

# Postgraduate Diploma

## Secure Software Architectures and DevOps



## Postgraduate Diploma Secure Software Architectures and DevOps

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Accreditation: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/information-technology/postgraduate-diploma/postgraduate-diploma-secure-software-architectures-devops](http://www.techtute.com/us/information-technology/postgraduate-diploma/postgraduate-diploma-secure-software-architectures-devops)

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# 01

# Introduction to the Program

In a highly interconnected digital world, security in software development and deployment has become a priority for organizations and governments worldwide. According to a report by the National Institute of Standards and Technology (NIST), more than 60% of vulnerabilities in business applications arise due to deficiencies in software architecture and errors in the development lifecycle management. In this context, TECH has designed this postgraduate program to provide the knowledge necessary to lead technology projects with the highest security standards. Through a 100% online methodology and an innovative syllabus, specialists will take a step forward in building secure and scalable software.





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*Boost your career with a 100% online Postgraduate Diploma designed to specialize in resilient infrastructure, automation, and cybersecurity. Enroll now and take the next step toward excellence!”*

Secure software architectures and DevOps are essential to ensuring the reliability and protection of digital systems in an environment where cyber threats are constantly evolving. In this regard, data protection and regulatory compliance stand out as key aspects, as they prevent security breaches that could expose sensitive information and ensure compliance with regulations such as GDPR, HIPAA, and ISO 27001.

Given this context of innovation, TECH has designed this program in Secure Software Architectures and DevOps that will provide completely up-to-date knowledge in this field. Through a comprehensive and optimized approach, this syllabus will cover a variety of essential content, including microservice design, cloud security, deployment automation, and the application of DevSecOps strategies. It will also delve into the use of advanced tools such as Docker, Kubernetes, Jenkins, and Terraform. In this way, professionals will master best practices in integration and continuous delivery with a focus on cybersecurity. In turn, they will excel in building resilient infrastructures optimized for modern business environments.

By acquiring this key knowledge, graduates will be ready to work as software architects, DevOps engineers, cybersecurity consultants, or cloud infrastructure managers, significantly expanding their professional horizons in leading technology companies. They will also be able to optimize digital infrastructures, minimize vulnerabilities, and ensure data security.

Thanks to its 100% online format, this program will facilitate independent learning without neglecting work or personal responsibilities. Similarly, TECH has implemented the Relearning methodology, based on the strategic repetition of key concepts to promote more effective and lasting understanding. With 24/7 access to materials from any device, students will be able to organize their learning process flexibly, ensuring an innovative learning experience tailored to their needs.

This **Postgraduate Diploma in Secure Software Architectures and DevOps** 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 Software
- ♦ 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 the self-assessment process can be carried out to improve learning
- ♦ Special emphasis on innovative methodologies in Secure Software Architectures and DevOps
- ♦ 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



*Become an expert in DevSecOps, microservices, and cloud security with this university program! You will study at your own pace, with unlimited access to the content"*

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*You will learn from experts in cybersecurity, cloud computing, and microservices in a program that combines theory and practice. You will acquire specialized skills to lead projects”*

The teaching staff includes professionals from the field of software, who bring their work experience to this program, as well as renowned specialists from leading companies 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 learning experience designed to prepare for real-life situations.

This program is designed around Problem-Based Learning, whereby the student 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 created by renowned and experienced experts.

*In this program, you will access up-to-date content and innovative methodologies that will propel you to stand out in the technology sector. Enroll and take your career to the next level!*

*With TECH, you will benefit from an up-to-date syllabus and a flexible methodology that adapts to you. What are you waiting for to enroll and stand out in cloud and on-premise environments?*





02

# Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it relies on an enormous faculty of more than 6,000 professors of the highest international renown.





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*Study at the world's largest online university  
and guarantee your professional success.  
The future starts at TECH”*

### The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

### The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

### The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.



### The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

### A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

#### The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

#### Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.



#### Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.



#### The top-rated university by its students

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.



# 03 Syllabus

Throughout this comprehensive educational program, professionals will cover everything from modern architectural models such as microservices and serverless computing to advanced security and automation strategies. They will then delve into scalable design, dependency management, applied cybersecurity, and DevSecOps implementation. In addition, they will address tools such as Docker, Kubernetes, and infrastructure as code to optimize deployments. All of this will enable graduates to develop efficient and secure systems aligned with market demands and best practices in technology.





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*You will be ready to tackle the current challenges of the technology industry, driving the development of reliable and sustainable digital solutions”*

## Module 1. Advanced Software Architecture for Seniors

- 1.1. Advanced Software Architecture
  - 1.1.1. Software Architecture
  - 1.1.2. Scalability and Modularity
  - 1.1.3. Modern Architecture Examples
- 1.2. Scalable and Advanced Software Design
  - 1.2.1. Horizontal and Vertical Scalability
  - 1.2.2. Load Balancing Strategies
  - 1.2.3. Design Patterns for Distributed Systems
- 1.3. Advanced Architectural Models
  - 1.3.1. Monolithic Architecture: Advantages and Disadvantages
  - 1.3.2. Microservice-Based Architecture
  - 1.3.3. Serverless: Case Studies and Limitations
- 1.4. Advanced Design Patterns
  - 1.4.1. Structural Patterns: Adapter, Facade
  - 1.4.2. Behavior Patterns: Observer, Strategy
  - 1.4.3. Creational Patterns: Singleton, Factory
- 1.5. UML Diagrams and Advanced Modeling
  - 1.5.1. UML Diagrams
  - 1.5.2. Class and Sequence Diagrams
  - 1.5.3. Distributed System Modeling
- 1.6. Advanced Dependency Management
  - 1.6.1. Principles of Dependency Injection
  - 1.6.2. Use of Inversion of Control (IoC) Containers
  - 1.6.3. Examples with Modern Frameworks
- 1.7. Middleware and Messaging
  - 1.7.1. Middleware
  - 1.7.2. Integration Using Message Queues
  - 1.7.3. Tools: RabbitMQ, Kafka
- 1.8. Advanced Event-Driven Architectures
  - 1.8.1. Event-Driven
  - 1.8.2. Reactive System Design
  - 1.8.3. Advantages and Challenges

- 1.9. Security in Software Architecture
  - 1.9.1. Authentication and Authorization Strategies
  - 1.9.2. Protection Against Common Attacks: SQL injection, XSS
  - 1.9.3. Role and Permission Management
- 1.10. Case Studies of Real Architectures
  - 1.10.1. Analysis of Real Architectures
  - 1.10.2. Evaluation of Architectural Decisions
  - 1.10.3. Lessons Learned from Successful Projects

## Module 2. Applied Cybersecurity for Seniors

- 2.1. Cybersecurity.
  - 2.1.1. Cybersecurity. Common Threats
  - 2.1.2. Importance of Cybersecurity in Software Development
  - 2.1.3. Key International Legislation and Regulations
- 2.2. Web Application Security
  - 2.2.1. Vulnerabilities According to OWASP
  - 2.2.2. Application Penetration Testing
  - 2.2.3. Strategies to Mitigate Common Attacks
- 2.3. Password Management and Authentication in Web Environments
  - 2.3.1. Best Practices in Password Management
  - 2.3.2. Implementation of Multi-Factor Authentication
  - 2.3.3. Secure Key Management
- 2.4. Encryption and Data Protection
  - 2.4.1. Symmetric and Asymmetric Encryption
  - 2.4.2. Implementation of SSL/TLS
  - 2.4.3. Cryptography in Databases
- 2.5. Secure Network and Firewalls in Web Environments
  - 2.5.1. Firewall Configuration
  - 2.5.2. Network Traffic Monitoring
  - 2.5.3. Use of VPNs for Secure Connections
- 2.6. API Security
  - 2.6.1. Token-Based Authentication
  - 2.6.2. Access Restriction via IPs
  - 2.6.3. Protection Against Brute Force Attacks



- 2.7. Auditing and Monitoring Systems in Web Environments
  - 2.7.1. Tools for Security Monitoring
  - 2.7.2. Log Analysis for Intrusion Detection
  - 2.7.3. Generating Security Reports
- 2.8. Response to Cyberattack Incidents
  - 2.8.1. Cyberattack Response Planning
  - 2.8.2. Damage Containment Procedures
  - 2.8.3. Recovery and Prevention of Future Incidents
- 2.9. Security in DevOps Environments
  - 2.9.1. DevSecOps
  - 2.9.2. Integration of Security Testing in CI/CD
  - 2.9.3. Automation of Security Audits
- 2.10. Cybersecurity Case Studies
  - 2.10.1. Simulation of Real Attacks
  - 2.10.2. Implementation of Defense Strategies
  - 2.10.3. Vulnerability Assessment in Real Projects

### Module 3. DevOps and Advanced Automation for Seniors

- 3.1. DevOps
  - 3.1.1. DevOps. Principles and Benefits
  - 3.1.2. DevOps Lifecycle: Development, Integration, Deployment
  - 3.1.3. Comparison with Traditional Models
- 3.2. Containers and Virtualization
  - 3.2.1. Differences Between Virtual Machines and Containers
  - 3.2.2. Docker: Installation and Commands
  - 3.2.3. Docker Container Creation and Management
- 3.3. Container Orchestration
  - 3.3.1. Kubernetes: Architecture and Components
  - 3.3.2. Cluster Creation and Administration
  - 3.3.3. Deployments and Services in Kubernetes
- 3.4. Continuous Integration (CI)
  - 3.4.1. Continuous Integration. Principles
  - 3.4.2. CI Pipeline Configuration with GitHub Actions
  - 3.4.3. Test and Build Automation



- 3.5. Continuous Delivery (CD)
  - 3.5.1. Continuous Delivery (CD)
  - 3.5.2. CD Pipeline Configuration
  - 3.5.3. Automated Deployment Tools
- 3.6. Infrastructure as Code (IaC)
  - 3.6.1. Terraform and Its Usefulness
  - 3.6.2. Cloud Infrastructure Management with IaC
  - 3.6.3. Practical Examples with Terraform and AWS
- 3.7. Monitoring and Logging in DevOps
  - 3.7.1. Monitoring in DevOps
  - 3.7.2. Tools such as Prometheus and Grafana
  - 3.7.3. Log Management with ELK Stack (Elasticsearch, Logstash, Kibana)
- 3.8. Security in DevOps (DevSecOps)
  - 3.8.1. Integrating Security Testing into Pipelines
  - 3.8.2. Vulnerability Scanning in Docker Images
  - 3.8.3. Configuration Auditing in Kubernetes Clusters
- 3.9. Performance and Scalability Testing
  - 3.9.1. Load Testing Tools (JMeter, Locust)
  - 3.9.2. Strategies for Assessing System Scalability
  - 3.9.3. Optimization Based on Test Results
- 3.10. Practical Application of a DevOps Case Study
  - 3.10.1. Implementing Full CI/CD for a Project
  - 3.10.2. Using Kubernetes for Deployment
  - 3.10.3. Automated Monitoring and Security Configuration







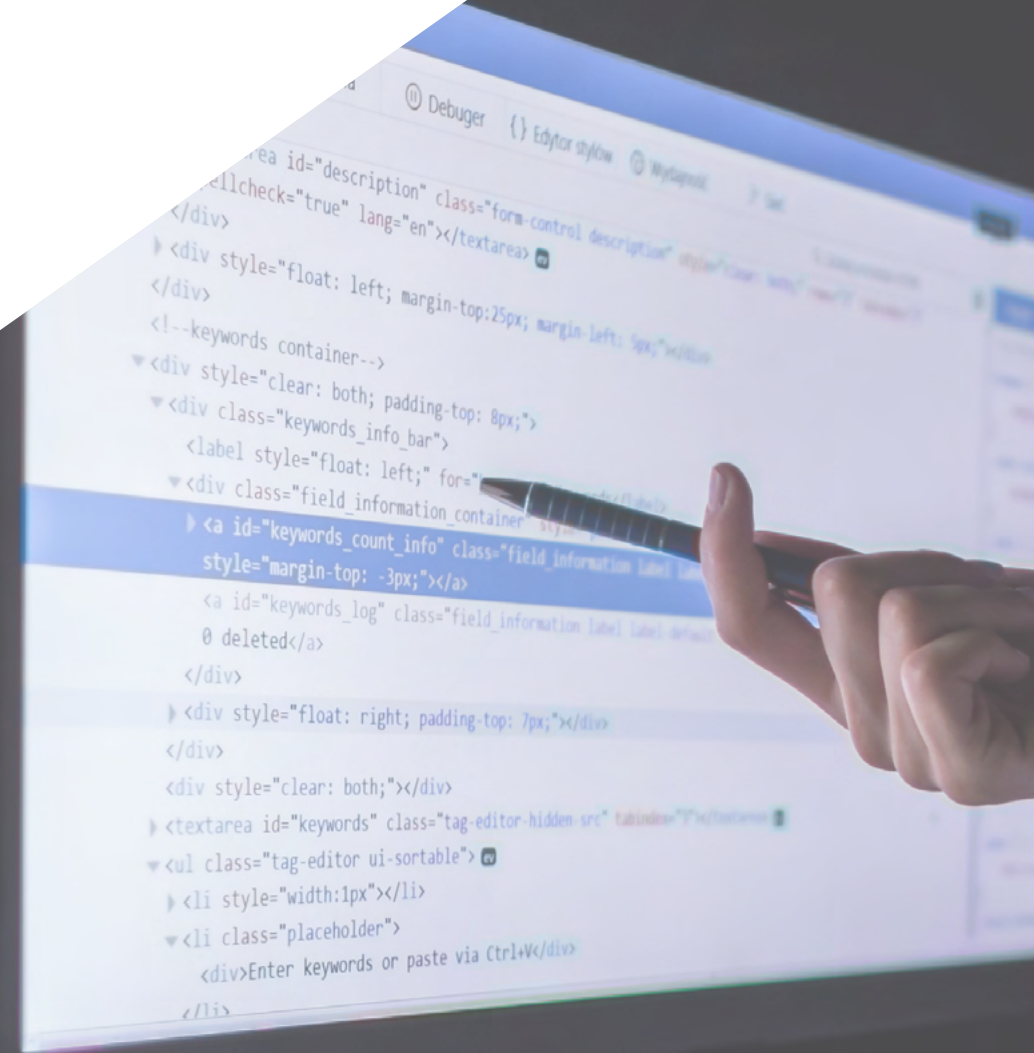
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*A program that will offer you high-level education focused on the most innovative technologies and strategies in the sector. Join this program now!”*

# 04

# Teaching Objectives

This program will provide a comprehensive overview of the development and implementation of robust technological infrastructures. To this end, an innovative methodology will be proposed through which professionals will understand and apply security principles, from design to production. In this sense, they will acquire skills to design scalable and secure architectures, apply DevOps methodologies in high-performance environments, and automate processes to ensure operational efficiency. Thanks to this program, graduates will be prepared to lead technology projects and ensure the protection of systems in a constantly evolving digital environment.



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*With this Postgraduate Diploma, you will be ready to excel in a demanding job market, combining academic excellence, practical skills, and a strong professional ethic”*





## General Objectives

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- ♦ Provide in-depth knowledge of advanced software architectures and their applicability in professional environments
- ♦ Provide a comprehensive overview of modern back-end development, covering architectures, tools, and best practices
- ♦ Develop efficient and scalable front-end applications with modern technologies
- ♦ Apply advanced data science and machine learning techniques
- ♦ Understand the fundamentals of cybersecurity and its importance in software development
- ♦ Manage the structure and differences between MEAN and MERN stacks
- ♦ Master the fundamental principles of DevOps and its impact on software development
- ♦ Implement the principles of the agile manifesto in development environments
- ♦ Manage the differences and benefits of native and cross-platform mobile development
- ♦ Analyze the fundamental concepts of Cloud computing and its impact on application development and operation



*Ready to lead change in Secure Software Architectures and DevOps? TECH will offer you access to exclusive content, flexible methodology, and collaborative learning”*







## Specific Objectives

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### Module 1. Advanced Software Architecture for Seniors

- ♦ Identify the main design patterns used in modern distributed systems
- ♦ Determine the importance of scalability and modularity in advanced software development
- ♦ Apply dependency injection principles and the use of inversion of control (IoC) containers
- ♦ Explore messaging tools such as RabbitMQ and Kafka for system integration

### Module 2. Applied Cybersecurity for Seniors

- ♦ Identify common cybersecurity threats and assess their impact on software development
- ♦ Implement mitigation strategies based on OWASP vulnerabilities
- ♦ Configure firewalls, VPNs, and traffic monitoring tools on networks
- ♦ Apply encryption and data protection techniques with SSL/TLS and cryptography in databases

### Module 3. DevOps and Advanced Automation for Seniors

- ♦ Configure and manage containerized development environments using Docker and Kubernetes
- ♦ Implement CI/CD pipelines with GitHub Actions and continuous delivery tools
- ♦ Automate infrastructure management with Terraform and IaC on AWS
- ♦ Monitor applications with Prometheus, Grafana, and ELK Stack

05

# Career Opportunities

This university program will open the doors to a wide range of professional opportunities, allowing graduates to excel in a highly competitive and constantly evolving sector. Thanks to the specialization acquired, they will be able to perform strategic roles such as software architects, DevOps engineers, application development security managers, or technology infrastructure optimization consultants. In addition, their mastery of agile methodologies and process automation will make them ideal candidates to lead innovative projects within large corporations, technology startups, or even in the field of entrepreneurship.





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*This Postgraduate Diploma will not only boost your employability, but also prepare you to make a difference in an increasingly challenging and competitive digital environment”*

### Graduate Profile

Graduates will stand out for their solid preparation in the design, implementation, and management of advanced technological infrastructures. Throughout the program, they will acquire in-depth knowledge of scalable software architectures and the application of secure DevOps methodologies, enabling them to manage dynamic technological environments with a strategic approach. In addition, their mastery of key tools such as continuous integration and delivery (CI/CD), deployment automation, and the implementation of cybersecurity policies in the cloud will make them experts capable of responding to market needs with efficient and reliable solutions.

*You will prepare to face the challenges of an ever-evolving digital world, acquiring the tools you need to excel in a highly competitive market.*

- ♦ **Critical Thinking and Problem-Solving:** analyze complex scenarios, identify vulnerabilities in software architectures, and apply innovative solutions that optimize system security and performance
- ♦ **Teamwork and Collaboration:** interact with different development, operations, and security teams, fostering an agile and cooperative work culture in DevOps environments
- ♦ **Adaptability and Continuous Learning:** excel in a constantly evolving technological field, integrating new methodologies, tools, and approaches into secure software development
- ♦ **Time Management and Project Leadership:** organize tasks efficiently, prioritize key activities, and coordinate multidisciplinary teams to ensure the successful implementation of secure and scalable software architectures







After completing the Postgraduate Diploma, you will be able to apply your knowledge and skills in the following positions:

- 1. Software Architect:** responsible for designing and developing scalable and secure technological infrastructures, ensuring their efficiency and adaptability to market changes.
- 2. DevOps Engineer:** responsible for integrating development and operations through automation, process optimization, and continuous improvement in software environments.
- 3. Application Security Specialist:** responsible for assessing, mitigating, and preventing vulnerabilities in software development, implementing advanced cybersecurity strategies.
- 4. Cloud Infrastructure Administrator:** responsible for managing and maintaining cloud platforms, ensuring their security, availability, and scalability.
- 5. Secure Software Architecture Consultant:** expert advisor on the implementation of secure and efficient technological solutions, focused on improving the digital infrastructure of companies.
- 6. Digital Transformation Leader:** responsible for driving the adoption of innovative technologies and agile methodologies to optimize development and operations processes.
- 7. Continuous Integration and Delivery (CI/CD) Manager:** coordinator of the automation and improvement of development flows, ensuring fast, secure, and efficient deployments.
- 8. DevSecOps Security Manager:** manager of security measures throughout the software lifecycle, integrating protection as a key element of development and operations.

# 05 Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.





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*TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”*



## The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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*At TECH you will NOT have live classes  
(which you might not be able to attend)”*



### The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

“*TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want*”

## Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.





## Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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



## A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



*The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule”*

### The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

### The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

*Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.*

*You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.*



As such, the best educational materials, thoroughly prepared, will be available in this program:



#### 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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



#### Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



#### Interactive Summaries

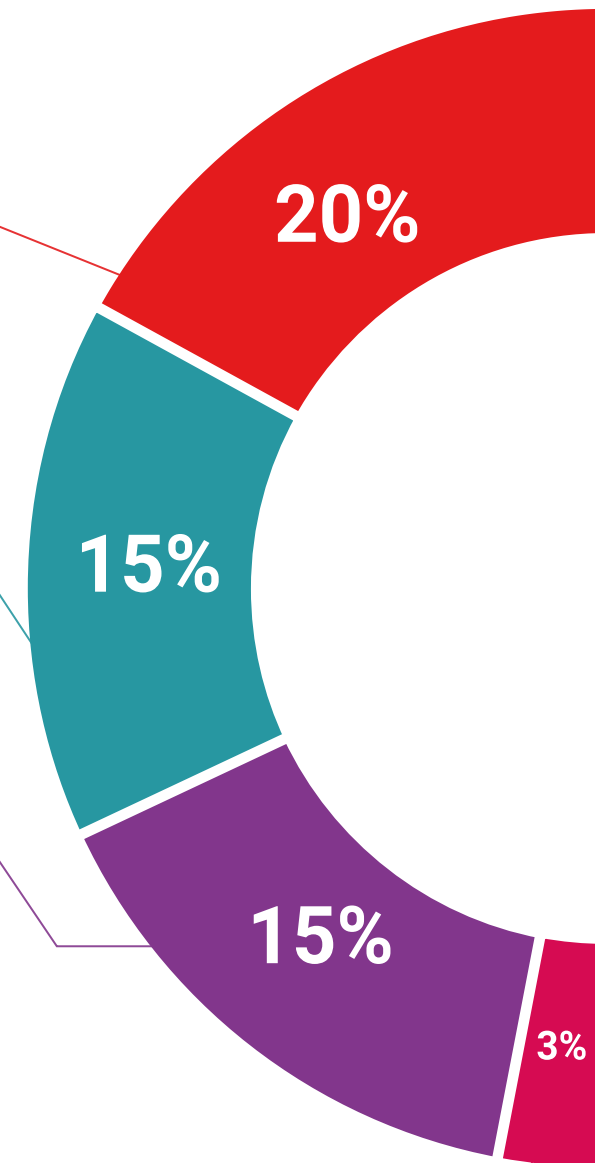
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

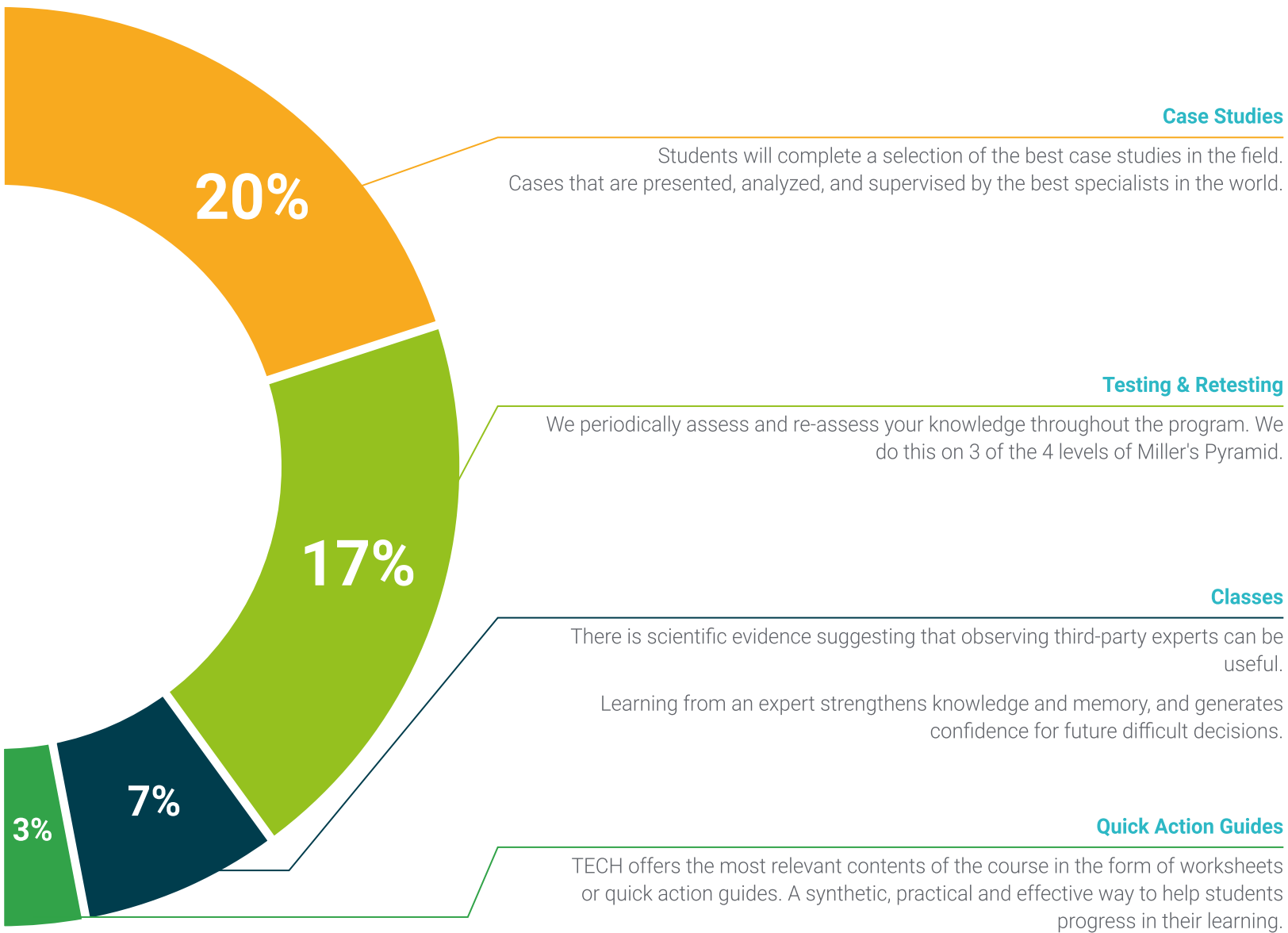
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





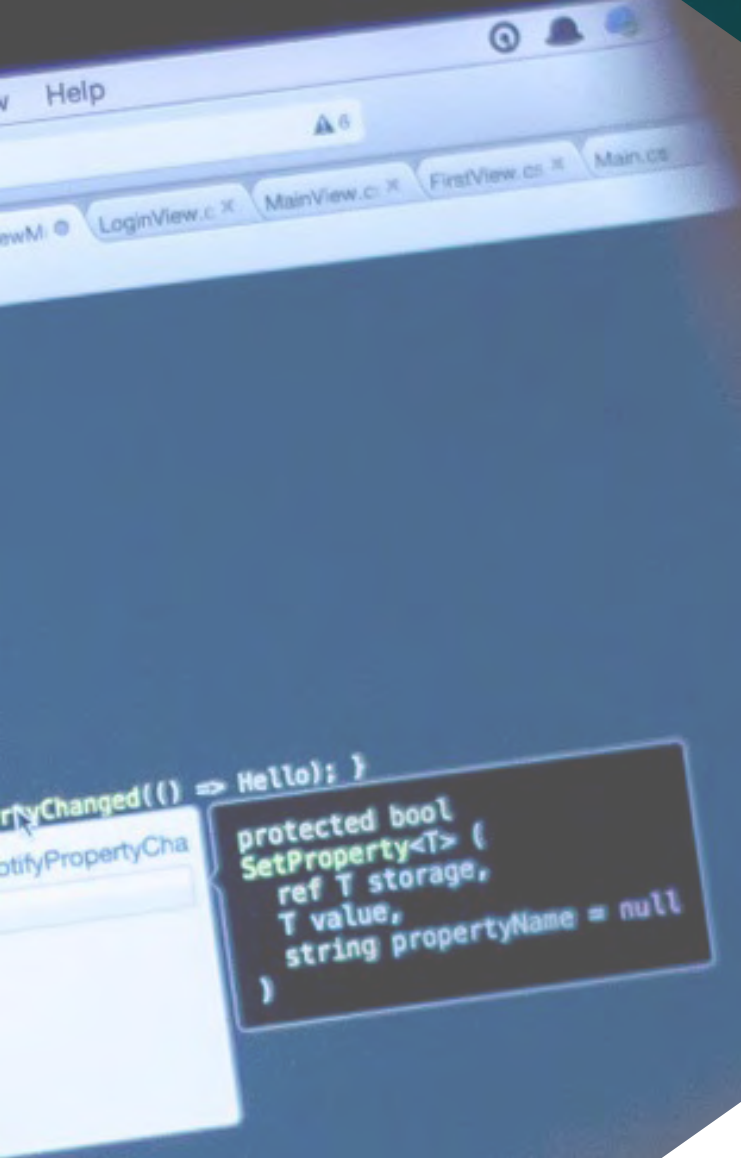
# 06

## Teaching Staff

The teaching staff for this academic program is made up of a team of high-level professionals whose knowledge and experience in the technology sector guarantee quality education. In this sense, the university program brings together software architects, DevOps engineers, cybersecurity specialists, and leaders in digital transformation, who will provide a practical and strategic vision in each module. Thanks to their extensive experience in technology companies, innovative startups, and international projects, they will share cutting-edge knowledge, combining theory with real-world cases and practical applications.







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*The excellence of the teaching staff will ensure that you are prepared to lead technology projects with an innovative vision and a high level of specialization in secure software architectures and DevOps”*

## Management



### Mr. Utrilla Utrilla, Rubén

- ♦ Technology Project Manager at Serquo
- ♦ Fullstack Developer at ESSP
- ♦ Junior Fullstack Developer at Sinis Technology S.L
- ♦ Junior Fullstack Developer at Cantoblanco Polytechnic School Campus
- ♦ Master's Degree in AI and Innovation by Founderz
- ♦ Degree in Computer Engineering from the Autonomous University of Madrid
- ♦ Google Cloud Developer course in Google Academic Program

## Professors

### Mr. Pradilla Pórtoles, Adrián

- ♦ Head of IT at Open Sistemas
- ♦ Ruby on Rails Developer at Populate Tools
- ♦ Product Development at Global ideas4all
- ♦ Senior Systems Technician at FREMAP's Prevention Society
- ♦ Bootcamp in Tokenization by Tutellus
- ♦ Executive Master's Degree in Artificial Intelligence by the Artificial Intelligence Institute
- ♦ Postgraduate degree in Marketing and Advertising from the Antonio de Nebrija University.
- ♦ Degree in Computer Engineering from the Antonio de Nebrija University.
- ♦ Diploma in Technical Engineering in Computer Systems by Antonio de Nebrija University

### Mr. Amate Ortega, Antonio

- ♦ Technical Product Manager at Serquo Software
- ♦ Expert in Computer Engineering
- ♦ Expert in Mathematics
- ♦ Product-Oriented Full-Stack Development Specialist
- ♦ Software Engineering Specialist
- ♦ Digital Product Creation Specialist
- ♦ Graduate in Computer Engineering from the Autonomous University of Madrid



“

*A unique, crucial and decisive learning experience to boost your professional development”*



# 07 Certificate

This Postgraduate Diploma in Secure Software Architectures and DevOps guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the Postgraduate Diploma issued by TECH Global University.



“

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

This private qualification will allow you to obtain a diploma for the **Postgraduate Diploma in Secure Software Architectures and DevOps** endorsed by TECH Global University, the world's largest online university.

**TECH Global University**, is an official European University publicly recognized by the Government of Andorra ([\*official bulletin\*](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** private qualification, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Secure Software Architectures and DevOps**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**







## Postgraduate Diploma Secure Software Architectures and DevOps

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Accreditation: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

# Postgraduate Diploma

## Secure Software Architectures and DevOps

