

Postgraduate Certificate

Continuous Integration Deployments for Mobile Application Development





Postgraduate Certificate Continuous Integration Deployments for Mobile Application Development

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

Website: www.techtute.com/in/information-technology/postgraduate-certificate/continuous-integration-deployments-mobile-application-development

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Methodology

p. 20

06

Certificate

p. 28

01

Introduction

Application development and software for mobiles is increasingly complex and poses a major challenge that commonly involves different teams deployed, and one of the main causes of delay in delivery is the implementation of manual processes. This is where the importance of automation and the whole cycle called Continuous Integration and Deployment lies, for which the professional, at the time of implementation, must consider the implications that arise in different areas of the software. For this reason, an exclusive program on the subject has been designed, to be developed in 6 weeks and with the most avant-garde methodology 100% online.





“

*Learn how to implement automation
in mobile application development.
Enroll now and qualify in 6 weeks”*

Implementing Continuous Integration Deployments implies using an agile methodology that translates into working quickly and trying to reduce the range of errors to the minimum. It is a descriptive and literal development, based on the continuous testing of the code to be able to integrate little by little the improvements or to be updated daily to obtain a much more reliable result and in a shorter period of time.

This Postgraduate Certificate aims to provide professionals with the most outstanding techniques and tools, regarding the implementation of Continuous Integration Deployment for Mobile Application Development, achieving a software with a solid and short delivery cycle that will result in advantages such as: being more stable, as errors between versions are more easily identifiable due to fewer changes introduced between cycles; being better for users, as they benefit from continuous improvements and corrections; being better for the company, as the software responds more easily to business changes.

Throughout 6 weeks the students will delve into determining the worst-case scenario that may give rise to the need for this methodology, will specify the requirements that the software to be integrated must meet, will understand what is continuous integration, continuous delivery and continuous deployment; likewise, they will analyze DevSecOps, continuous monitoring and learn to develop the implementations of the different stages.

All this is described in a specialized syllabus, developed by experts in the field, computer engineers with more than 25 years of experience in the IT sector. Together with a 100% online methodology, with innovative study systems, such as problem-based learning, Relearning and the variety of formats in which the content is presented, make the process much more dynamic and practical.

This **Postgraduate Certificate in Continuous Integration Deployments for Mobile Application Development** contains the most complete and up-to-date program on the market. The most important features include:

- ◆ The development of practical cases presented by experts in Mobile Application Development
- ◆ The graphic, schematic, and practical contents with which they are created, provide practical information on the disciplines that are essential for professional practice
- ◆ Practical exercises where self-assessment can be used to improve learning.
- ◆ Its special emphasis on innovative methodologies
- ◆ Theoretical lessons, questions for experts and individual reflection work
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



TECH at the forefront of education offers you the most specialized content on Continuous Integration Deployments for Mobile Application Development in this program"



Learn how to perform dynamic analysis security testing with DevSecOps"

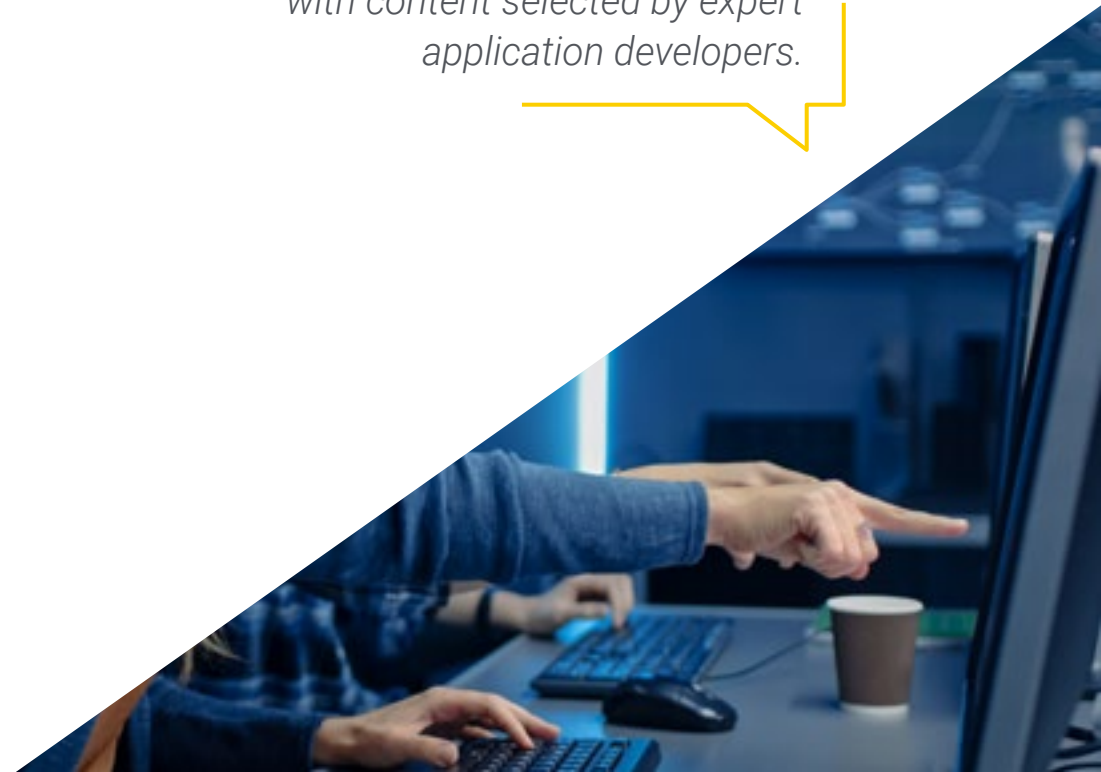
The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will allow professionals to learn in a contextual and situated learning environment, i.e., a simulated environment that will provide immersive education programmed to prepare in real situations.

The design of this program focuses on Problem-Based Learning, by means of which professionals must try to solve the different professional practice situations that are presented to them throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

Understand the benefits of software with a strong and short delivery cycle. And master the tools to develop it in a few weeks.

TECH Technological University offers the most specific program, with content selected by expert application developers.



02

Objectives

In the midst of the need to deliver faster and with higher quality, application developers must implement agile methodologies and that is why this program aims to determine the different stages of a continuous integration cycle and to support the need for each one of them in productive environments, shaping professionals towards a development adequate to the needs and demands of today's market, generating more efficient projects and therefore, achieving greater success with a future outlook.



“

Adapting to the needs and demands of the environment makes professionals capable of generating more efficient results”



General Objectives

- ◆ Analyze user needs and behavior in relation to mobile devices and their applications
- ◆ Execute the design of architectures, iterations and user interfaces through the programming languages of the most representative mobile platforms on the market (Web, iOS and Android)
- ◆ Apply error control, testing and debugging mechanisms in mobile application development
- ◆ Address different practical and business cases for publishing, distributing and disseminating mobile applications in the main application markets
- ◆ Master the practical knowledge to plan and manage technology projects related to mobile technologies
- ◆ Develop the skills, aptitudes and tools necessary to learn to develop mobile applications in an autonomous and professional manner, on multi-platform devices
- ◆ Explore content related to app monetization and mobile marketing





Specific Objectives

- ◆ Determine the worst-case scenario that may give rise to the need for this methodology
- ◆ Specify the requirements that the software must meet to be integrated
- ◆ Establish what is continuous integration, continuous delivery and continuous deployment
- ◆ Analyze DevSecOps
- ◆ Examine continuous monitoring
- ◆ Develop the implementations of the different stages

“

If you are someone who is always looking for the best opportunities. This program is for you"

03

Course Management

This refresher program, which will benefit all professionals working in IT environments, has been designed under the perspective of teachers with more than 25 years of experience in the industry of application development, in the field of new technologies, solution architecture and digital infrastructure, who have been chosen by TECH to accompany the student throughout the learning process, through various multimedia resources: meeting rooms, personalized chats, videos, forums and communities of experts, allowing easy access to content and communication.





“

This refresher program has been designed by professionals with more than 2 decades of experience in IT solutions”

Management



Mr. Olalla Bonal, Martín

- ♦ Senior Blockchain Practice Manager at EY.
- ♦ Blockchain Client Technical Specialist for IBM.
- ♦ Director of Architecture for Blocknitive
- ♦ Non-Relational Distributed Databases Team Coordinator for wedoIT (IBM Subsidiary)
- ♦ Infrastructure Architect at Bankia
- ♦ Head of Layout Department at T-Systems
- ♦ Department Coordinator for Bing Data España SL.

Professors

Dr. Ceballos van Grieken, Ángel

- ♦ Researcher specialized in the application of ICTs in education
- ♦ Author of the Project for the Creation of Educational Contents for Mobile Devices
- ♦ Teacher in postgraduate studies related to ICTs
- ♦ Teacher in university studies related to Computer Science
- ♦ Doctor in Education from Los Andes University
- ♦ Specialist in Educational Informatics, Simón Bolívar University



04

Structure and Content

In order to learn all about Continuous Integration Deployments for Mobile Application Development, TECH has designed an exclusive program with the most up-to-date and functional content for all those computer scientists who want to raise their level of professionalism. A syllabus described in depth, with multiple multimedia resources and practical-theoretical material that will make the learning process much more dynamic and agile, suitable for a 100% online methodology based on Relearning, which will also be available from the first day and with the option to download it for consultation whenever necessary.



Android Studio
Version 3.3

lio project



The syllabus is developed with a 100% online methodology based on Relearning, which allows for easy and efficient learning"

Module 1. Continuous Integration Deployments for Mobiles

- 1.1. Software Life Cycle
 - 1.1.1. Software Life Cycle
 - 1.1.2. Agile Methodologies
 - 1.1.3. The Continuous Agile Software Cycle
- 1.2. Manual Product Development
 - 1.2.1. Manual Integration
 - 1.2.2. Manual Delivery
 - 1.2.3. Manual Deployment
- 1.3. Supervised Integration
 - 1.3.1. Continuous Integration
 - 1.3.2. Supervised Integration. Manual Revision
 - 1.3.3. Static Automatic Revisions
- 1.4. Logical Tests
 - 1.4.1. Unit Tests
 - 1.4.2. Integration Tests
 - 1.4.3. Behavior Tests
- 1.5. Continuous Integration
 - 1.5.1. Continuous Integration Cycle
 - 1.5.2. Dependencies between Integrations
 - 1.5.3. Continuous Integration as a Repository Management Methodology
- 1.6. Continuous Delivery
 - 1.6.1. Continuous Delivery
 - 1.6.2. Continuous Delivery Solutions
 - 1.6.3. Continuous Delivery. Advantages



- 1.7. Continuous Deployment
 - 1.7.1. Continuous Deployment
 - 1.7.2. Continuous Deployment Solutions
 - 1.7.3. Continuous Deployment. Typology
- 1.8. DevSecOps
 - 1.8.1. DevSecOps Use
 - 1.8.2. Static Analyzers
 - 1.8.3. Dynamic Analysis Safety Tests
- 1.9. Continuous Monitoring
 - 1.9.1. Continuous Monitoring
 - 1.9.2. Continuous Monitoring. Analysis and Advantages
 - 1.9.3. Continuous Monitoring. Platforms
- 1.10. Implementation
 - 1.10.1. Local Machine Implementation
 - 1.10.2. Shared Machine Implementation
 - 1.10.3. Cloud-Based Implementation
 - 1.10.4. Configuration Management



Enroll now and study for 6 weeks from the comfort of your favorite internet-enabled device"

05 Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.



“

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

Case Study to contextualize all content

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

“

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



You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.



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

A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and professional reality is taken into account.

“*Our program prepares you to face new challenges in uncertain environments and achieve success in your career”*

The case method has been the most widely used learning system among the world's leading Information Technology schools for as long as they have existed. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question that you are presented with in the case method, an action-oriented learning method. Throughout the course, students will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

Relearning Methodology

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

We enhance the Case Study with the best 100% online teaching method: Relearning.

In 2019, we obtained the best learning results of all online universities in the world.

At TECH you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our university is the only one in the world authorized to employ this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

This methodology has trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, and financial markets and instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.



This program offers the best educational material, prepared with professionals in mind:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

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



Practising Skills and Abilities

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



Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Case Studies

Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best specialists in the world.



Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



06

Certificate

The Postgraduate Certificate in Continuous Integration Deployments for Mobile Application Development guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.





“

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

This **Postgraduate Certificate in Continuous Integration Deployments for Mobile Application 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 Continuous Integration Deployments for Mobile Application 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.

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



Postgraduate Certificate Continuous Integration Deployments for Mobile Application Development

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

Postgraduate Certificate

Continuous Integration Deployments for Mobile Application Development

