

QUALIFICATION IN COMPUTER AUDITING
Guidance notes on completing logbooks

INTRODUCTION

These notes form the guidance for students seeking the award of the Qualification in Computer Auditing, QiCA, awarded by The Institute of Internal Auditors – UK and Ireland.

To qualify for Qualification in Computer Auditing a student must successfully complete both Qualification in Computer Auditing examination papers.

The student must also complete 1600 hours of relevant computer auditing work over at least two years and record this on the Qualification in Computer Auditing logbook record sheets attached to this guidance note.

SUBMISSION OF LOGBOOK

When completed, the logbook and the Application for the Award of the Qualification in Computer Auditing form, also appended to this note, should be submitted to:

Qualification in Computer Auditing Logbook Submissions
Examinations and Assessment Team
The Institute of Internal Auditors - UK and Ireland
13 Abbeville Mews
88 Clapham Park Road
London
SW7 7BX

No alternative form of experience log will be accepted.

The logbook will be returned after assessment as, provided it is maintained, it could be of value to the member: within their organisation, in support of a job application, or as evidence of Continuing Professional Development.

RESUBMISSION

Where a student fails to provide sufficient information they will be asked to re-submit their application.

In this eventuality the student must resubmit their original application plus the additional detail required.

NOTES ON COMPLETING THE LOGBOOK

Log3

The purpose of this summary sheet is to give an instant overview of the student's computer auditing history.

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This sheet is for students to record the number of hours spent on each piece of audit work, under the appropriate categories. This outlines the types of experience that the work reflects. The sheets must be totalled at the end to indicate the full number of hours recorded within each category.

The student's superior should complete the confirmation section at the bottom of the form, eg the Head of Computer Audit, the Chief Internal Auditor or another senior officer. Corroboration of the student's participation in and contribution to audits is an important element in guiding the assessors when they consider the value of the experience gained. The IIA reserves the right to contact the person certifying the Log3 in the event of a query.

Log4

For each of the entries in the Log3 there must be a corresponding Log4.

The Log4 sheets are to be used to record the detail of the audit assignments on which the student has worked. As these sheets form the main basis for assessment of capabilities they should include enough information to communicate to the assessors:

- the nature of the system audited:
 - Platform
 - Operating system
 - Network architecture
 - Connectivity issues
 - Software
- the full scope of the audit:
 - Detailed objectives (not high level risks)
 - The degree of complexity of the audit
- the contribution made by the student:
 - The role of the student in the audit
 - Any supervisory or management responsibilities exercised
 - Any computer assisted audit techniques used.

The aspects listed above form the basis of the information needed. Students may wish to include further information where it better describes their role or contribution or the systems being reviewed.

The Log4 sheet confirmation section should be completed by the student's superior, eg the Head of Computer Audit, the Chief Internal Auditor or another senior officer with sufficient direct knowledge of the student's participation in the review. The IIA recommends that the Log4 sheets are completed at the close of each review to ensure the clarity of the information being provided and confirmed.

The IIA reserves the right to contact the person certifying the Log4 in the event of a query.

NOTES ON THE TIME REQUIREMENT

The total time required on computer auditing related work is 1600 hours over a minimum period of two years. This experience should be mainly at the technical level and not principally at the management level. It is recognised, however, that there may be an element of management activity in team based situations.

Within this overall hours requirement, the following criteria apply.

Basic Experience

At least 250 hours computer auditing related work including all of the following four types of experience:

- The audit of a system under development
- The audit of an operational system, in the form of a systems based audit or an audit checking compliance with operational requirements
- The writing of an interrogation program to interrogate an operational system or evidence of other hands-on audit work, using a computer. Writing a program to interrogate a computer requires the student to create a new or unique program rather than to apply new parameters to an existing program or interrogation tool. Similarly, it does not include merely using an on-line enquiry to examine accounts/transactions
- The audit of a computer centre, ie an installation audit, for which the scope of the review and the type of hardware/software covered should be specified OR the audit of microcomputer systems covering security, control or contingency planning aspects

Specialist Topics

Significant audit involvement in at least three of the specialist areas shown in the table below. Significant audit involvement requires the auditor to carry out investigative work, where possible at a technical level, rather than using interviews as the sole means of enquiry.

Some work could be classified under more than one subject. For example, access control reviews are covered by the syllabus for operating systems, security, networks, database and microcomputers. An audit of this type may be analysed against one of the specialist topics or split proportionately between two or more. The Log3 must identify the proportion of time against the relevant subjects.

There must be a minimum of 250 hours in each of the three main areas nominated.

Examples of the types of work considered are recorded on the following pages. However, it should be noted that due to the wide range of computer audit opportunities, the items listed are illustrative rather than compulsory. Students need to apply their professional judgement when comparing the tasks they have undertaken with the examples in this guidance note.

IT Management, Strategy Development and Systems Development

- Audit of an organisation's information systems strategy
- Audit of the project management of major IT developments, whether using in-house development services or external software development resources
- Audit of the systems development process, including for example, the audit of a formal systems development methodology, audit of a rapid application development or CASE approach
- Audit of procurement or contract negotiation processes in an IT environment
- Review of a microcomputer acquisition or security strategy
- Involvement in developing an IT audit strategy for an organisation or developing IT audit standards
- Reviews of development projects and change control over end user developments
- Audit involvement in helping the organisation deal with legal issues, such as data protection, copyright requirements, or major issues, such as identity theft
- Audit involvement in the outsourcing of an IT function
- Audit of performance or capacity planning
- Auditing the information security management system to BS 7799-2:2002 level, or demonstrating an understanding of an appropriate ISMS and how the candidate's audit activity relates to it

Operating Systems Software and Other Software

- Audit work related to the installation, maintenance and configuration of operating systems and systems software, including reviews of major operating systems such. This work will include examination of the software and the controls / security issues related to it and the review of any security features associated with the software
- Reviews of other systems software, such as access control software, used in conjunction with operating systems software to achieve the objective of access control, carrying out tests and analysis of logs to ensure that controls are enforced effectively

Security and Contingency Planning

- Carrying out physical and logical security reviews of mainframe systems
- Carrying out reviews of contingency planning and back-up / recovery methods, including involvement in disaster recovery tests and in reviewing back-up material to ensure that it is current
- Carrying out audits to confirm that appropriate security is afforded over data, files and application / operating software
- Audits of the installation, maintenance and configuration of specialised access control software. The reviews of operating system security features and use of microcomputer based security packages could be claimed against this subject as an alternative to other relevant options
- Reviews of microcomputer security policies and their implementation
- Reviews of microcomputer-based security packages

Networks and Communications

- Audit of the telecommunication aspects in a mainframe network
- Audit of servers and network operating systems software on a LAN
- Audit of web-based servers and their connectivity to the back office
- Network software installation, maintenance and configuration
- Reviews of the physical networks used and resilience measures in place to limit failure
- Controls over the communications aspects, accountability, authorisation, encryption issues of on-line systems
- Audit of an automated teller system
- Audit of security in an internet / intranet / extranet environment, including for example, the audit of a firewall or router

Database Systems

- Reviews of database management software, as described for operating systems software but also including the reviews of the controls provided by such mechanisms as schema's and sub-schema's and related software such as data dictionaries
- Audit of database administration activities
- Audit of disaster recovery mechanisms in a database environment

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APPLICATION FOR THE AWARD OF QUALIFICATION IN COMPUTER AUDITING

Declaration of Applicant:

I have completed the required examinations and have logged 1600 hours relevant experience as indicated in the logs.

I understand the the Institute reserves the right to publish my name and the name of my employer once I am awarded the IIA Qualification in Computer Auditing. (Please email studentsupport@iia.org.uk if you do not wish your name to be included in the listings.)

Signed:	Membership Number:
Name in block capitals:	Date:

Certified by:

I certify that the above named has completed the relevant experience and that a satisfactory quality of work was achieved.

Signed:	Membership Number (if applicable):
Name in block capitals:	Date:
Position in organisation:	Name of organisation:

Note: This sheet MUST be submitted with Log1, Log2, Log3 and Log4.

IIA-UK use only

Approved by:

Signed:	Date:	Position in IIA-UK:
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Logbook: Record of Employment

Log1

NAME:

MEMBERSHIP NUMBER:

From	To	Position	Company/Organisation

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Logbook: Record of Training Courses Attended

Log2

NAME:

MEMBERSHIP NUMBER:

Title Of Course	Date	Duration	Name/Company Of Course Presenter

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Logbook: Analysis Sheet

Log3

NAME:

MEMBERSHIP NUMBER:

Date of Audit	Audit Title	Log 4 (tick)	Basic	IT Man/Strategy	Op Sys	Sec/CP	Networks	Dbase	Total

Confirmation (by student superior)

I confirm that this is an accurate summary of work performed in this period.

Position in organisation:	Organisation:
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Logbook: Detailed record of practical experience

Log4

NAME:

MEMBERSHIP NUMBER:

Audit Title:

Student's Participation

From: To: Hours of Personal Involvement:

Number of Members in Audit Team:

Student's Role in Audit Team:

Brief Description of Participation:

Confirmation (by student superior)

I confirm that this is an accurate summary of work performed in this period.

Name, organisation and position held:

Signature:

Date: