



University of London International Academy
MSc/PG Dip in Information Security
Lead College – Royal Holloway

Security Management IYM001 (Core)

Aims

This module will emphasise the need for good security management. Its aims are to identify the problems associated with security management and to show how various (major) organisations solve those problems.

Pre-requisites

None

Essential Reading

- A Practical Guide to Managing information Security (Purser)

Included as study materials once registered on the course.

Assessment

This module is assessed by a two hour unseen written examination.

Learning Outcomes

On completion of the module, the student will appreciate the complexities of security management, and have seen how some companies attempt to solve these problems.

Syllabus

Unit 1

Based on the presentation '**Why Information Security?**' by Richard Walton, and is deliberately chosen to be the first one on both this and the campus version of the MSc at Royal Holloway. It helps motivate and provide context not just for this module but the entire MSc course.

Unit 2.

Graham Edwards considers many of the very wide issues associated with '**Managing Information Security**'. Graham is a very well known information security practitioner with

more than thirty years in the business and his lecture very much represents the 'real world problems' faced by a Head of Information Security in a large financial institution. This presentation serves as a very useful introduction to security management practices by providing a reasonably detailed overview of some of the most relevant aspects of managing security within a large organisation; and shows how there is no 'one size fits all' in this complex and multi-faceted discipline.

Unit 3

The importance of ISO/IEC 17799 and 27001 as a recognised framework of controls designed to

reflect best security management practices is considered in Unit 3, when Mike Usher looks at **'Complying with BS 7799'**. This presentation aims to explain both the logic and the limitations of BS7799.

Unit 4

Chris Sundt looks at **'The Regulatory Environment'**. There are many aspects of law that affect security management and this presentation aims to introduce several of these, as well as discussing past cases to illustrate the significant impact of regulation on security management practice.

Unit 5

In Unit 5 Richard Whiteing explain the black art of **'Risk Analysis'**. This presentation considers the requirements for, and role of, risk analysis and risk management within a security management framework. These processes are illustrated using the risk analysis tool CRAMM. implemented using IPSEC.

Unit 6

Paul Dorey Head of Digital Security at BP and one of the most well known information security practitioners in the UK, examines information security from the perspective of developing an environment of 'trust' in the information age.

Unit 7

It is important to recognise that security management is a continuous process and its effectiveness needs to be constantly reviewed and evaluated. In unit 7, Chris Potter looks at **The**

role of Audit in Security", discussing both general audits and special security audits.

Unit 8

David Spinks discusses **'Information Assurance'**. This unit looks at the threats posed to large organisations by unforeseen events, including cybercrime and discusses a range of solutions and responses to the dangers businesses face in this area. There is a short video on Crisis Management accompanying the presentation.

Unit 9

In the penultimate presentation, Charles Brookson describes his own personal philosophy on how to organise security for a large organisation and provides useful pointers to what the effects of this were in practice. His Unit 9 presentation is titled **'Putting Theory into Practice'**.

Unit 10

We close with a look into the future when David Lacey presents **'Building a World Class Security Architecture for the New Millenium'** in Unit 10. As well as looking at new approaches to dealing with some 'day to day' information security challenges, in this presentation David presents a fascinating series of predictions for future developments in business practices, security technology and security management. He also discusses how to plan for future developments and discusses the creation of a suitably adaptable security infrastructure within the Royal Mail where, until recently, David was Head of Information Security.