





Postgraduate Certificate

Agile Methodologies for Website Development

Course Modality: Online

Duration: 6 weeks

Certificate: TECH Technological University

Official No of Hours: 150 h.

Website: www.techtitute.com/in/information-technology/postgraduate-certificate/agile-methodologies-website-development

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01 Introduction

This high-level specialization provides a comprehensive review of agile methodologies, highlighting the key differences between these innovative frameworks versus traditional approaches to project management. It also analyzes some common myths and misconceptions about agile development approaches, providing project leaders with the techniques, tools and insight needed to develop an agile way of thinking, the first step towards team transformation. It explores the planning of Releases and Sprints, the creation of user stories, the generation of estimates, as well as the prioritization of requirements and operational procedures, among other issues of interest to the IT engineer.





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Technological development has been the driving force behind what we know today as "Agility". Traditional project management techniques were difficult to apply in the complex, uncertain and highly changeable environment faced by technology projects. Agile project management emerged both from and for technology, characterized by the use of short work iterations and incremental product development, focusing on the constant delivery of value to the customer or users.

It is necessary to have a thorough understanding of the actions that take place during the planning and execution of a project iteration. Thus, the key tools and methods used by agile teams to monitor and report project progress, both at the iteration level and at the overall project level, are essential. All this, without forgetting the crucial importance of the commitment, collaboration and communication of the interested parties or stakeholders during the aforementioned stages of the project.

Having a good team and strong leadership is key to the success of any project, but in agile development it is fundamental. In this course, the student will study the management of agile teams in depth, including the necessary skills for their leaders and the roles and characteristics of the team as a whole.

Project managers in technology environments must assume and exercise their role of coaching, leadership and facilitation. Leaders must empower their teams to organize, collaborate and solve problems. This program provides specialized guidance on how to lead an interdisciplinary team and how to drive team performance.

This Postgraduate Certificate has been created by a team of expert teachers with multi-faceted skillsets and a wealth of experience and specialized knowledge in their respective fields. As it is a 100% online program, the student will not have to neglect their personal or professional commitments. At the end of the program, students will have updated their knowledge and will be in possession of a prestigious Postgraduate Certificate that will allow them to advance personally and professionally.

This **Postgraduate Certificate in Agile Methodologies for Website Development** contains the most complete and up-to-date educational program on the market. The most important features include:

- The examination of case studies presented by experts in Agile Methodologies for Website Development
- The graphic, schematic, and practical contents which they contain, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be undertaken to improve learning
- A 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



A unique opportunity to specialize in website design and programming from renowned professionals with years of experience in the sector"



A high-quality Postgraduate Certificate that will allow the student to advance quickly and steadily in the acquisition of knowledge, with the scientific rigor of world class teaching"

The program's teaching staff includes professionals from the sector who pour their work experience into this Postgraduate Certificate, 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 learning designed for real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to resolve 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.

You will specialize in Agile Methodologies for Website Development under the guidance of professionals with years of experience in the sector and with the most innovative educational methodology.

> A unique qualification that stands out due to the quality of its contents and its excellent teaching staff.







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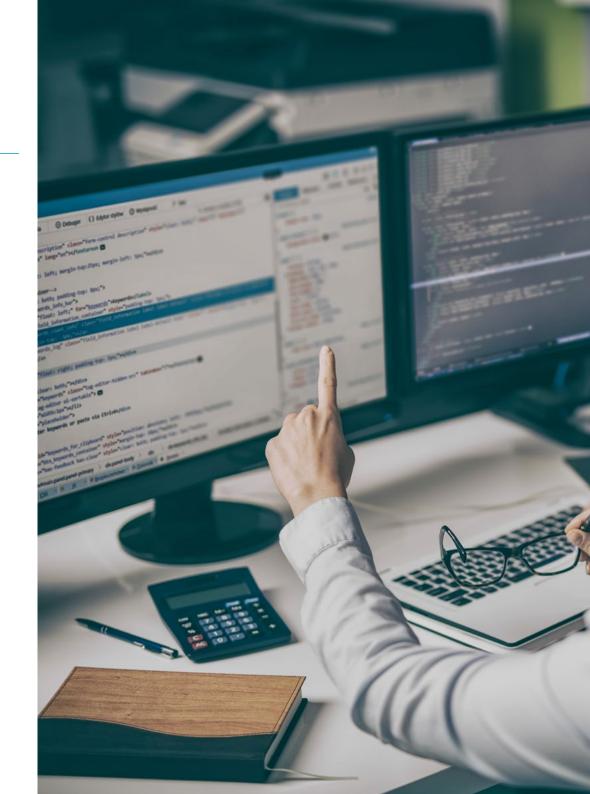


General Objectives

- Examine the characteristics of agile project management and determine the differences with predictive or traditional approaches
- Assimilate the key principles of agile mindset and practice
- Analyze the different agile methodologies and determine the best framework to adopt according to project characteristics
- Initiate, plan, execute, monitor, and close an agile project
- Lead and differentiate the roles of an agile team and recommend strategies for overcoming the challenges faced by dispersed or offshore agile teams



A comprehensive and highly relevant course for the IT professional, which will allow you to compete among the best in the industry"



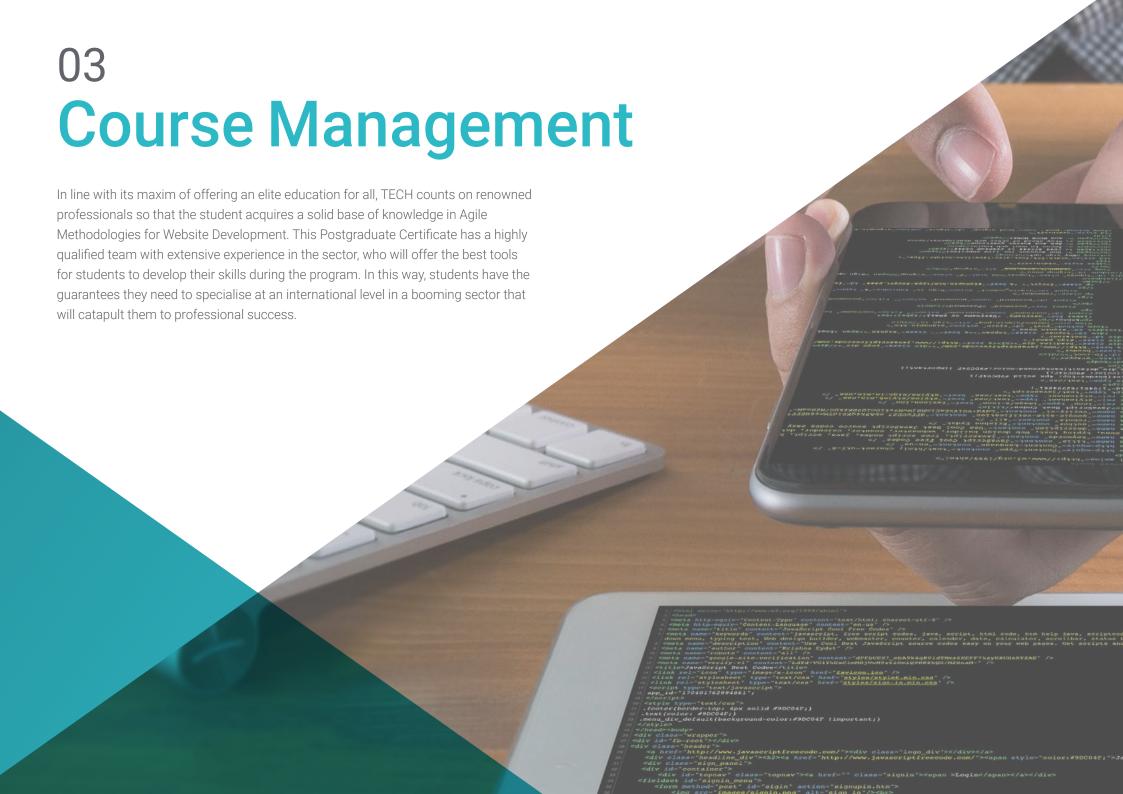




Specific Objectives

- Determine key elements in business cases, product vision and user stories
- Plan iterations based on team speed and iteration length
- Gather and prioritize requirements for agile projects
- Recognize guidelines for decomposing, estimating, and assigning user stories
- Develop agile practices to manage project quality and risk
- Calculate cost and schedule performance indicators for agile projects
- Analyze the keys to contracting for agile projects
- You will use tools and strategies to actively engage stakeholders throughout the life
 of a project
- Examine the leadership strategies of high-performing self-managed teams







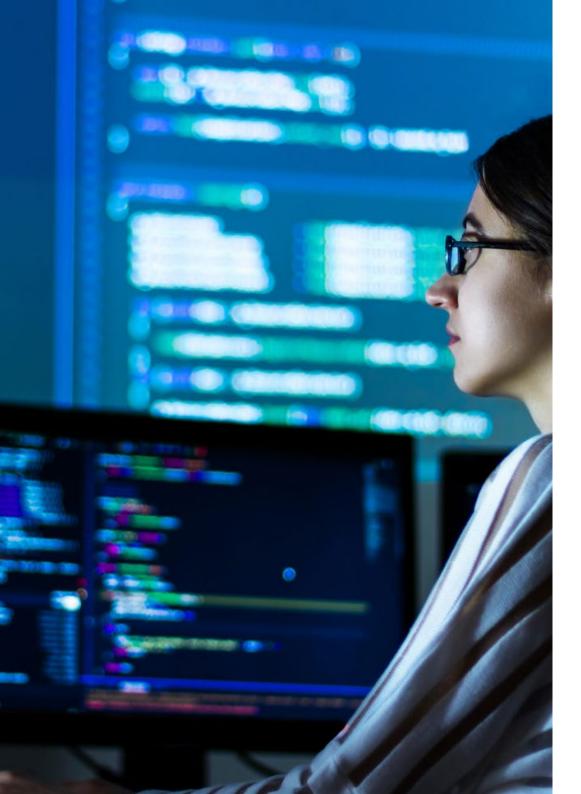
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Management



Mr. Gris Ramos, Alejandro

- Director of Persatrace, web development and digital marketing agency
- Director of Club de Talentos
- Computer Engineer UNED
- Master's Degree in Digital Teaching and Learning Tech Education
- Master's Degree in High Abilities and Inclusive Education
- Business Development Director at Alenda Golf
- Director of Web Applications Engineering Department at Brilogic
- Web programmer at Grupo Ibergest
- Software/web programmer at Reebok Spain





An excellent teaching staff for professionals who want to improve in their career"

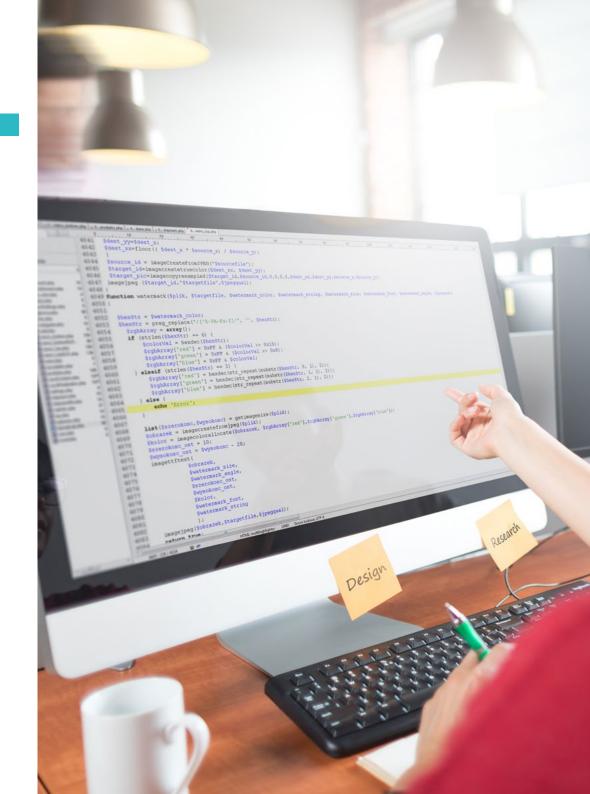




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Module 1. Methodologies for Web Application Development

- 1.1. Agile Project Management: Basis for Web Application Development
 - 1.1.1. The Agile Approach
 - 1.1.2. Agile Values and Principles
 - 1.1.3. Traditional and Agile Project Management
 - 1.1.4. Agile Project Management Models
 - 1.1.5. Agile Methodologies
- 1.2. Using an Agile Approach for Web Application Development
 - 1.2.1. Myths and Realities Regarding Agility
 - 1.2.2. Agile Practices
 - 1.2.3. Selecting Agile Practices for a Project
 - 1.2.4. Developing an Agile Mentality
 - 1.2.5. Implementing and Communicating the Adoption of Agile Principles
- 1.3. Agile Methodologies for Web Application Development
 - 1.3.1. Lean Development
 - 1.3.2. Extreme Programming (XP)
 - 1.3.3. Crystal Methods
 - 1.3.4. Feature-Driven Development (FDD)
 - 1.3.5. Dynamic Systems Development Method (DSDM) and Unified Agile Processes
- 1.4. Agile Methodologies for Advanced Web Application Development
 - 1.4.1. Kanban Method
 - 1.4.2. Scrum and Scrumban
 - 1.4.3. DA Disciplined Agile
 - 1.4.4. Hybrid Methodologies
 - 1.4.5. Comparing Agile Methodologies
- 1.5. Web Development Projects: Planning Process
 - 1.5.1. Starting an Agile Project
 - 1.5.2. Agile Planning Process
 - 1.5.3. Gathering Requirements and User History
 - 1.5.4. Establishing Project Scope Using Agile Methods: Product Backlog
 - 1.5.5. Agile Tools to Prioritize Requirements

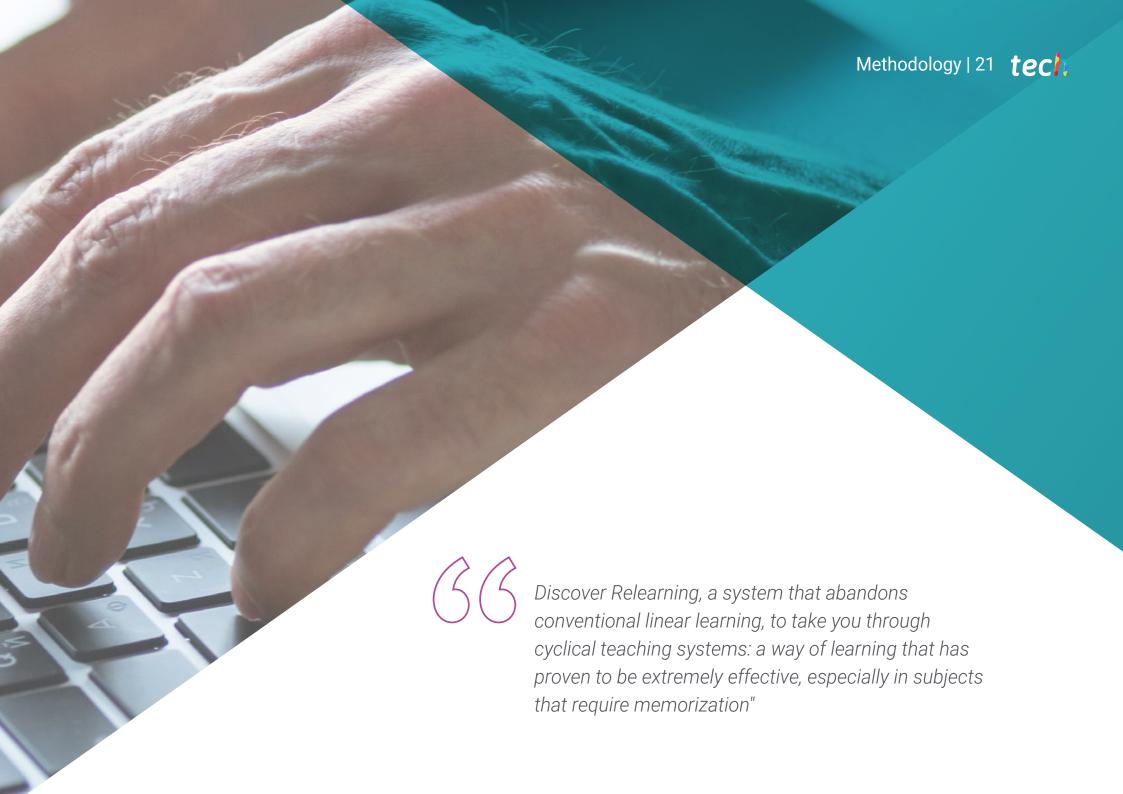




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- 1.6. Stakeholders in Agile Projects for Web Application Development
 - 1.6.1. Stakeholders in Agile Projects
 - 1.6.2. Promoting Effective Participation among Stakeholders
 - 1.6.3. Participatory Decision-Making
 - 1.6.4. Agile Knowledge Sharing and Gathering
- 1.7. Launch Plan and Estimate Creation
 - 1.7.1. Launch Plan
 - 1.7.2. Estimating User History Size
 - 1.7.3. Estimating Speed
 - 1.7.4. Agile Estimation Techniques
 - 1.7.5. User History Prioritization
- 1.8. Iterations Planning and Monitoring
 - 1.8.1. Iteration and Progressive Development
 - 1.8.2. Iteration Planning Process
 - 1.8.3. Creating Iteration Backlog
 - 1.8.4. Buffers and Agile Schedule
 - 1.8.5. Iteration Progress Monitoring
 - 1.8.6. Monitoring and Release Progress Report
- 1.9. Team Leadership in Web Application Development
 - 1.9.1. Agile Teams
 - 1.9.2. Agile Project Leader
 - 1.9.3. The Agile Team
 - 1.9.4. Virtual Agile Team Management
 - 1.9.5. Coaching for Team Performance Improvement
- 1.10. Value Management and Delivery in Web Development Projects
 - 1.10.1. Delivery Processes Focused on Value
 - 1.10.2. Product Quality
 - 1.10.3. Quality Agile Practices
 - 1.10.4. Risk Management
 - 1.10.5. Agile Contracts
 - 1.10.6. Value Added Management in Agile Projects





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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.



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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.



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4%

3%

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.





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This **Postgraduate Certificate in Agile Methodologies for Website Development** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery*.

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

Title: Postgraduate Certificate in Agile Methodologies for Website Development Official N° of Hours: 150 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.

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