Postgraduate Certificate
Interfaces and Layouts Applied to Android Application Development

tech technological university

Postgraduate Certificate
Interfaces and Layouts Applied to Android Application Development

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

Website: **www.techtitute.com/pk/information-technology/postgraduate-certificate/interfaces-layouts-applied-android-application-development**
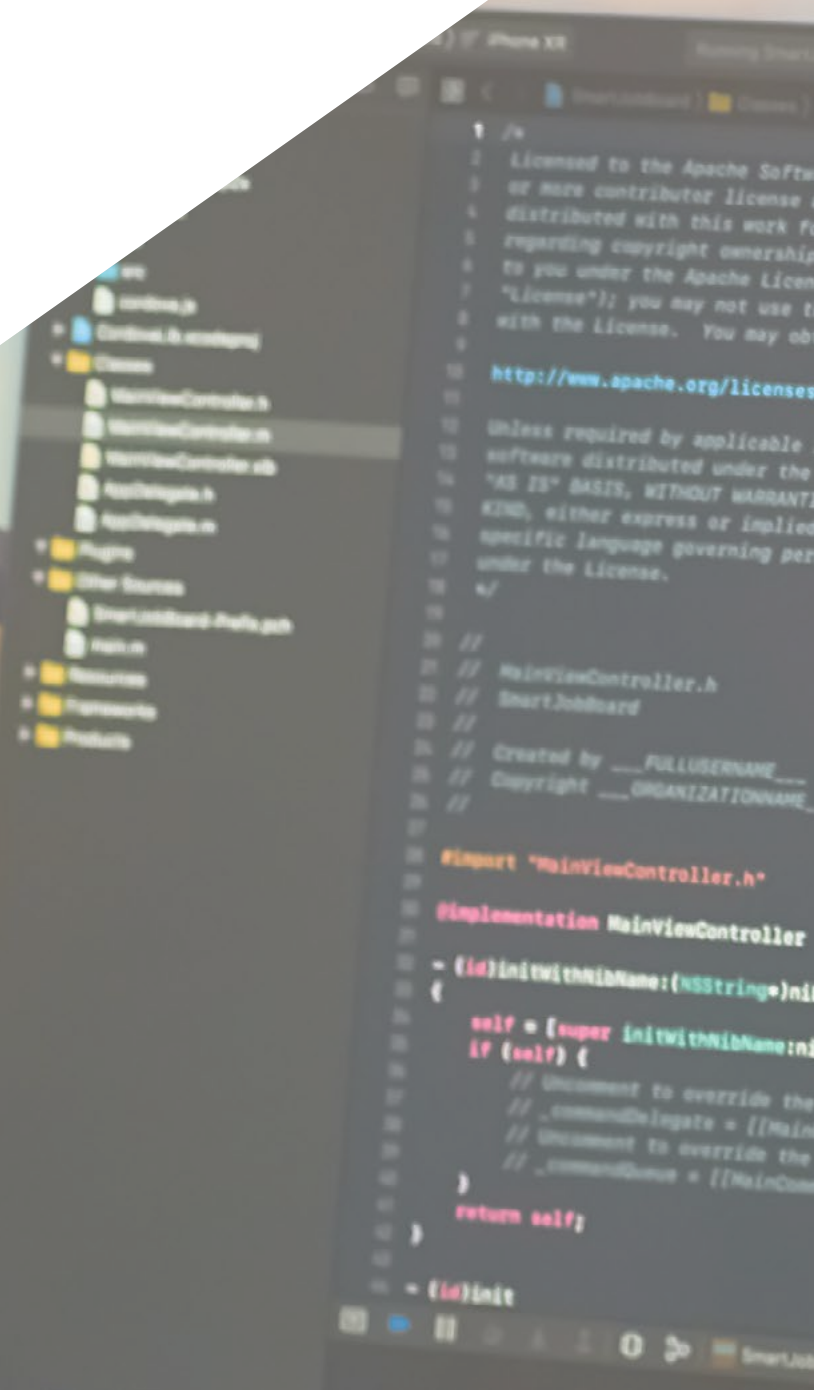
Index

01
Introduction

Android is currently by far the most widely used mobile operating system in the world. This fact, coupled with the rapid evolution of devices, creates a need for constant updating of technical architectures and application interfaces. The aim of this program is to bring together the necessary knowledge to enable the computer scientist to create style libraries and reusable elements, optimizing their work and saving time and effort. All this through a fluid methodology, with up-to-date and dynamic content all 100% online.

> *Improve your knowledge at the same pace as mobile technology"*

The development of new technologies, especially linked to mobile devices, seems to have no limits. Today, more than half of the world's population has a phone with Internet access, and within this figure, a high percentage are Android users. The demands of device owners to have a device with a comfortable, simple and practical interface are becoming more and more frequent, which is the reason why programs such as the Postgraduate Certificate in Interfaces and Layouts Applied to Android Application Development.

Knowing, from a strictly technological point of view, the different types of interfaces and designs available in this operating system, will allow the computer scientist to generate style libraries and reusable elements. You will be able to explore the advantages this brings to a professional creation, especially with regard to the use of themes and their applicability to designs for virtual and augmented reality.

In addition to its constant evolution, it is important to highlight that this sector is booming. For this reason, the demand for properly qualified professionals in the field is high and having the necessary knowledge will allow you to complete and update your CV.

In addition to this, TECH is committed to offer a 100% online education, that enables the continuity of the student's professional career while at the same time investing in their future with a Postgraduate Certificate adapted to the sector and taught by an expert with extensive experience.

This **Postgraduate Certificate in Interfaces and Layouts Applied to Android Application Development** contains the most complete and up-to-date program on the market. The most important features include:

- Case studies presented by computer science experts focused on Android interface design
- 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 the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

Invest in your future with TECH and improve your employability with professionals in the sector"

Developing a professional and up-to-date extensible technical architecture is possible thanks to this Postgraduate Certificate.

Analyze and learn about interface design strategies from a strictly technological point of view.

" *Learn how to generate style libraries and reusable elements in different applications"*

The program includes, in its teaching staff, professionals from the sector who bring to this program the experience of their work, in addition to recognized specialists from prestigious reference societies and 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 knowledge programmed to learn 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 throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

02
Objectives

Although knowledge in the area of mobile interface design, in this case Android, is extensive, the main objective of this program is to synthesize information in a clear and concise, yet complete way, creating quality content. TECH intends with this Postgraduate Certificate that the computer scientist will be able to identify designs and interfaces to be able to apply them in augmented virtual reality.

That is, to be able to apply what was learned in the program easily and successfully.

TECH gives you the knowledge you need to develop your own strategy"

General Objectives

- Determine the types of interfaces and designs (*Layout*) available
- Examine the characteristics of each of the existing layouts
- Analyze when to use and when to avoid each of the layouts
- Establish how to create styles and themes including virtual reality themes

Our priority is to ensure that education is always direct, clear and of high quality. Perfect to be able to put it into practice"

Specific Objectives

- Introduce the view lifecycle model in Android
- Examine the most important attributes of a visual design (layout)
- Analyze available layout designs
- Create a reusable layout designs
- Determine how to use alternative resources
- Identify the differences in the use of these components compared to other programming systems
- Establish the potential and use of the AndroidManifest.xml file

03
Course Management

In order to offer quality content that meets the demands of the students, it is necessary to have the best professionals in the IT sector. For this reason, TECH selects expert and specialized teachers in the field, capable of transmitting the necessary information to master the subject while providing a personal and unique vision through their own experience. Sharing, through their professional background, their technical knowledge, provides a plus of dynamism and closeness, which favors and enriches the learning process.

The experience of our expert teachers will help you learn about a different reality that does not appear in the theoretical manuals"

International Guest Director

Colin Lee is a **successful mobile application developer**, specializing in **native Android code**, whose influence extends internationally. The Postgraduate Diploma is an **authority in the Twin Cities area and in the handling of Kotlin**. One of his most recent contributions was to demonstrate, in live code, how to **quickly build a browser** using the aforementioned programming language and Mozilla's open source browser components for Android.

In addition, his applications have been linked to globally significant companies. For example, he was in charge of **creating digital solutions for Pearson**, one of the largest international publishers. He also developed a low-level Android video recorder for the startup Flipgrid, later acquired by Microsoft.

He also built a successful Android VPN for a large **client in the consulting world**. In turn, he is the creator of a freight management tool implemented by the transnational **Amazon** to facilitate the work of its contracted truckers. On the other hand, he has helped build the **mobile versions of the Firefox browser** for Mozilla.

Today, he performs work as a contractor, including **code reviews and security checks**. His impact on mobile application development and his experience over the years make him a leading figure in the global technology arena.

Mr. Lee, Colin

- Director at ColinTheShots LLC
- Android Software Engineer for Specto Inc.
- Senior Android Engineer for Mozilla
- Software Development Engineer for Amazon
- Mobile Application Engineer for Flipgrid
- Software Configuration Specialist for Pearson VUE
- Bachelor's Degree from the University of Florida

Thanks to TECH you will be able to learn with the best professionals in the world"

Management

Mr. Olalla Bonal, Martín

- Current Blockchain Technical Specialist at IBM SPGI
- Digital Electronics Technician
- Blockchain Architect
- Infrastructure Architect in Banking
- Hyperledger Fabric training to companies
- Business-oriented companies Blockchain training
- Project management and implementation of solutions
- More than 25 years of experience in the IT world

Professors

Mr. Villot Guisán, Pablo

- Cloud Architect, Exponential Solutions and Subject Mater Expert Blockchain at KPMG
- Cloud Architect, Exponential Solutions and Subject Mater Expert Blockchain Integration at Everis
- Developer and Technical Manager of web and heavy desktop applications for the Commercial Logistics area of Inditex, Connectis
- Degree in Computer Engineering from the University of La Coruña
- Microsoft MSCA certification: Cloud Platform

Mr. Noguera Rodríguez, Pablo

- Native App Developer (iOS & Android)- Starman Aviation (Aviaze App)
- Native App Developer (iOS) - Stef (Mtrack App)
- Native App Developer (iOS & Android) - Bitnovo (Bitnovo App)
- Expert Java Developer: JSE, JEE and Android - Ilabora Formación
- Android Applications Programming - EOI - Madrid

Mr. Guerrero Díaz-Pintado, Arturo

- Professional services consultant working with leading-edge organizations in Europe, the Middle East and Latin America since IBM
- Outstanding collaborations in renowned universities and higher education centers in subjects related to technology such as Artificial Intelligence, Internet of Things, Cloud, Customer Experience and Digital Transformation
- Technical Presales Engineer across Watson Customer Engagement portfolio (Marketing and Customer Experience solutions) within Spain, Portugal, Greece and Israel at IBM
- R&D Network Engineer at Telefónica
- Graduate in Telecommunications Engineering from the University of Alcalá and the Danish Technical University

Mr. Pérez Rico, Javier

- Current Android Technical Lead at Nologis
- Android Technical Lead at Seekle
- Androif programmer at Gowex-Ideup
- Junior Android Programmer at Tecnocom
- Speaker at the II iTest Symposium, E@tic2011
- Degree in Technical Computer Engineering of Systems at the Complutense University of Madrid
- Master's Degree in Research at the Complutense University of Madrid

Mr. Jiménez Pérez, Carlos

- Senior Android Developer at OnTheSpot - Telefónica Tech
- Automatic and Electronic Engineering
- Master's Degree in Electronic Systems and Applications Engineering
- Associate Professor at Carlos III University of Madrid

Mr. Marcano Van Grieken, Alejandro Antonio

- Product Manager - Vikua, Remote (Jira, SCRUM, Figma, Slack, Notion)
- Backend Developer - InnovativeGX
- Systems Engineering Degree, Metropolitan University of Caracas, Venezuela
- Master in Cybersecurity, University of León Online

Mr. Arevalillo González, Emilio

- DBA Oracle BBVA
- Assistant Project Manager Archibus Solution Center Spain
- Backend developer atTelefónica I+D
- Degree in Computer Engineering from the Polytechnic University of Madrid
- Master's Degree in Software and Systems from Polytechnic University of Madrid

Mr. Arranz, Héctor

- Software Project Manager at Ezenit
- Degree in Software Engineering at the Complutense University of Madrid
- Master MBA Power Leaders by The Power MBA Teaching Experience
- Digital skills trainer at Three Life
- Digital skills trainer at Fundacion Esplai
- Assistant professor of the multi-platform application development degree at MEDAC
- Support for entrepreneurship work at Complutense University of Madrid
- Digital skills trainer at Three Life and Fundacion Esplai
- Entrepreneurship consultant at Cink Venturing
- Adjunct professor of the multiplatform application development degree at MEDAC

04

Structure and Content

TECH prioritizes learning in a comfortable and adapted way, so the content of this program has been designed in such a way that the computer scientist can customize the course based on their availability. Its structure organized in blocks will make the learning process a dynamic and easy-to-study experience.

"

A curriculum that is adapted, organized and in which the computer scientist sets their own pace"

Module 1. Interfaces and Layouts in Android Application Development

1.1.   Android Interface Lifecycle
    1.1.1.   Android Lifecycle
    1.1.2.   Process-Activity Relationship
    1.1.3.   Application State Persistence
    1.1.4.   Clean Architecture Applied to Android

1.2.   Views in Android Application Development (Views)
    1.2.1.   Clean Architecture Presentation Layer
    1.2.2.   Recycler View
    1.2.3.   Adapter View

1.3.   Designs in Android Application Development (Layouts)
    1.3.1.   Layouts in Android
    1.3.2.   Constraint Layout
    1.3.3.   Creating Layouts Using Android Studio Layout Editor

1.4.   Animations in Android Application Development (Animations)
    1.4.1.   Icons and Images
    1.4.2.   Transitions
    1.4.3.   Difference between Property Animation and View Animation

1.5.   Activities and Intentions in Android Application Development (Activity and Intentions)
    1.5.1.   Explicit and Implicit Intentions
    1.5.2.   Action Bar
    1.5.3.   Communication between Activities

1.6.   Alternative and System Resources (Material Design, Cardboard, etc.)
    1.6.1.   Material Design for Android
    1.6.2.   Multimedia in Android
    1.6.3.   Virtual Reality with Google Cardboard for Android NDK

*A program designed on the basis of
to the current needs of the sector"*

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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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 adapted in 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.
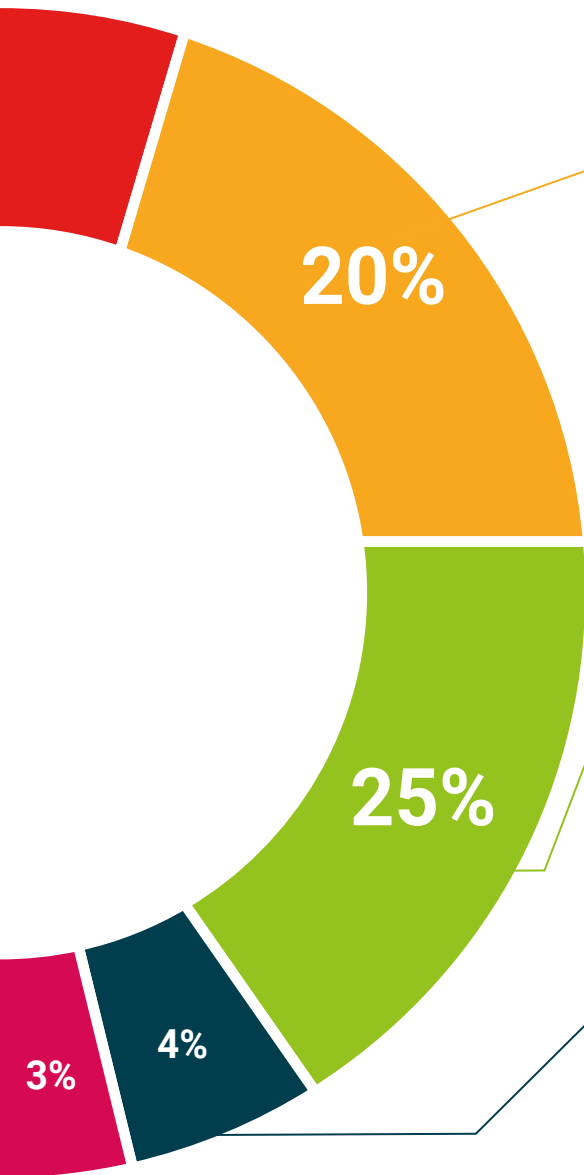
Practising Skills and Abilities

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 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.

20%

25%

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.

06
Certificate

The Postgraduate Certificate in Interfaces and Layouts Applied to Android 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 Interfaces and Layouts Applied to Android 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 Interfaces and Layouts Applied to Android Application Development**

Official Nº of Hours: **150 h.**

tech technological university

Awards the following
CERTIFICATE
to

Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE CERTIFICATE
in
Interfaces and Layouts Applied to Android Application Development

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

Unique TECH Code: AFWORD23S   techtitute.com/certificates

*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.

tech technological university

Postgraduate Certificate
Interfaces and Layouts Applied to Android Application Development

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

Postgraduate Certificate
Interfaces and Layouts Applied to Android Application Development

tech *technological university*