## COMPUTER AUDITING COURSE

The ICT Consults offers a number of computer auditing and IT governance related courses. Although each one is designed to be 'stand alone', a new entrant to computer audit may wish to take them in the sequence shown in the table below.

| Course | Topics |
|---|---|
| Computer Auditing Concepts | Information systems auditing |
| Auditing the Data Centre | IT management. Systems software |
| Auditing Computerised Systems | End-user computing. Networks & on-line systems. Auditing applications and advanced systems |
| Auditing Computer System Developments | Information systems strategy & development |
| Introduction to Using Computer Assisted Audit Techniques (CAATs) | Basic CAATs |
| Cybercrime and Computer Fraud | Computer misuse and the law |
| Auditing Computer Security | Information systems security & operations |
| E-Business Security and Control | Networks & on-line systems. Auditing applications and advanced systems |
| Business Continuity Planning | Contingency planning |
| IT Governance | IT management |

### Computer Auditing Concepts

This course provides an introduction to, and overview of, computer auditing. The importance of data processing in today's business environment is discussed and the impact of the main IT components on the control environment is examined. The role of computer audit in the overall assurance process is linked to the business risk management process and the knowledge requirements of the audit staff. The concept of 'perfect system behavior' is introduced and an audit approach based on confidentiality, integrity and availability is used to illustrate how computer audits should be structured in order to cover the key risks associated with a computerized environment. The various tools and techniques that are available to the auditor are described together with their advantages and disadvantages. A background in computing is not required as technical matters are clearly explained within the appropriate business and audit context.

### Auditing the Data Centre

Data centers are the heart of any information systems department. Ranging from large-scale mainframe operations through to mid-range computers and file servers, they are the hub for processing the systems and data that support the business. Such a concentration of resources and duties require their day-to-day operation to be well controlled, efficient and effective if the organization is to receive value for money from its IT investment. This course will cover the auditing of in-house and outsourced data centers using a structured approach. A case study will be used to reinforce the points raised during the sessions.

### Auditing Computerized Systems

Almost every business process today has a computer system at its heart. Many auditors are discouraged from tackling this component of the process due to its inherent complexity. This course demystifies computer systems by introducing a structured approach that can be applied to the most complex application. The approach identifies the different types of computer system and their impact on the audit approach. The data processed by the systems is described and a hierarchical ranking is proposed. The types of control that are available are discussed in the context of a total audit approach.

### Auditing Computer System Developments

After some forty years of computer system development most organizations are still producing poor computer systems. According to a recent survey only one in four computer developments actually complete and of those nearly all are late, over budget and do not provide the users with the functionality that they require. Even those developments that do complete are often found to be riddled with software errors, leading to such news headlines as 'system fiasco', 'pensioners billed for zero amounts' and 'ariane rocket disaster caused by faulty software'. What is going wrong and why? What can be done to avoid what is apparently the unavoidable? The focus of this course is to provide an understanding as to why computer developments tend to fail, what can be done to prevent such problems in your organization, the importance of designing control in at the beginning and the real role of the auditor in the development process.

### Introduction to Using Computer Assisted Audit Techniques (CAATs)

The use of the computer as an audit tool can increase audit efficiency and effectiveness many fold. This increase can only be gained, however, if the tool is used correctly. The world is littered with discarded CAATs and disappointed auditors.

This course will introduce the concept of CAATs, discuss the different types that are available and how they can be used to advantage. The use of CAATs in the audit of data centre management, the computer applications and the application's data will be discussed. A case study will be used to reinforce the points raised during the sessions.

### Cyber crime and Computer Fraud-The Auditor's Role in Prevention, Detection and Prosecution

This course is intended to make participants aware of both the external and internal threats to their systems, the defensive measures that are available and the problems associated with gathering acceptable evidence. No previous experience of computers or fraud investigation is required.

### Auditing Computer Security

The move towards web based trading should have expanded companies' requirements from being introspective to outward looking, but in many organizations security has been an afterthought, which has more often resulted in an illusion of security, rather than in real security. This course covers the requirements of computer security and describes a structured way of implementing a reliable and robust security regime. Rather than dealing with the topic as a straight technical problem the course examines the link

between computer security and corporate governance and the relevance of people and organizational structure to the problem.

### E-Business Security and Control

Organizations are realizing that unless they are e-enabled they are viewed as being retarded. The rush to e-business has however blinded many organizations to the risks that they run. In many cases these risks are totally different from both normal trading risks and traditional IT risks. This course will look at the building blocks of e-business, identify the risks associated with each component and suggest ways of controlling them.

### Business Continuity Planning

Single, isolated business or service disruptions as well as large-scale, community-wide disasters have shown that a well-designed and tested enterprise-wide recovery and continuity plan is essential for business survival. Ensuring that an organization's assets, operations, commitments and relationships are protected is a critical element of staying in business. The frequency and severity with which disasters are occurring prove that planning for the emergency response phase of disaster recovery alone is simply not enough. As organizations look to extend their recovery planning efforts, the spectrum of enterprise-wide planning can seem overwhelming. There are, however, certain planning elements that are common to all organizations, no matter the size. A successful planning methodology will assist not only in recovery, but also ensure continuity of your core strategic and revenue-generating business/service units, operations and processes. The program will be of benefit to anyone involved in planning for the continuity of business operations in the event of a disaster.

### IT Governance

As part of this requirement, information technology departments will have to provide assurance to the main board that they have suitable controls in place. This course examines the problems posed by Turnbull to IT departments and develops an integrated process to ensure IT governance at minimum cost.

### Audit & Security for Networks Including TCP/IP

This bespoke training course will give participants the opportunity to discover:

- The main infrastructure components of local, wide and wireless networks
- How networks operate, how data is formatted, standardized, transmitted and received
- Terminology used by network specialists.
- How risks stem from network based operations and how they can be mitigated.
- How to deploy a wide range of controls and strategies over organizational networks and applications.

### IT Audit, Risk and Security for Internal Auditors

This special short course provides an excellent, broad-ranging introduction to the subject of computer systems risks and security for those who do not possess a background that is steeped in technology. It's designed to inform about advances in IT technology, highlight new risks, and pinpoint organizational activities, which are essential to contain

the risks. This course will provide guidance on the entire audit implications associated with your IT systems.
Participants will discover how to manage the risks associated with:

- Operating systems
- Networking
- Database System
- Client Server Systems
- Internet, Intranet Extranet
- Local Area Networks
- Wide Area Networks
- A non- technical overview of information technology risks

## Fundamentals of Information Security

A high tropical course designed to reflect the rapid changes taking place in Business, Technology, Security and Audit.

This training course will give you the opportunity to discover

- The principle standards that drive security
- How to develop excellent practical strategies for physical security
- How logical security works and how good security practices can be put in place to underpin its strength
- How to accredit and validate software using audit software and tools
- How to deploy a wide range of controls and strategies over organizational processing and applications
- An insight into the development of formal security architectures

## Information Technology Management Audit

As part of this requirement, information technology departments will have to provide assurance to the main board that they have suitable controls in place. This course examines the problems posed by Turnbull to IT departments and develops an integrated process to ensure IT governance at minimum cost.