QSECDEF

Quantum Security and Defence

ON-DEMAND EXECUTIVE CERTIFICATE

Executive Certificate in Macro Cybersecurity

ECMC — A strategic view of cyber risk for high-value technology leaders.

Understand the threat before you are expected to respond to it.

Five on-demand lectures from Professor Julian Richards, a former GCHQ senior manager, taking executives from the global threat picture to landmark attacks, cyber conflict, governance and regulation, and industrial and scientific espionage.

Framed for leaders of deep-technology organisations whose research, IP and people make them strategic targets. Start with the free preview lecture.

5	1	80%	ECMC
ON-DEMAND LECTURES	FREE PREVIEW	EXAM PASS MARK	CREDENTIAL

THE PROGRAMME

Five lectures. One free preview. A strategic view of cyber risk.

The Executive Certificate in Macro Cybersecurity is an online, on-demand course designed to give executives a high-level understanding of the business, economic, geopolitical and societal dimensions of cybersecurity, framed for organisations whose technology, research and intellectual property make them strategic targets.

Study at your own pace. Begin with the free introductory lecture, then work through five lectures that move from the global threat picture to landmark attacks, cyber as a weapon, governance and regulation, and industrial and scientific espionage.

LECTURES AND LEARNING OBJECTIVES

What each lecture is designed to help you do

INTRODUCTION · FREE PREVIEW

Contextualising strategic cybersecurity: the global perspective

See cybersecurity as a strategic and geopolitical issue, not only a technical one, and why frontier technology companies now sit at the centre of that contest.

LECTURE 1

Macro cybersecurity: the global threat picture

Identify the main state and criminal actors targeting deep-tech organisations, what they seek (IP, capability and influence), and how hybrid, proxy and AI-enabled methods are aimed at frontier technology firms.

LECTURE 2

Case studies in major cyber attack

Draw lessons for deep-tech operations, supply chains and industrial control systems from landmark attacks such as Stuxnet, Estonia 2007 and Shamoon, and tell credible risk apart from hype.

LECTURE 3

Cyber as a weapon: conflict and “cyberwar”

Understand how cyber capability enables hybrid and unconventional conflict, where the laws of armed conflict fall short, and what that means for companies whose technology has strategic or dual-use value.

LECTURE 4

Governance and regulation: approaches and challenges

Understand how national strategies, agencies such as the NCSC and CISA, international standards such as ISO 27001 and the limits of cross-border cooperation shape obligations for companies holding sensitive technology.

LECTURE 5

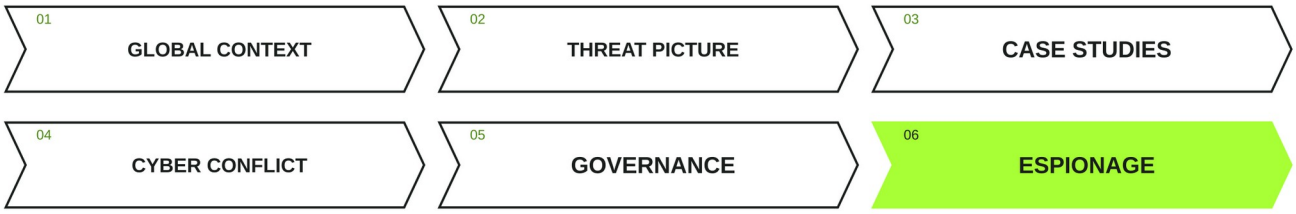
Industrial and scientific espionage, and counterespionage strategies

Recognise how hostile actors combine cyber intrusion with human recruitment of researchers, executives and academic partners (the MICE motivations), and apply counter-deception thinking to protect labs, IP and supply chains.

LEARNING PATH

From the global picture to protecting your organisation

The free preview and five lectures build on each other:



WHO IT IS FOR

Built for leaders of high-value technology organisations

CEOs, board members and non-executive directors

Understand the strategic, geopolitical and economic threat picture behind cyber risk.

Leadership teams in quantum and deep-tech companies

A grounded introduction to cybersecurity, espionage and IP-theft risk for high-value technology firms.

Risk, compliance and governance leaders

How regulation, standards and international governance shape organisational cyber obligations.

Policy, government and public-sector professionals

State-level threats, cyber conflict and the challenges of national and international governance.

Investors, advisers and consultants

Assess cyber and espionage exposure in portfolios, transactions and client organisations.

Security and intelligence professionals moving into leadership

Connect technical knowledge to the strategic and human dimensions of the threat.

YOUR LECTURER

Professor Julian Richards

Director of Training and Education, Inspire Defence and Security Ltd · Strategic Director, Kyba.ai Ltd · Professor Emeritus, University of Buckingham · Ex GCHQ Senior Manager



Professor Julian Richards is a leading expert in intelligence, security and counter-terrorism, with more than three decades of experience across government and academia. He spent 18 years at the UK's Government Communications Headquarters (GCHQ), where he held senior roles in intelligence analysis, training programme design and strategic liaison.

He went on to direct the University of Buckingham's Centre for Security and Intelligence Studies (BUCSIS), often described in the UK as a “school for spies”, where he is now Professor Emeritus. His expertise spans global security, cybersecurity, intelligence operations, terrorism and counter-terrorism. He holds a PhD from the University of Cambridge.

CERTIFICATION

The credential

Complete all course materials and pass the final exam with a mark of 80% or above to earn the Executive Certificate in Macro Cybersecurity.

ECMC — Executive Certificate in Macro Cybersecurity

Certificated by Quantum Security Defence (QSECDEF).

Study the lectures and materials online, at your own pace.

DELIVERY

Pricing and access

ON DEMAND · NON-MEMBERS

$1,039

Includes lifetime membership of QSECDEF. Five recorded lectures, course materials and the ECMC final exam, studied online at your own pace.

ON DEMAND · QSECDEF MEMBERS

$799

The same course for QSECDEF members — members save $240.

TEAMS AND ORGANISATIONS

Contact us

Licences for leadership teams and organisations. Email info@qsecdef.com.

Prices in USD.

THE CASE FOR ACTING

Why now

Deep-technology sectors such as AI, quantum, semiconductors and defence technology are central to national strategies and to the ambitions of hostile states. In March 2025, China announced a ¥1 trillion (about $138bn) public–private partnership investing in AI, quantum computing and semiconductors. State-sponsored groups, proxies and cyber-mercenaries increasingly combine intrusion, social engineering and human recruitment to reach the research, IP and people behind frontier technology.

> **For deep-technology organisations, cyber risk is strategic before it is technical.**

Lead with a strategic view of cyber risk.

5 ON-DEMAND LECTURES | FREE PREVIEW | 80% PASS MARK | ECMC CREDENTIAL

Start with the free preview, then register online.

Built for leaders of high-value technology organisations who need to understand the threat before they are expected to respond to it.

Register: quantumsecuritydefence.com/executive-cyber-certificate

MEMBERSHIP

One membership. Global opportunity.

QSECDEF membership is designed to keep you current as post-quantum standards, regulation and threats change. One membership opens our certificated courses, a growing library of expert lectures and a global network of practitioners — so you can keep learning long after this course ends.

HOW MEMBERSHIP WORKS

01
Join
Choose annual or lifetime personal membership, or talk to us about your team.

02
Learn
Start included courses online at your own pace and follow new bootcamps as they launch.

03
Certify
Pass the online exam (80% pass mark) to earn credentials such as CASRP and CQBP.

04
Connect
Join the weekly live call and a peer network across industry, government and academia.

WHAT MEMBERS GET

- **Certificated courses**
  Members can currently earn CASRP, CQBP, Quantum Resilient Blockchain and Introduction to Quantum Cybersecurity.
- **Expert lecture library**
  170+ practitioner lectures on replay, with new lectures added as the field moves.
- **New bootcamps**
  A new bootcamp roughly every six months, on the topics members are asking about.
- **Member rates**
  Reduced rates on partner programmes such as the Certified PQC Programme Manager (CPQCPM), and on selected events.
- **The weekly live call**
  A practitioner presents every week and takes questions, with recordings for members.
- **A global network**
  1,500+ professional members in 40+ countries, sharing what works and what doesn't.

CHOOSE YOUR MEMBERSHIP

PROFESSIONAL · ANNUAL

$99 per year

Full personal membership, renewed each year.

Join for $99 a year →

PROFESSIONAL · LIFETIME

$239 one payment

Personal membership with no renewals.

Join for life, $239 →

Lifetime membership is offered for a limited time.

TEAMS & ORGANISATIONS

Talk to us

Corporate, consultancy and industry memberships for teams of any size.

Contact us →

Membership benefits are set out in the current QSECDEF membership terms and may change. Prices in US dollars.

READY FOR ECMC?

Start with the free preview, then register.

Five on-demand lectures, studied online at your own pace.

Register for ECMC →

ABOUT QSECDEF

Making the quantum transition safe, trusted and unstoppable.

Quantum Security and Defence (QSECDEF) connects government, industry and academia through the transition to quantum technology. A global membership association under UK governance, funded by its members from more than 600 organisations, it helps individuals, enterprises, governments and industries adopt quantum technologies safely — with instructors drawn from tenured professors, doctoral researchers and practitioners in quantum physics, IT and cybersecurity.

- **Quantum cybersecurity**
- **Quantum-secure communications**
- **Integrated quantum computing**

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