

Postgraduate Certificate Cyberintelligence and Cybersecurity





Postgraduate Certificate Cyberintelligence and Cybersecurity

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

Website: www.techtitute.com/us/information-technology/postgraduate-certificate/cyberintelligence-cybersecurity

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01

Introduction

As technology and connectivity advance, so do the number and form of potential threats. Therefore, it is crucial that professionals update their knowledge in this field in order to offer more effective solutions adapted to different contexts. This comprehensive program offers a higher education path that will allow students to acquire the knowledge of a specialist in cyber intelligence and cybersecurity, with the most convenient and effective study method in the educational market.





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Set yourself on the road to a future of maximum job competitiveness with this high-intensity program that we offer you with the quality of TECH"

The Postgraduate Certificate in Cyberintelligence and Cybersecurity is an intensive program that compiles specialized knowledge in this field throughout a high-impact curriculum.

It addresses fundamental aspects such as the Intelligence Cycle, intelligence sources, social engineering, OSINT methodology, HUMINT, Anonymization, risk analysis, existing methodologies (OWASP, OWISAM, OSSTMM, PTES) and current cybersecurity regulations. These fields are taught with the most up to date vision that includes all the latest developments.

On the other hand, regulations play a fundamental role in cybersecurity and data privacy, we address the regulations concerning all data, whether health, economic, tax, etc. so this program also examines the most relevant international organizations in cybersecurity, exposing its scope of action and its position on different problems.

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

- ◆ The development of case studies presented by cybersecurity experts
- ◆ 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
- ◆ Its special emphasis on innovative methodologies in Advanced Practice Nursing
- ◆ 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



With a totally practice-focused approach, this Postgraduate Certificate will boost your skills to the level of a specialist"

“*Specialize in a sector in constant growth and achieve the professional improvement you desire*”

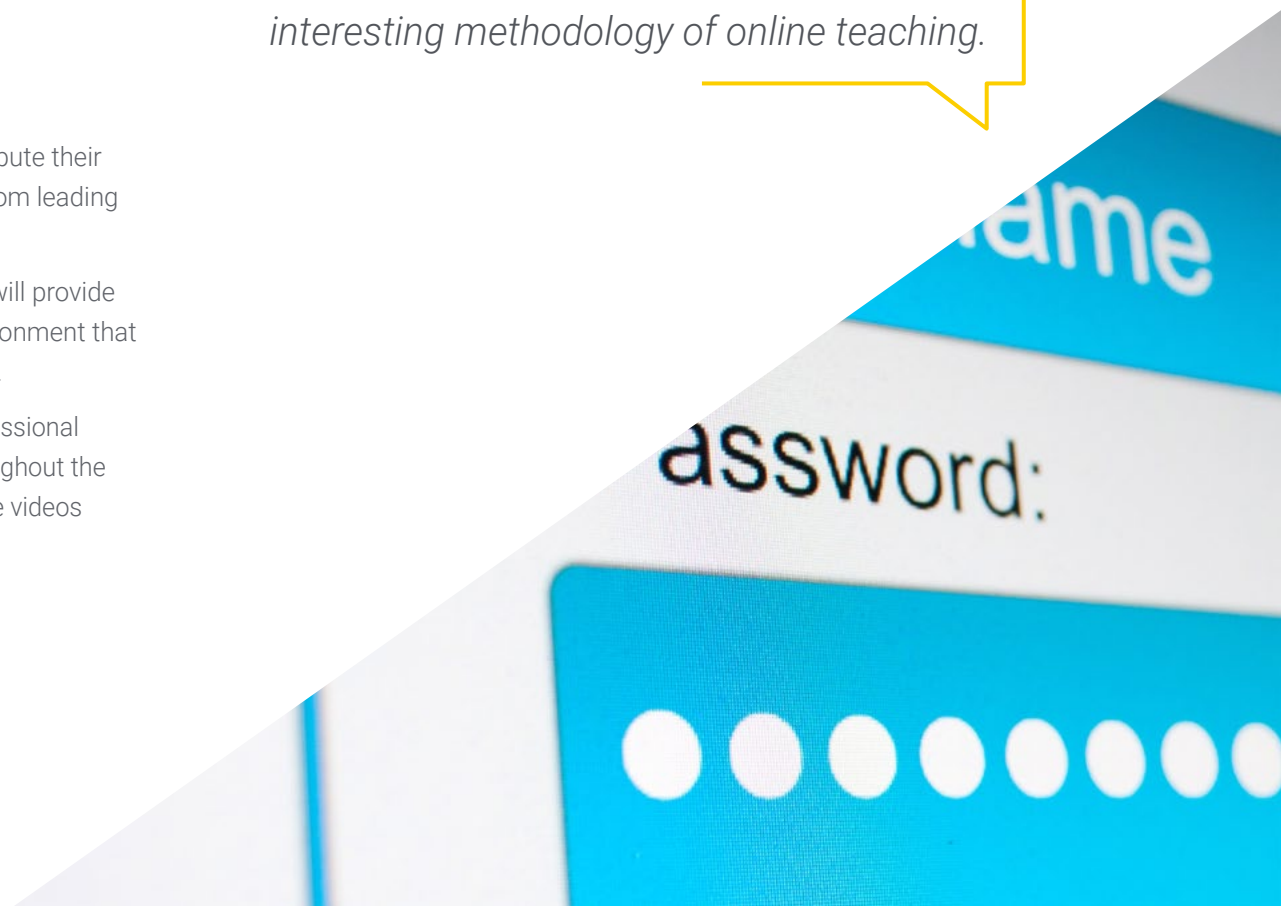
The program's teaching staff includes professionals from sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive specialization 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. This will be done with the help of an innovative system of interactive videos made by renowned experts.

A fast and efficient learning process that will allow you to advance with confidence in just a few weeks of stimulating work.

A higher education process created to be affordable and flexible, with the most interesting methodology of online teaching.



02 Objectives

This Postgraduate Certificate will enable students to achieve their learning objectives quickly and easily. With realistic and highly interesting goals, this study process is designed to progressively lead students to the acquisition of the theoretical and practical knowledge necessary to intervene with quality and to develop transversal competencies that will allow them to face complex situations by elaborating adjusted and precise answers.



“

A field of work full of job possibilities that will allow you to compete among the most qualified professionals in the sector”



General Objectives

- ◆ Analyze the role of the cybersecurity analyst
- ◆ Study in depth on social engineering and its methods
- ◆ Examine OSINT, HUMINT, OWASP, PTEC methodologies. OSSTMM, OWISAM
- ◆ Conduct a risk analysis and understand risk metrics
- ◆ Determine the appropriate use of anonymity and use of networks such as TOR, I2P and Freenet
- ◆ Compiling current cybersecurity regulations

“*Comfort and efficiency in a high-quality program*”





Specific Objectives

- ◆ Develop methodologies used in cybersecurity
- ◆ Examine the intelligence cycle and establish its application in cyberintelligence
- ◆ Determine the role of the intelligence analyst and the obstacles to evacuation activity
- ◆ Analyze OSINT, OWISAM, OSSTMM, PTES, OWASP Methodologies
- ◆ Establishing the most common tools for intelligence production
- ◆ Conduct a risk analysis and understand the metrics used
- ◆ Concretize the options for anonymity and the use of networks such as TOR, I2P, FreeNet
- ◆ Detail the current cybersecurity regulations

03

Course Management

The teachers who teach this program have been selected for their exceptional competence in this field. They combine technical and practical experience with teaching experience, offering students first-class support in achieving their goals. Through them, the program offers the most direct and immediate vision of the real characteristics of the intervention in this field, achieving a contextual vision of maximum interest.



A photograph of a person's hand typing on a laptop keyboard. The background shows a desk with a monitor displaying code, a calculator, and other office equipment. The image is partially obscured by a teal and white geometric overlay.

“

The Postgraduate Certificate in Cyberintelligence and Cybersecurity teachers will accompany you in each phase of the study and will give you the most realistic vision of this work"

Director Invitado Internacional

Dr. Frederic Lemieux is internationally recognized as an innovative expert and inspirational leader in the fields of Intelligence, National Security, Internal security, Cybersecurity and Disruptive Technologies. His constant dedication and relevant contributions in Research and Education position him as a key figure in the promotion of security and the understanding of today's emerging technologies. During his professional career, he has conceptualized and directed cutting-edge academic programs at various renowned institutions, such as the University of Montreal, George Washington University and Georgetown University.

Throughout his extensive background, he has published multiple books of great relevance, all related to criminal intelligence, policing, cyber threats and international security. He has also contributed significantly to the field of Cybersecurity with the publication of numerous articles in academic journals, which examine crime control during major disasters, counter-terrorism, intelligence agencies and police cooperation. In addition, he has been a panelist and keynote speaker at various national and international conferences, establishing himself as a reference in the academic and professional arena.

Dr. Lemieux has held editorial and evaluative roles in different academic, private and governmental organizations, reflecting his influence and commitment to excellence in his field of expertise. As such, his prestigious academic career has led him to serve as Professor of Practice and Faculty Director of the MPS programs in Applied Intelligence, Cybersecurity Risk Management, Technology Management and Information Technology Management at Georgetown University.



Dr. Lemieux, Frederic

- Researcher in Intelligence, Cybersecurity and Disruptive Technologies, Georgetown University
- Director of the Master's Degree in Information Technology Management at Georgetown University
- Director of the Master's Degree in Technology Management at Georgetown University
- Director of the Master's Degree in Cybersecurity Risk Management at Georgetown University
- Director of the Master's Degree in Applied Intelligence at Georgetown University
- Professor of Internship at Georgetown University
- PhD in Criminology from the School of Criminology, University of Montreal
- B.A. in Sociology, Minor Degree in Psychology, University of Laval
- Member of: New Program Roundtable Committee, Georgetown University



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

Management



Ms. Fernández Sapena, Sonia

- ◆ Computer Security and Ethical Hacking Trainer. Getafe National Reference Center for Informatics and Telecommunications. Madrid
- ◆ Certified E-Council instructor. Madrid
- ◆ Trainer in the following certifications: EXIN Ethical Hacking Foundation y EXIN Cyber & IT Security Foundation. Madrid
- ◆ Accredited expert trainer by the CAM of the following certificates of professionalism: Computer Security (IFCT0190), Voice and Data Network Management (IFCM0310), Departmental Network Administration (IFCT0410), Alarm Management in Telecommunications Networks (IFCM0410), Voice and Data Network Operator (IFCM0110), and Internet Services Administration (IFCT0509)
- ◆ Colaboradora externa CSO/SSA (Chief Security Officer/Senior Security Architect). University of the Balearic Islands
- ◆ Computer Engineer. Alcalá de Henares University. Madrid
- ◆ Master in DevOps: Docker and Kubernetes. Cas Training. Madrid
- ◆ Microsoft Azure Security Technologies. E-Council. Madrid



04

Structure and Content

Throughout the study of the different units of this program the student will be able to acquire the latest developments that have been contributed to the field of cyberintelligence and cybersecurity. To this end, the syllabus has been structured with a view to the efficient acquisition of complementary learning, which will enable the ability to intervene as quickly as possible. A high-intensity course created for the best in the industry.



“

*All concepts of CyberIntelligence and
Cybersecurity developed in a structured way in a
study approach focused on efficiency”*

Module 1. All concepts of Cyber Intelligence and Cybersecurity implemented in a structured way in a study approach focused on efficiency"

- 1.1. Cyberintelligence
 - 1.1.1. Cyberintelligence
 - 1.1.1.1. Intelligence
 - 1.1.1.1.1. Intelligence Cycle
 - 1.1.1.2. Cyberintelligence
 - 1.1.1.3. Cyberintelligence and Cybersecurity
 - 1.1.2. The Intelligence Analyst
 - 1.1.2.1. The Role of the Intelligence Analyst
 - 1.1.2.2. The Intelligence Analyst's Biases in Evaluative Activity
- 1.2. Cybersecurity
 - 1.2.1. Layers of Security
 - 1.2.2. Identification of Cyber Threats
 - 1.2.2.1. External Threats
 - 1.2.2.2. Internal Threats
 - 1.2.3. Adverse Actions
 - 1.2.3.1. Social Engineering
 - 1.2.3.2. Commonly Used Methods
- 1.3. Techniques and Tools of Intelligences
 - 1.3.1. OSINT
 - 1.3.2. SOCMINT
 - 1.3.3. Humit
 - 1.3.4. Linux Distributions and Tools
 - 1.3.5. OWISAM
 - 1.3.6. OWASP
 - 1.3.7. PTES
 - 1.3.8. OSSTMM
- 1.4. Evaluation Methodologies



- 1.4.1. Intelligence Analysis
- 1.4.2. Techniques for Organizing Acquired Information
- 1.4.3. Reliability and Credibility of Information Sources
- 1.4.4. Analysis Methodologies
- 1.4.5. Presentation of Intelligence Results
- 1.5. Audits and Documentation
 - 1.5.1. Computer Security Auditing
 - 1.5.2. Documentation and Permits for Auditing
 - 1.5.3. Types of Audits
 - 1.5.4. Deliverables
 - 1.5.4.1. Technical Report+
 - 1.5.4.2. Executive Report
- 1.6. Anonymity in the Network
 - 1.6.1. Use of Anonymity
 - 1.6.2. Anonymity Techniques (Proxy, VPN)
 - 1.6.3. TOR, Freenet and IP2 Networks
- 1.7. Threats and Types of Security
 - 1.7.1. Types of Threats
 - 1.7.2. Physical Security
 - 1.7.3. Network Security
 - 1.7.4. Logical Security
 - 1.7.5. Web Application Security
 - 1.7.6. Security on Mobile Devices
- 1.8. Regulations and Compliance
 - 1.8.1. The GDPR
 - 1.8.2. The 2019 National Cybersecurity Strategy
 - 1.8.3. ISO 27000 Family
 - 1.8.4. NIST Cybersecurity Framework
 - 1.8.5. PIC
 - 1.8.6. ISO 27032
 - 1.8.7. Cloud Regulations
 - 1.8.8. SOX
 - 1.8.9. PCI
- 1.9. Risk Analysis and Metrics
 - 1.9.1. Extent of Risk
 - 1.9.2. The Assets
 - 1.9.3. Threats
 - 1.9.4. Vulnerabilities
 - 1.9.5. Risk Evaluation
 - 1.9.6. Risk Treatment
- 1.10. Important Cybersecurity Agencies
 - 1.10.1. NIST
 - 1.10.2. ENISA
 - 1.10.3. INCIBE
 - 1.10.4. OEA
 - 1.10.5. UNASUR PROSUR



A current agenda that includes each and every one of the aspects that a specialist in this field must master"

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.



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

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

Title: **Postgraduate Certificate in Cyberintelligence and Cybersecurity**

Official Number of Hours: **150 h.**



*Apostille Convention. In the event that the student wishes to have their paper diploma 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

tech technological
university

personalized service innovation

knowledge present and Cybersecurity

online training

development languages

classroom

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