

## ICA ADVANCED CERTIFICATE IN CYBER SECURITY

A professional qualification awarded in association with University of Manchester Business School











The University of Manchester Manchester Business School

# AN INTRODUCTION TO THE ICA ADVANCED CERTIFICATE IN CYBER SECURITY

Cybercrime (also called computer crime or electronic crime) is one of the fastest-growing criminal activities in the world and has surpassed illegal drug trafficking as a criminal money maker. It covers a wide range of illegal activity including financial scams and computer hacking and costs businesses millions of dollars each year.

Criminals exploit both the general public and organisations to steal money, commit fraud and undertake other criminal activities such as identity theft. Motivations of criminals vary. Some are driven by financial gain, whilst others by ideology and the prospect of bringing down institutions from the inside.

Enhanced security precautions and increased awareness of the issues can help prevent cyber attacks. The ICA Advanced Certificate in Cyber Security has been designed to equip risk, compliance, AML and fraud prevention professionals with the knowledge they need to combat these sophisticated crimes and mitigate the risk they pose. This innovative qualification will teach you the fundamentals of information and communications technology so you will better understand common cyber security vulnerabilities. You will learn about typical cyber security attack vectors, the motivations driving cyber criminals and discover how to put security control frameworks in place. The course also covers useful AML/ CTF/Fraud automated tools as well as addressing ongoing and future developments in the sphere of cyber security.

Whether you already hold an ICA qualification or just want to learn more about the subject, this course will enhance your skills in an area that is paramount to your firm's security.



**66** Discover how to talk to your IT consultant or software provider to get the best out of your automated security systems.

## **KEY FEATURES**

- An intermediate level programme resulting in a professional qualification
- 6 months' duration
- Comprehensive detailed course materials that can be used in the workplace
- Written and delivered by experienced industry practitioners
- Extensive support and resource material
- Awarded in association with University of Manchester Business School

# **KEY BENEFITS** <sup>44</sup><sub>97</sub>

- Improved knowledge, developed skills
- Professional designation
- Potential for career progression
- Recognised mark of excellence
- Reduced reputational and financial risk for firms
- Enhanced workplace performance



## WHO THE COURSE WILL BENEFIT

- MLROS/MLPOs, Compliance Officers/Managers, Risk Officers/ Managers, Fraud Prevention Officers/Managers
- Those who have already undertaken an ICA qualification and are interested in specialising in cyber security
- Anyone who is interested in learning more about cyber security in business

## **PROGRAMME DELIVERY**

- Excellent course manuals, support readings and texts
- Dedicated online support
- Attendance at two full day workshops (where offered)
- One written assignment (approx 3,000 words in length)
- $\bullet$ One open book examination (1 hour and 45 minutes)

This course can also be delivered in-house. There are many advantages to this including a reduction in price per person and the option to include processes that are unique to your firm in workshop discussions. For more information about in-house delivery please contact Helen at hlangton@int-comp.org.

## ADMISSION REQUIREMENTS

The ICA Advanced Certificate in Cyber Security is open to anyone who is interested in learning more about the subject. However, the content of the programme requires students to possess:

- Sound educational background
- Good written English skills •

If you would like to discuss the Advanced Certificate and how it might fit in with your current role and career aspirations, contact the ICA (+44 (0) 121 362 7534) for an informal discussion with the Course Director.

## PROFESSIONAL QUALIFICATION AWARD

Following completion of the ICA Advanced Certificate in Cyber Security you will be able to use the designation 'Adv. Cert. (CS)'

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## **FEES**

Please see ICA or approved training provider website for details.

Prices for in-house delivery vary depending on the number undertaking the programme. Please contact the approved training provider (details on the ICA website) for a quotation.

## **HOW TO APPLY**

Complete the enrolment form online at www.int-comp.org/enrol or contact us on ict@int-comp.com or +44 (0) 121 362 7501.

## COURSE CONTENT

#### Unit 1: Fundamentals of Information and **Communications Technology (ICT)**

- ICT Network Architectures • The IP Protocol Stack
- Computer basics

Databases

Web and intranets Web-facing applications

• Network vulnerabilities

• Anti-virus and firewalls

Mobile devices and Aps

Man-in-the-Middle Attacks

Location based services

Database security

DoS resilience

Distributed DoS

Phishina

Pharming

• URL Spoofing

Email Spoofing

Social Engineering

IP Spoofing

The Internet, the World Wide

Cloud Computing

#### **Unit 2: Common ICT and Cyber Security Vulnerabilities**

- The OWASP Top Ten
- User awareness and disclosures
- Contract staff
- Trusted key personnel
- Authentication and log on
- Web facing applications

#### Unit 3: Typical ICT and Cyber Security Attack Vectors

- Hacking
- Ethical Hacking
- **Command Injection**
- Computer Viruses
- Internet Worms
- **Trojan Horses**
- Spyware
- Botnets
- Denial of Service (DoS)

#### **Unit 4: Cyber Security Threat Actors and Motivations**

- State sponsors
- Corporate sponsors
- Malware creators
- Spammers
- Hackers

### **Unit 5: ICT and Cyber Security Control Frameworks**

- **Risk assessment**
- Organisation and governance
- Asset management
- Human resources security
- Physical and environmental security
- Communications and
- Unit 6: AML/CTF and Fraud Automated Tools
- monitoring
- Sanctions screening

#### **Unit 7: The Future of Cyber Security**

- Developments in computing
- The impact of robotic systems
- Cyber Warfare and Public/ • Private Sector Security Implications
- Web 2.0; Social Media and MMOGs risks
- Identity Capital vs. Data Protection
- The Next Internet?

- Phreakers Fraudsters & thieves Organised crime
  - Cyber terrorists

- Understanding current • Access control regulation and guidance Information systems
- Security policy
- of information security

- operations management
- Business continuity management • Compliance

monitoring

Vendor selection

• Deep packet inspection

Watch Lists and PEP Indices

acquisition, development

Penetration testing

and maintenance

Information security

incident management

- Suspicious transaction
- compliance

## INTERNATIONAL COMPLIANCE ASSOCIATION

The ICA is a professional, awarding body with a global membership. Since it was founded in 2001, thousands of individuals have completed ICA's



International Compliance Association Excellence through Education

diploma and certificate programmes all over the world. ICA's internationally recognised qualifications are a benchmark of professionalism, competence and excellence. The ICA is the government appointed Lead Provider of Financial Industry Competency Standards, accredited training and assessment programmes in the field of compliance in Singapore. The ICA helps businesses, regulatory authorities, government agencies and clients promote best practice through education, dialogue, information exchange and detailed resource material. The ICA aims to help improve the performance of individuals, firms and the industry as a whole.

## DETAILS OF OTHER QUALIFICATIONS AVAILABLE

The ICA delivers a wide range of qualifications, appropriate to the financial services sector both in the UK and overseas. For beginners and experienced practitioners alike, the ICA Certificate and Diploma qualifications increase knowledge, improve skills and enhance understanding. Certificate programmes are designed for entry-level staff new to a particular discipline. Content focuses on awareness and on the introduction of the key issues involved. They form a solid foundation for future learning. Diploma programmes are designed for more senior practitioners, those who have already amassed a level of experience. Certificate and Diploma qualifications cover the following subjects:

- Anti Money Laundering
- Compliance
- Financial Crime Prevention

## UNIVERSITY OF MANCHESTER BUSINESS SCHOOL

MBS is the UK's leading centre for business research, offering an impressive range of programmes and services to both students and businesses. We provide world-class business and management education



The University of Manchester Manchester Business School

to undergraduates, postgraduates, highly-experienced practitioners and people wishing to pursue academic careers. We compete on a global scale for the best students and staff, and continue to generate ground-breaking research that is recognised by peers and practitioners across the globe.

## INTERNATIONAL COMPLIANCE TRAINING

International Compliance Training is the approved training partner of the International Compliance Association. ICT is dedicated to supporting financial services practitioners as they study ICA



qualifications. Their unique blended learning approach, combining high quality materials, interactive workshops and dedicated support, ensures a successful learning experience for all. The emphasis is on helping individuals succeed, develop their careers and reach their full potential. ICT has regional offices in Singapore and Dubai.



www.int-comp.org

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