

# Postgraduate Certificate Emerging Technologies





## Postgraduate Certificate Emerging Technologies

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

Website: [www.techtute.com/pk/information-technology/postgraduate-certificate/emerging-technologies](http://www.techtute.com/pk/information-technology/postgraduate-certificate/emerging-technologies)

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# 01

# Introduction

Innovation is the basis of Computer Science, because new technologies are continually emerging, which are improvements in Computer Science that facilitate the work in different areas. The Emerging Technologies program aims to provide students with an up to date and transversal vision of these new developments in the field of Computer Science. This program will allow professionals to acquire a broad vision in this field to develop quality work



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*IT professionals must continue their specialization to adapt to new developments in this field"*

The teaching team of this Postgraduate Certificate in Emerging Technologies has carefully selected each of the topics of this program to offer the student the most complete study opportunity possible, always in relation to current events.

The program focuses on mobile technologies and services, user experience design, extended reality, internet of things, Blockchain or automated driving, among other aspects.

This program provides students with specific tools and skills to successfully develop their professional activity in the broad environment of emerging technologies. Develop key competencies such as knowledge of the reality and daily practice in different IT areas and develop responsibility in the monitoring and supervision of their work, as well as specific skills within this field.

Additionally, as it is a 100% online program, the student is not constrained by fixed schedules or the need to move to another physical location, but can access the contents at any time of the day, balancing their professional or personal life with their academic life.

This **Postgraduate Certificate in Emerging Technologies** contains the most complete and up-to-date program on the market. The most important features include:

- ♦ The development of case studies presented by experts in IT Engineering
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and 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 in Emerging Technologies
- ♦ 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



*Don't miss the opportunity to take this Postgraduate Certificate in Emerging Technologies with us. It's the perfect opportunity to advance your career"*

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*This Postgraduate Certificate is the best investment you can make in selecting a professional program to upgrade your knowledge in Emerging Technologies”*

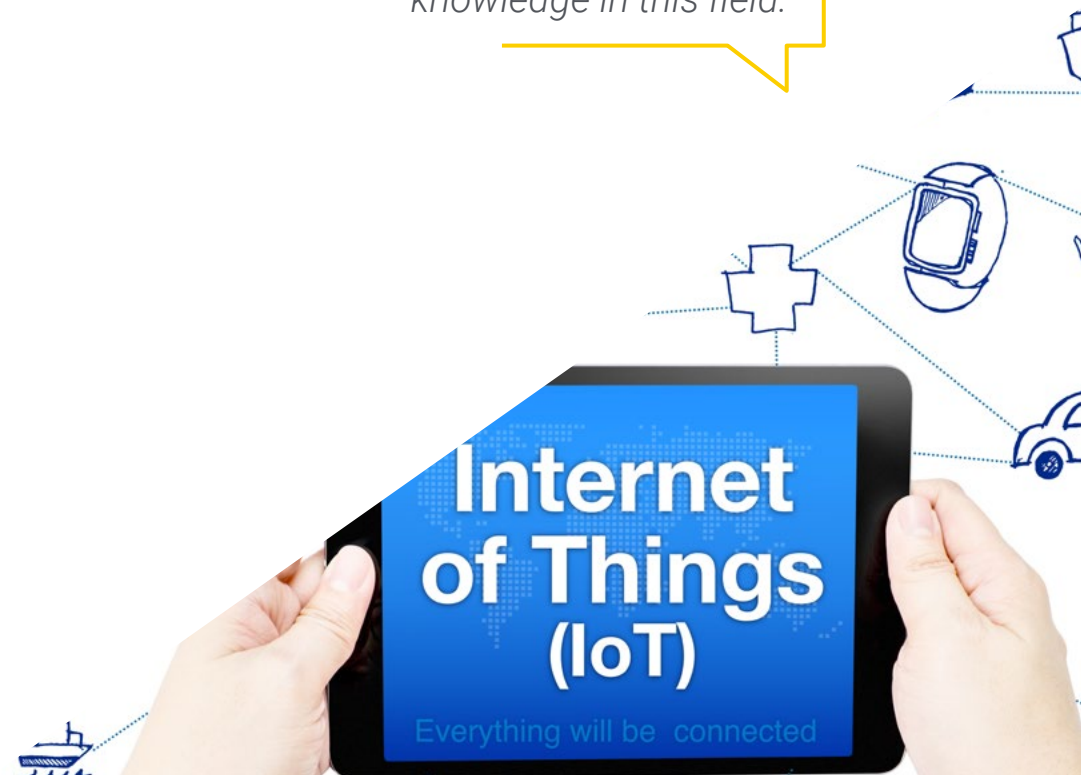
It includes in its teaching staff professionals belonging to the field of education, who bring to this program their work experience, in addition to recognized specialists belonging to reference societies and prestigious universities.

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 an immersive program designed 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 professional will be assisted by an innovative interactive video system developed by renowned experts in Emerging Technologies with extensive experience in the field.

*This Postgraduate Certificate has the best teaching material, which will allow you a contextual study that will facilitate your learning.*

*This 100% online Postgraduate Certificate will allow you to balance your studies with your professional work while increasing your knowledge in this field.*



# 02 Objectives

The Postgraduate Certificate in Emerging Technologies is designed to facilitate the performance of the professionals in this field and enable them to master the main developments in this IT field.





```
1  /*  
2  * CSSReset.COM - How To Keep Footer At Bottom of Page with CSS  
3  *  
4  * Original Tutorial: http://www.cssreset.com/2010/css-tutorials/how-to-keep-footer-at-bottom-of-page-with-css/  
5  * License: Free - do whatever you like with it! Credit and linkbacks  
6  *  
7  * NB: Make sure the value for 'padding-bottom' on #content is equal  
8  */  
9  html,  
10 body {  
11     margin: 0;  
12     padding: 0;  
13     height: 100%;  
14 }  
15  
16 #wrapper {  
17     min-height: 100%;  
18     position: relative;  
19 }  
20 #header {  
21     background: #ededed;  
22     padding: 0px 0px 0px 0px;  
23 }  
24 #content {  
25     padding-bottom: 300px; /* Height of the footer element */  
26 }  
27 #footer {  
28     background: #1A1D20;  
29     height: 300px;  
30     position: absolute;  
31     bottom: 0;  
32     left: 0;  
33     width: 100%;  
34 }  
35 footercopyright {  
36     text-align: left;  
37     font-size: 15px;  
38     padding: 30px 0px 0px 0px;  
39 }  
40 contactfooter {  
41     text-align: left;  
42     font-size: 20px;  
43     padding: 15px;  
44     color: #02b2b2;  
45 }
```

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*This is the best option to learn about the latest developments in Emerging Technologies"*



### General Objective

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- ♦ Prepare scientifically and technologically, as well as to develop the professional practice of Emerging Technologies, with a transversal and versatile approach adapted to the new technologies and innovations in this field



*Take the step to get up to date  
on the latest developments in  
Emerging Technologies"*





## Specific Objectives

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- ◆ Knowledge of the different mobile technologies and services currently available in the market
- ◆ Learn how to design user experiences adapted to the new emerging technologies available today
- ◆ Know the new developments in the world of extended reality, with AR and VR applications and services, as well as location-based services
- ◆ Understand how the Internet of Things (IoT) works, its fundamentals, main components, cloud computing and smart cities
- ◆ Acquire the basic knowledge to understand the fundamentals of blockchain and blockchain-based applications and services
- ◆ Learn the latest innovative technologies and the basics of research

03

# Structure and Content

The structure of the contents has been designed by the best professionals in the field of Computer Engineering, with extensive experience and recognized prestige in the profession.





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*We have the most complete and up-to-date educational program on the market. We strive for excellence and for you to achieve it too"*

## Module 1. Emerging Technologies

- 1.1. Mobile Technologies
  - 1.1.1. Mobile Devices
  - 1.1.2. Mobile Communications
- 1.2. Mobile Services
  - 1.2.1. Types of Applications
  - 1.2.2. Decision on the Type of Mobile Application
  - 1.2.3. Mobile Interaction Design
- 1.3. Location-based Services
  - 1.3.1. Location-based Services
  - 1.3.2. Technologies for Mobile Localization
  - 1.3.3. GNSS-based Localization
  - 1.3.4. Precision and Accuracy in Localization Technologies
  - 1.3.5. Beacons: Location by Proximity
- 1.4. User Experience (UX) Design
  - 1.4.1. Introduction to User Experience (UX)
  - 1.4.2. Technologies for Mobile Localization
  - 1.4.3. Methodology for UX Design
  - 1.4.4. Best Practices in the Prototyping Process
- 1.5. Extended Reality
  - 1.5.1. Extended Reality Concepts
  - 1.5.2. Technologies for Mobile Localization
  - 1.5.3. AR and VR Application and Services
- 1.6. The Internet of Things (IoT) I
  - 1.6.1. IoT Fundamentals
  - 1.6.2. IoT Devices and Communications





- 1.7. The Internet of Things (IoT) II
  - 1.7.1. Beyond Cloud Computing
  - 1.7.2. (Smart Cities)
  - 1.7.3. Digital Twins
  - 1.7.4. IoT Projects
- 1.8. Blockchain
  - 1.8.1. Blockchain Fundamentals
  - 1.8.2. Blockchain-based Applications and Services
- 1.9. Autonomous Driving
  - 1.9.1. Technologies for Autonomous Driving
  - 1.9.2. V2X Communications
- 1.10. Innovative Technology and Research
  - 1.10.1. Fundamentals of Quantum Computing
  - 1.10.2. Applications of Quantum Computing
  - 1.10.3. Introduction to Research

“ *This program will allow you to advance in your career comfortably* ”

# 04 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.



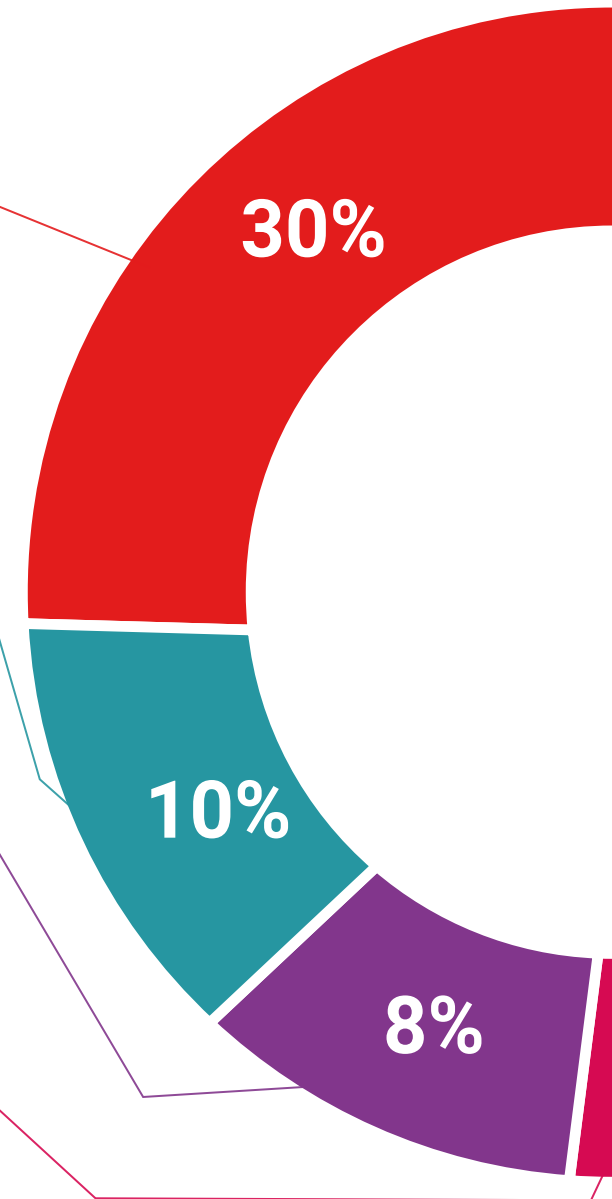
#### Practising Skills and Abilities

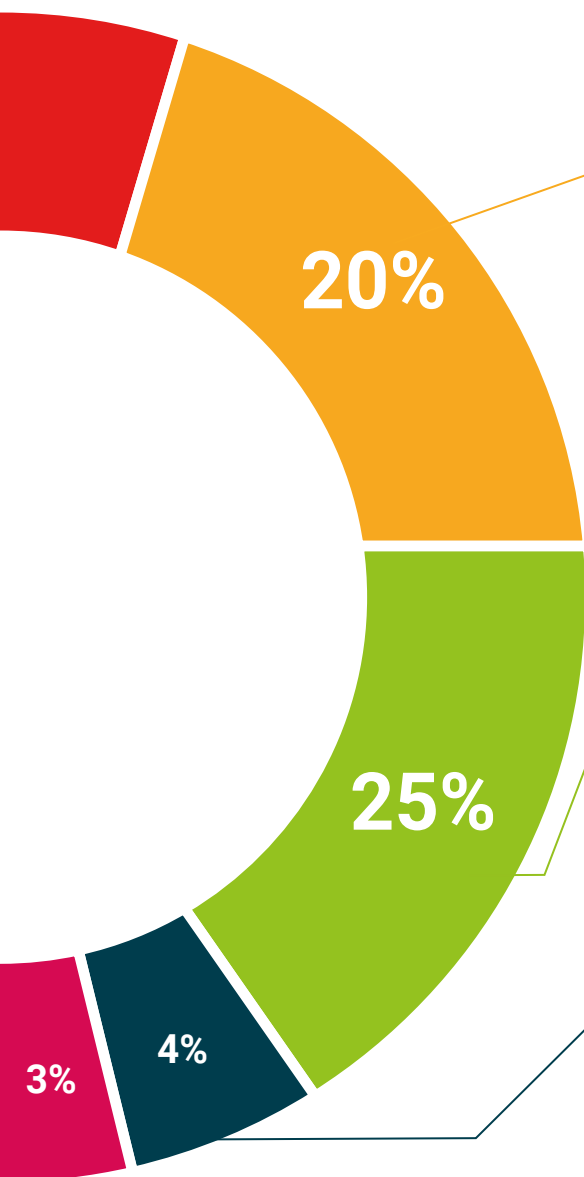
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



#### 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.



# 05 Certificate

The Postgraduate Certificate in Emerging Technologies guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Emerging Technologies** 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 Emerging Technologies**

Official N° of Hours: **150 h.**





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