



INNOCYBER Innovation HUB

Digital transformation, Cyber & IoT

< CYBERSECURITY EXECUTIVE PROGRAM >

Starting date:

March 29th, 2022

Scientific Coordination

Professor

António Casimiro

Executive Coordination

Professor

Telmo Vieira



**Ciências
ULisboa**



PREMIVALOR Consulting
Your Value Partner



>Objectives and scope

- > To provide an overall comprehension of the risks and challenges on organizations resulting from an increasingly digital economy concerning cybersecurity leveraged in terms of speed and deepness by the COVID-19 pandemic.
- > To provide insights from leading experts of the industry and reference academics concerning the implications of cybersecurity risks in terms of the organizations' Business, Governance and Compliance.
- > This program aims to be the best international cybersecurity short/medium term course for executives and decision makers in Europe.



> To whom this course is addressed

- > Members of the **Management Board** of companies/organizations from the private and public sectors
- > Members of the **Supervisory Board** of companies/organizations from the private and public sectors
- > Members of the **Management Board** and the **Supervisory Board** of **Banks, Fintechs, and Insurance companies**
- > **Directors and Decision makers** of organizations on the areas/committees of **Internal Control and Risk, Internal Audit, Inspection, and Compliance and Legal**
- > **Armed forces** decision makers
- > **Law enforcement** decision makers
- > **Certified Public Accountants/Statutory Auditors** (Revisores Oficiais de Contas)
- > **Lawyers** on decision making positions



> Format

- > The course will be held online
- > There will be the **option** of having the last class in person at Faculty of Sciences of University of Lisbon
- > Starting date: March 29th, 2022
- > 25 hours (9 modules)
- > Tuesdays and Thursdays, from 16:30 to 17:50 and 18:00 to 19:20
- > Certificate to be issued by the Faculty of Sciences of University of Lisbon after the completion of the course



> Program

- > MODULE 1: Macro perspective on cybersecurity
- > MODULE 2: Introduction to cyber security concepts
- > MODULE 3: Identification of assets and risk concepts
- > MODULE 4: Protection of assets and detection of attacks
- > MODULE 5: Reaction and Recovery
- > MODULE 6: Cybersecurity Law
- > MODULE 7: Economic Evaluation of Cybersecurity Investments
Cybersecurity risks and challenges on
Banking and Fintech sectors
- > MODULE 8: Asymmetric Threats - Cyber Threats
- > MODULE 9: Case studies and Tabletop exercise

Final self-evaluation quiz on learned topics



> Pricing

> **1.450 € ***

> Discounts (non-cumulative):

> **Early bird: 15%** for participants that register until January 31st, 2022

> **Early bird: 10%** for participants that register between January 31st, 2022 and February 28th, 2022

> **20%** for INNCYBER INNOVATION HUB partner companies/organizations and individual participants from universities and research centers

> **20%** for companies that participate in the course with 2 or more members

* 23% VAT to be added (if applicable)



> Program

> MODULE 1

Macro perspective on cybersecurity (3h)

- > The strategic perspective of Cybersecurity at national level - Resilience, sovereignty, and Leadership
- > What the C level needs to ask to assess the organization's cybersecurity level
- > Major challenges for organizations and citizens
- > New technologies leveraged by the pandemic
- > The need for a common knowledge concerning cybersecurity
- > EU Cybersecurity Strategy and its relationship with the National Cyberspace Security Strategy
- > EU Cybersecurity Certification. What is due to occur in Portugal and the impact in the economy
- > Cybersecurity incidents in Portugal – The National Cybersecurity Observatory
- > Operational Capability to prevent, deter and respond
- > New strategic initiatives

> Self-evaluation Quiz

> Instructor

Contra-Almirante António Gameiro Marques

General Director

Gabinete Nacional de Segurança (GNS)





> Program

> MODULE 2

Introduction to cyber security concepts (3h)

- > Cyber Security definition
- > Importance of security at different layers (from physical to information)
- > Fundamental information security properties: confidentiality, integrity, availability
- > Types of vulnerabilities
- > Types of attacks
- > Motivations of attackers
- > Phases of an attack
- > Attack-Vulnerability-Intrusion (AVI) model
- > NIST Cybersecurity Framework: Identify, Protect, Detect, Respond, Recover
- > Self-evaluation Quiz

> Instructor

Eng. José Alegria

CISO, Head of CyberSecurity & Privacy (DCY)

ALTICE Portugal





> Program

> MODULE 3

Identification of assets and risk concepts (3h)

- > Resources
- > Information flows and dependencies
- > Security policies and responsibilities
- > Risk identification
- > Risk assessment
- > Risk analysis
- > Risk management
- > Control strategies
- > Cost-benefit analysis in InfoSec
- > Self-evaluation Quiz

> Instructor

Prof.^a Ana Respício

Assistant Professor of Informatics

Faculty of Science of the University of Lisbon





> Program

> MODULE 4

Protection of assets and detection of attacks (3h)

- > Access control (Authentication, Authorization, Accounting)
- > Network protection (SSL/TLS, VPNs)
- > Infrastructure protection (Firewalls, IPS, Antivirus)
- > Information protection (backups, DLP tools)
- > Penetration testing
- > Personnel training
- > Intelligence gathering systems / OSINT
- > Vulnerability scanners
- > Event gathering and monitoring systems (Syslog, NIDS, HIDS)
- > Event correlation (SIEMs)
- > Self-evaluation Quiz

> Instructor

Eng. Paulo Moniz

Information Security and IT Risk Director

EDP - Energias de Portugal





> Program

> MODULE 5

Reaction and Recovery (3h)

- > Response plans (legal frameworks)
- > Incident management
- > Analysis of incident impacts
- > Contingency plans
- > Disaster recovery
- > Business continuity
- > Image recovery and communication
- > Self-evaluation Quiz

> Instructors

Eng. Marcelo Rodrigues

Director of Cybersecurity & Privacy

PwC Portugal



Eng. Pedro Santinhos

Risk Assurance Director

PwC Portugal





> Program

> MODULE 6

Cybersecurity Law (3h)

- > The importance of the legal dimension
- > Main legal concepts
- > Cybersecurity legal and regulatory framework – main trends
- > The legal impacts of a cyber incident
- > A strategic approach to cybersecurity regulatory framework (general and sector-specific legislation)
- > Self-evaluation Quiz

> Instructor

Dra. Magda Cocco

Head of Practice of Information,
Communication & Technology

VdA - Vieira de Almeida





> Program

> MODULE 7

a. Economic Evaluation of Cybersecurity Investments (1,5h)

> Cybersecurity Due Diligence in Mergers & Acquisitions (M&A) processes

> The economic evaluation of Cybersecurity Investments:

> The financial model

> Key assumptions

> Economic and financial indicators (KPIs):

> ALE – Annual Loss Expectancy

> ROSI – Return on Security Investment

> Self-evaluation Quiz

> Instructor

Prof. Telmo Vieira

Managing Partner

PremiValor Consulting

Certified Public Accountant / Statutory Auditor (CPA)





> Program

> MODULE 7

b. Cybersecurity risks and challenges on Banking and Fintech sector (1,5h)

- > Major trends and Cybersecurity concerns in the financial sector
- > Cooperation, Proactivity and Systemic Approaches to Cyber Threats
- > Cybersecurity Governance: Engaging the Executive Boards
- > Narrowing the Cyber Language GAP between Operational/ Tactical and Executive Boards
- > Self-evaluation Quiz

> Instructor

Eng. Luís Gonçalves

Head of Cybersecurity, IT Risk and Compliance

Banco de Portugal





> Program

> MODULE 8

Asymmetric Threats - Cyber Threats (2h)

- > Cyber war
- > Asymmetric conflicts, threats, cyber attacks, cyber attacks examples
- > Cost vs impact
- > Who is the enemy
- > Who is the target
- > Vectors
- > What to do
- > Attack strength
- > Case study
- > Self-evaluation quiz

> Instructor

Tenente-coronel André Castro (Portuguese Air Force)

Cyber Defense Chief in Portuguese Air Force

INFOSYS and INFOSEC Officer for NATO Networks for 11 years





> Program

> MODULE 9

Case studies and Tabletop exercise (2h)

- > Target and MAERSK case studies – to be first discussed by students and then in class with the professor/lecturer as a way to cement the knowledge obtained throughout the course
- > Tabletop exercise to stimulate leaders in the decision associated with a crisis originating in cyberspace
- > Final remarks on the program

> Instructor

Contra-Almirante António Gameiro Marques

General Director

Gabinete Nacional de Segurança (GNS)



> **NOTE:** The tabletop exercise is a meeting to discuss a simulated emergency. Participants review and discuss the actions they would take in a specific emergency, testing their emergency plan in an informal, low-stress environment. Tabletop exercise is intended to clarify roles and responsibilities and to identify additional mitigation and preparedness needs. The exercise should result in action plans for continued improvement of the emergency plan.



> Program

> Final self-evaluation quiz on learned topics
(50 min)

> Participants are required to complete a final self-evaluation quiz to receive the graduation certificate from Faculty of Sciences of University of Lisbon



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For additional information, please feel free to contact us:

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We are available to book a conference call for further clarification on the platforms:

- Zoom
- Google Meet
- MS TEAMS

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