

# Postgraduate Diploma Improvement, Quality and Data Protection in IT Projects



## Postgraduate Diploma Improvement, Quality and Data Protection in IT Projects

Course Modality: **Online**

Duration: **6 months**.

Certificate: **TECH Technological University**

Official N° of hours: **450 h**.

Website: [www.techtute.com/infromation-technology/postgraduate-diploma/postgraduate-diploma-improvement-quality-data-protection-it-projects](http://www.techtute.com/infromation-technology/postgraduate-diploma/postgraduate-diploma-improvement-quality-data-protection-it-projects)

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# 01

# Introduction

Technology projects are gaining strength as they are proving to be efficient in solving some problems in the business world.

In these cases, the work team must meet delivery deadlines to achieve the objectives as best as possible. This makes a leader necessary to ensure the specifications and requirements demanded are executed properly. For this reason, IT specialists interested in this field should have the skills that will help them access different career options within the company.







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*Review and audit new Software Products and their related activities throughout the Development Cycle”*

In this Postgraduate Diploma in Improvement, Quality and Data Protection in IT Projects, students will be able to develop the most current methods used in Business Organizations for Data Analysis, which are indicative for business improvement. Therefore, they will delve into Digital Marketing, with special emphasis on Digital Campaigns that help examine risks and improve organization results.

Furthermore, in the second module, students will develop a system or product that meets the specifications and requirements of the company. To do so, they will monitor the Software Creation process, ensuring quality through Client Server Testing. They will also identify program deficiencies in order to correct them efficiently.

Finally, there is another module devoted to Data Protection Regulations, which broadly sets out the Legal Framework for good practices in the field of Information Security. In this sense, the European Parliament Regulation identifies a series of obligations that must be integrated into any IT Project that engages in Personal Data Processing. So, students will establish Security Regulatory Frameworks and the main available security certifications.

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.

This **Postgraduate Diploma in Improvement, Quality and Data Protection in IT Projects** contains the most complete and up to date 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



*Make this Postgraduate Diploma the turning point in your career by managing incidents in your Technology Projects”*

“

*By enrolling in this program you will be able to analyze a Marketing Campaign and adjust it to the needs of the company”*

The program's teaching staff includes professionals from 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.

*This program will enable you to reach excellence in your professional career.*

*Work with a team trained to provide you with the best business leadership skills.*



# 02 Objectives

The objective of this Postgraduate Diploma in Improvement, Quality and Data Protection in IT Projects is to help students develop specialized knowledge to monitor and audit the programs they develop to obtain User Information. They will also learn about Data Security measures proposed by international organizations, completing a professional profile that is highly demanded in the sector.







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*Get ready to take a step forward  
in your professional career. Build  
your criteria for evaluating data  
collection programs”*



## 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







## Specific Objectives

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### Module 1. Improving IT Projects and Businesses Using Analytical Techniques

- ◆ Analyze Digital Marketing campaigns so they align with the global business strategy
- ◆ Apply the proposed drive techniques to improve organization results
- ◆ Generate specialized knowledge of Digital Marketing with special emphasis on Digital Campaigns
- ◆ Determine the different types of campaign exclusions, control and apply them to mitigate risks in executing Digital Marketing Campaigns

### Module 2. Quality in Software Project Management and Implementation

- ◆ Monitor Software Development processes and final products
- ◆ Ensure the Development Project implements the established Quality procedures and standards
- ◆ Notify stakeholders of the Quality actions taken
- ◆ Identify deficiencies in products, processes or standards and correct them

### Module 3. Regulatory Compliance for Information Security in IT Projects

- ◆ Examine Data Protection Regulation
- ◆ Establish the bases that legitimize Personal Data Processing
- ◆ Develop techniques to ensure compliance with Data Protection Regulations
- ◆ Establish Security Regulatory Frameworks and the main security related Certifications available



*Be aware of regulation non compliance violations that can be incurred and associated penalties”*

# 03

# Course Management

The teaching staff assembled for this program has extensive experience in business, technology and computing in the management and direction of technological projects. Student will be sure to acquire the necessary skills to demonstrate the quality of their work, proposing novel solutions to the problems presented by the software they use.







## Management



### Dr. Peralta Martín-Palomino, Arturo

- CEO and CTO at Prometheus Global Solutions
- CTO in AI Shephers GmbH
- CTO at Korporate Technologies
- Director of Design and Development at DocPath Document Solutions
- Computer Engineer from the University of Castilla la Mancha
- Doctorate in Psychology from the University of CastillaLa
- PhD in Economics, Business and Finance from the Camilo José Cela University
- Master's Degree in Advanced Information Technologies from the University of Castilla la Mancha
- MBA+E (Master's Degree in Business Administration and Organisational Engineering) from the University of Castilla la Mancha

## Professors

### Mr. Fondón Alcalde, Rubén

- ◆ Business Analyst in Customer Value Management at Vodafone Spain
- ◆ Head of Service Integration at Entelgy for Telefónica Global Solutions
- ◆ Online Account Manager for Clone Servers at EDM Electronics
- ◆ Business Analyst for Southern Europe at Vodafone Global Enterprise
- ◆ Telecommunications Engineer from the European University of Madrid
- ◆ Master's Degree in Big Data and Data Science from the International University of Valencia

### 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

### Ms. Palomino Dávila, Cristina

- ◆ Consultant and Senior GRC Auditor at Oesía Networks
- ◆ Audit Sub-Directorate - General Secretariat in Compañía Logística de Hidrocarburos CLH
- ◆ Senior consultant and auditor in the field of Personal Data Protection and information society services at Helas Consultores
- ◆ Graduate in Law from the University of Castilla La Mancha
- ◆ Master's Degree in Legal Consultancy for Businesses from the Instituto de Empresa
- ◆ Advanced Course in Digital Security and Crisis Management, University of Alcalá and the Spanish Security and Crisis Alliance (AESYC)

# 04

## Structure and Content

The content structure for this Postgraduate Diploma will allow students to acquire and improve their skills to thrive in their IT Projects through Digital Marketing and Data Management. To do so, they will perform Audit tests and Data Control Methodologies adapted to the Current Legal framework. Each topic on the program has been defined and organized to help you enhance your professional profile with the objective of advancing in your workplace or undertake a project of your own.





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*With this program, you will not only grow professionally, but you will also grow personally so you can undertake your own project in the future”*

## Module 1. Improving IT Projects and Businesses Using Analytical Techniques

- 1.1. Company Data Analytics
  - 1.1.1. Company Data Analytics
  - 1.1.2. Value
  - 1.1.3. Project Management According to Value
- 1.2. Digital Marketing
  - 1.2.1. Digital Marketing
  - 1.2.2. Benefits of Digital Marketing
- 1.3. Digital Marketing: Preparation
  - 1.3.1. Campaigns
  - 1.3.2. Implementation and Measurement
  - 1.3.3. Digital Strategy Variants
  - 1.3.4. Plan
- 1.4. Digital Marketing: Implementation
  - 1.4.1. Applications
  - 1.4.2. Integration in Web Environments
- 1.5. Life Cycle
  - 1.5.1. Customer Journey vs. Campaigns
  - 1.5.2. Measurement
- 1.6. Data Management
  - 1.6.1. Datawarehouse and Datalab
  - 1.6.2. Applications for the Generation of Campaign Bases
  - 1.6.3. Drive Options
- 1.7. Campaign Exclusions
  - 1.7.1. Types
  - 1.7.2. GDPR and Robinson
  - 1.7.3. Data Anonymization
- 1.8. Control Panels
  - 1.8.1. Audience
  - 1.8.2. Story Telling
  - 1.8.3. Applications
- 1.9. Value Conclusions in Data Analytics
  - 1.9.1. Customer Global Vision

- 1.9.2. Analysis Strategy and Types
- 1.9.3. Applications
- 1.10. Application in Business Scenarios
  - 1.10.1. Wallet *Clustering*
  - 1.10.2. Predictive Risk Models
  - 1.10.3. Wallet Customers Characterization
  - 1.10.4. Image Processing
  - 1.10.5. Bid Proposal Forms

## Module 2. Quality in Software Project Management and Implementation

- 2.1. Software Quality
  - 2.1.1. Methodologies and Standards
  - 2.1.2. Software Quality Reports: Standish Group Chaos Report
  - 2.1.3. Software Quality Certifications: ISO and AENOR
- 2.2. Secure Codification
  - 2.2.1. Codification: Reasons and Types of Codes
  - 2.2.2. Codification Rules
- 2.3. Data Quality through Input Validation
  - 2.3.1. Efficient Data Capture
  - 2.3.2. Data Entry Models: OCR, Keyboard, RFID, etc.
  - 2.3.3. Data Validation Tests
- 2.4. Total Quality Management: Six Sigma
  - 2.4.1. TQM
  - 2.4.2. Six Sigma: Methodology and Culture
  - 2.4.3. Top-Down Design Systems and Modular Programming
  - 2.4.4. Documentation: Folklore Documentation Method
- 2.5. Tests, Maintenance and Audits
  - 2.5.1. Test Processes
  - 2.5.2. Using Test Data
  - 2.5.3. Audits and External Auditing
- 2.6. Quality of Network Implemented Products
  - 2.6.1. Client Server Technology
  - 2.6.2. Cloud Computing Technology
- 2.7. User Training
  - 2.7.1. User Training Strategies

- 2.7.2. Training Guides
- 2.8. Conversion/Migration to New Systems Strategies
  - 2.8.1. Migration Strategies: Parallel, Gradual
  - 2.8.2. Migration/Conversion Plans
  - 2.8.3. Data Owners Management
- 2.9. Security/safety
  - 2.9.1. Physical and Logical Security: Document Destruction
  - 2.9.2. e-Commerce
  - 2.9.3. *Disaster-Recovery* Plans
- 2.10. Assessment
  - 2.10.1. Quality Assessment Techniques
  - 2.10.2. Evaluation in Web Environments

### Module 3. Regulatory Compliance for Information Security in IT Projects

- 3.1. Data Protection Regulation
  - 3.1.1. Regulatory Framework
  - 3.1.2. Subjects Obligated to Comply with Regulations
    - 3.1.2.1. Data controllers, Co-responsible Parties and Data Processors
  - 3.1.3. Data Protection Officer
- 3.2. Treatment of Personal Data
  - 3.2.1. Fairness, Loyalty and Transparency
  - 3.2.2. Purpose Limitation
  - 3.2.3. Data Minimization, Accuracy and Shelf Life Limitation
  - 3.2.4. Integrity and Confidentiality
  - 3.2.5. Proactive Responsibility
- 3.3. Data Protection by Design and by Default
  - 3.3.1. Data Pseudonymization
  - 3.3.2. Data Minimization
  - 3.3.3. Organizational Measures in Accordance with the Purpose of Processing
- 3.4. Bases of Lawfulness or Legitimacy and Authorizations for Processing: Data Communication
  - 3.4.1. Consent
  - 3.4.2. Contractual Relationship or Pre-contractual Measures
  - 3.4.3. Fulfilling Legal Obligations
  - 3.4.4. Vital Interests Protection for Interested Parties or Others
- 3.4.5. Public Interest or Exercise of Public Powers
- 3.4.6. Legitimate Interests: Interest Weighting
- 3.5. Individuals Rights
  - 3.5.1. Transparency and Information
  - 3.5.2. Access
  - 3.5.3. Rectification and Deletion (Right to Be Forgotten), Limitation and Portability
  - 3.5.4. Opposition and Automated Individual Decisions
  - 3.5.5. Limits to Rights
- 3.6. Risks Analysis and Management of Personal Data Processing
  - 3.6.1. Identification of Risks and Threats to the Rights and Freedoms of Individuals
  - 3.6.2. Risk Assessment
  - 3.6.3. Risk Management Plans
- 3.7. Techniques to Ensure Data Protection Regulations Compliance
  - 3.7.1. Identification of Proactive Accountability Measures
  - 3.7.2. Processing Activities Register
  - 3.7.3. Security Breach Management
  - 3.7.4. Codes of Conduct and Certifications
- 3.8. Data Protection Impact Assessment (DPA or DPIA)
  - 3.8.1. Studying the Need for DPIA
  - 3.8.2. Assessment Methodology
  - 3.8.3. Risk and Threat Identification
  - 3.8.4. Prior Consultation with Control Authorities
- 3.9. Information Security
  - 3.9.1. Security Regulatory Framework
  - 3.9.2. ICT Security Products Assessment and Certification
  - 3.9.3. STIC Products and Services Catalog (CPSTIC)
- 3.10. Control Authorities: Violations and Penalties
  - 3.10.1. Violations
  - 3.10.2. Fines
  - 3.10.3. Penalty Procedure
  - 3.10.4. Control Authorities and Cooperation Mechanisms

# 05 Methodology

This training program offers 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.







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

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

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 Improvement, Quality and Data Protection in IT Projects guarantees, in addition to the most rigorous and updated training, access to a qualification issued by TECH Technological University.





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

This **Postgraduate Diploma in Improvement, Quality and Data Protection in IT 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 it meets the requirements commonly required by labor exchanges, competitive examinations, and professional career evaluation committees.

**Title: Postgraduate Diploma in Improvement, Quality and Data Protection in IT Projects**

**Official N° of hours: 450 h.**



\*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.

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



## Postgraduate Diploma Improvement, Quality and Data Protection in IT Projects

Course Modality: **Online**

Duration: **6 months.**

Certificate: **TECH Technological University**

Official N° of hours: **450 h.**

# Postgraduate Diploma Improvement, Quality and Data Protection in IT Projects