  - 3.1.4. Group Leadership Management in Companies
- 3.2. *Team Building*
  - 3.2.1. Team Management
  - 3.2.2. Performance Evaluation
  - 3.2.3. Delegation and *Empowerment*
  - 3.2.4. Commitment Management

- 3.3. Work Teams
  - 3.3.1. Culture: Mission, Vision, Values
  - 3.3.2. Planning and Strategy
  - 3.3.3. Organization and Monitoring
  - 3.3.4. *Feedback and Feedforward*
  - 3.3.5. Results Assessment
- 3.4. Stages in Team Training
  - 3.4.1. Dependence Stage
  - 3.4.2. Counter-Dependence Stage
  - 3.4.3. Independence Stage
  - 3.4.4. Interdependence Stage
- 3.5. Computer Projects Organization
  - 3.5.1. Company Planning
  - 3.5.2. Time Planning
  - 3.5.3. Resource Planning
  - 3.5.4. Costs Planning
- 3.6. *Talent Management* in Companies
  - 3.6.1. Talent
  - 3.6.2. Talent Management
  - 3.6.3. Talent Dimensions
  - 3.6.4. Attracting Talent
- 3.7. Company Communication
  - 3.7.1. Communication Process in Companies
    - 3.7.1.1. Internal Relationships and Communication in Companies
    - 3.7.1.2. Relation between Company Organization and Communication: Centralization or Decentralization
    - 3.7.1.3. Internal and External Communication Strategy
  - 3.7.2. Interpersonal Relationships in Companies
    - 3.7.2.1. Interpersonal Communication and Conflicts
    - 3.7.2.2. Communication Filters and Barriers
    - 3.7.2.3. Criticism and Active Listening
  - 3.7.2.4. Active Listening Techniques

- 3.8. Negotiation Techniques in Companies
  - 3.8.1. Negotiation at the Managerial Level in Technology Companies
    - 3.8.1.1. Negotiation
    - 3.8.1.2. Negotiation Styles
    - 3.8.1.3. Negotiation Phases
  - 3.8.2. Negotiation Techniques
    - 3.8.2.1. Negotiation Strategies and Tactics
    - 3.8.2.2. Negotiation Types
  - 3.8.3. The Negotiator
    - 3.8.3.1. Negotiator Characteristics
    - 3.8.3.2. Types of Negotiators
    - 3.8.3.3. Psychology in Negotiation
- 3.9. *Coaching* and Business Management
  - 3.9.1. *Business Coaching*
  - 3.9.2. *Coaching Practice*
  - 3.9.3. *Coaching* in Organizations
- 3.10. *Mentoring* and Business Management
  - 3.10.1. *Mentoring*
  - 3.10.2. The Four Processes of a *Mentoring* Program
    - 3.10.2.1. Processes
    - 3.10.2.2. Mentors in Companies
    - 3.10.2.3. Protégés in Technological Companies
  - 3.10.3. Benefits of *Mentoring* in Companies
    - 3.10.3.1. Benefits for the Organization: Mentor and Mentored
  - 3.10.4. Differences between *Mentoring* and *Coaching*





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*All these skills and knowledge will make you the leader you always wanted to be. Advance professionally and enroll now in this Postgraduate Diploma”*

# 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"*

## At TECH we use the Case Method

Our program offers a revolutionary method of skills and knowledge development. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

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*At TECH, you will experience a way of learning that is shaking the foundations of traditional universities around the world”*



*We are the first online university to combine Harvard Business School case studies with a 100% online learning system based on repetition.*





### A learning method that is different and innovative

This intensive Information Technology program at TECH Global University prepares you to face all the challenges in this field, both nationally and internationally. We are committed to promoting your personal and professional growth, the best way to strive for success, that is why at TECH Global University you will use Harvard *case studies*, with which we have a strategic agreement that allows us, to offer you material from the best university in the world.

“*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.

*The student will learn, through collaborative activities and real cases, how to solve complex situations in real business environments.*

## Relearning Methodology

Our university is the first in the world to combine Harvard University case studies with a 100%-online learning system based on repetition, which combines different teaching elements in each lesson.

We enhance Harvard case studies 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 university 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.



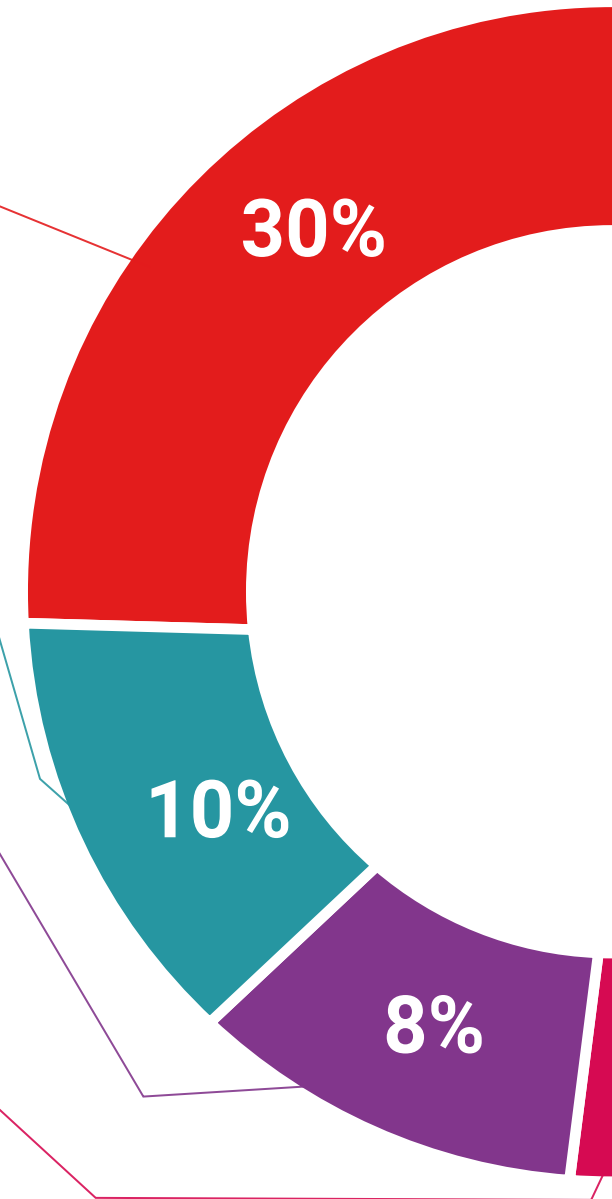
### Practising Skills and Abilities

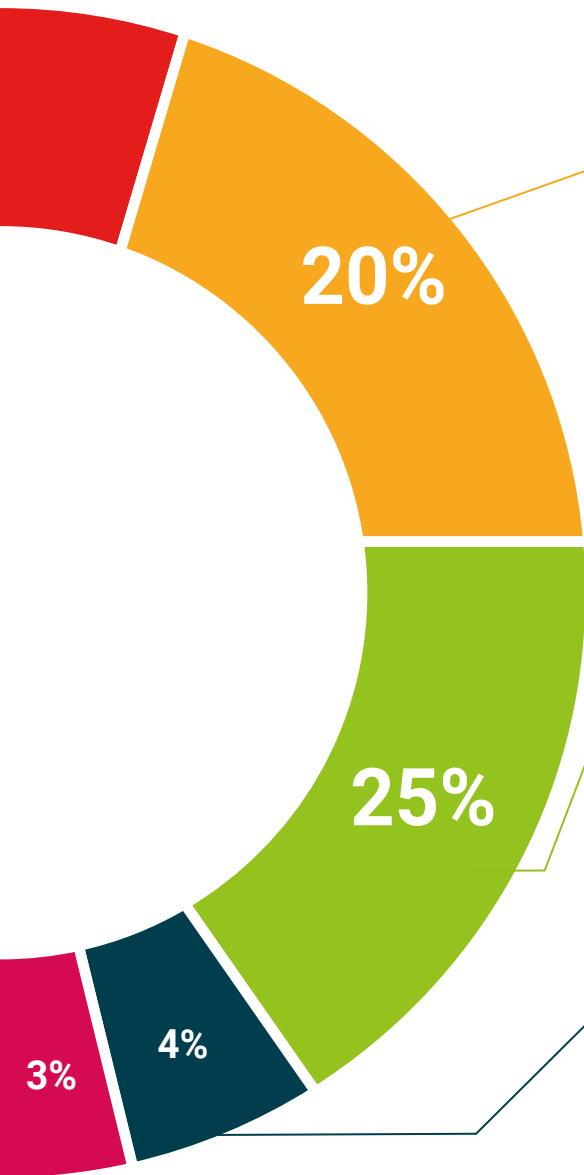
They will carry out activities to develop specific competencies and skills in each thematic area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization we live in.



### 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

They will complete a selection of the best case studies in the field used at Harvard. Cases that are presented, analyzed, and supervised by the best senior management 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 multimedia content presentation training Exclusive system 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 your goals.



06

# Certificate

The Postgraduate Diploma in IT Project and Team Management in Technological Environments Management guarantees, in addition to the most rigorous and updated training, access to a qualification issued by TECH Global University.



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*Successfully complete this program  
and receive your diploma without the  
hassle of travel or paperwork”*

This program will allow you to obtain your **Postgraduate Diploma in IT Project and Team Management in Technological Environments** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in IT Project and Team Management in Technological Environments**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**



\*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.



health future  
confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present  
online training  
development language  
classroom



## Postgraduate Diploma IT Project and Team Management in Technological Environments

- » Modality: **online**
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- » Credits: **18 ECTS**
- » Schedule: **at your own pace**
- » Exams: **online**

# Postgraduate Diploma IT Project and Team Management in Technological Environments

