

IQA LEVEL 4
DIPLOMA IN QUALITY
(Assurance and Management)

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1.0 INTRODUCTION

The Institute of Quality Assurance (IQA) is a respected contributor to policy issues at both national and international level, promoting the role of the quality professional from its headquarters at Grosvenor Crescent in London.

The IQA introduced the professional body of quality knowledge, which provides the basis for the IQA's qualification criteria. As the professional body for quality practitioners, the IQA provides training, education and information on a range of quality issues. These IQA examinations have been designed to assist quality practitioners in acquiring the relevant skills needed in their employment. Through the years the examinations have evolved into a selection of units designed to assist today's quality professional in acquiring relevant knowledge. Since the last major change to examination structure in 1996, with the introduction of the A-11 'Introduction to Quality Assurance' and the A-12 'Principles and Techniques of Quality Management' over 27,000 papers have been taken.

The post-secondary learning environment has become increasingly competitive in the last decade. The pre-eminence of the traditional universities as the major providers of higher education is being challenged by non-traditional organisations, such as corporate and virtual providers. Numbers of pre-print archives, electronic journals and virtual libraries are on the increase. The growth of the information society, and the importance of knowledge based skills, aligned with the increased availability of communication and information based technologies has facilitated the development of flexible 'virtual' learning environments. There has been a growth in the demand for continuing professional development (CPD) as an element of lifelong learning.

Employer demand is now moving toward flexible education and training, which can be tailored to company needs, allowing re-training of employees to improve competitiveness and recognition of the learning needs of employees in globalised businesses. Through the development of the body of quality knowledge, the IQA has established a clear indicator of key quality competencies. It is now the intent of the IQA to translate those competencies into the pedagogy of the examination. It is the responsibility of the IQA to ensure the pedagogy and standard of all awards granted by the IQA as the Awarding Institution. It is also the responsibility of the IQA to ensure that the academic standard of all awards made under any collaborative arrangement must be equivalent to those comparable awards for programmes delivered by the IQA as an awarding institution itself. These awards should be comparable with any relevant benchmark information recognised within the UK.

2.0 RATIONALE

2.1 **Background**

The structure of the Diploma has been assisted by, but not been limited to consideration of the report of the National Committee of Inquiry into Higher Education (NCIHE) in July 1997 (the Dearing Committee), and the subsequent consultation on the promotion of learning and teaching (HEFCE 98/40). Additional deliberation has been achieved through consideration of the requirements outlined by the Department for Education and Employment and the Learning and Skills Council. Through review of the June 1999 white paper 'Learning to Succeed - a new framework for post-16 learning' and with regard to the LSC study QBO - Learning Skills Council Study Summary Report - March 2001.

2.2

Programme principles

The programme will be guided by four key principles:

- i. The need to provide an experience that will be relevant and practical for participating individuals and their employers or sponsors.
- ii. Intellectual rigour will be reflected in the nature of the subject material of each unit.
- iii. The need for flexibility both in programme design and delivery, and in the tailoring of assessment work.
- iv. The dissertation will require demonstration of appropriate application, research and communication skills applied to an advanced area of study.

These principles have been further developed to form programme aims and learning outcomes.

2.3

Programme aims

This Diploma programme will enable participants to:

- i. Acquire and develop a range of skills to analyse quality problems and to suggest and implement strategies to resolve them.
- ii. Select, evaluate and apply appropriate quality assurance/management skills, knowledge and techniques in a competent and professional manner.
- iii. Provide industry with autonomous professionals, equipped to lead in quality assurance/management.
- iv. Provide a programme where individuals can select one or more units in order to enhance their knowledge, skills and understanding in specific subject areas.
- v. Encourage students to promote a positive quality culture.
- vi. Provide an opportunity for critical appraisal, application and research, which engages with issues and debate relevance to quality assurance/management principles and practices.

2.4

Programme learning outcomes

On successful completion of the Diploma programme, students should:

- i. Have gained a critical understanding of key concepts, principles and practices relevant to each unit, and where appropriate, demonstrate links between units.
- ii. Be able to evaluate the applicability and usefulness of general principles, concepts and practices to specific situations based on workplace experience and/or case studies.
- iii. Recognise limitations in knowledge and management tools as applied to quality problems and reformulate new lines of approach.
- iv. Independently argue the need to recognise a number of differing approaches to a problem and the necessity for predicting and evaluating consequences.
- v. Be able to engage in professional discourse with other quality professionals.
- vi. Present information that is critical and evaluative in a variety of forms (including oral and written) using appropriate professional and academic styles.
- vii. Have gained confidence and competence in their areas of expertise and demonstrate these in the workplace or in group situations.
- viii. Complete a project which allows opportunity for appraisal, application and research, and which engages with issues and debate relevant to quality assurance/management principles and practices.

The generic programme aims and learning outcomes have been mapped against the specific units.

3.0 COURSE STRUCTURE

3.1 General principles

The structure of the IQA Diploma in Quality (Assurance and Management) is informed by the education panel of the IQA, and approved by IQA council. The programme requires students to undertake a course of study based on a six-unit configuration, which is outlined below:

Unit code	Title	Mandatory or optional
D1	Introduction to quality	mandatory
D2	Quality management	mandatory
D3	Quality tools and techniques	mandatory
D4	Communications and project management	mandatory
D5	Project	mandatory
D6*	Quality and environmental management	optional
D7*	Information technology and quality management	optional

* More electives may become available in later editions of the syllabus. See section 4.2.2.

3.2 Delivery pattern

Students are able to enter the programme at the start of any semester. Each unit is essentially free standing but has clear links and relationships with other units. As part of the learning process, special focus is placed on the ability to transfer knowledge, practices and skills between and across units.

3.3 Level descriptors

Level descriptors are designed as guidance for levels of learning to be attained. Learning accredited to all units contained within the framework of the Diploma is to be considered at Level 4.

This will reflect the student's ability to:

- Develop a rigorous approach to the acquisition of a broad knowledge base
- Employ a range of specialised skills across an area of study
- Evaluate information, and use it to plan and develop investigative strategies
- Determine solutions to a variety of unpredictable problems
- Operate in a range of varied and specific contexts
- Take responsibility for the nature and quality of outputs

3.4 Key skills signposting

Upon completion of the Diploma, the individual will have covered the full suit of key skills at level 4.

4.0 PROGRAMME STRUCTURE

In line with the findings and proposals outlined in 'Benchmarking Credit Ratings for Professional Qualifications' (HECIW, 1999) each unit has been considered against the credit accumulation and transfer scheme (CATS) tariff.

The assessment of the programme learning outcomes will be achieved by assessment at the unit level. Students will therefore achieve the programme learning outcomes by successful completion of the combination of mandatory and optional units.

4.1 Mapping of programme learning outcomes to units

The table below shows the relationship between the units and the programme learning outcomes. It can be seen that many of the programme learning outcomes are assessed in a range of units. In some cases there is a particularly strong relationship between a programme outcome and a unit. Similarly there are cases where there is a relationship between a unit but the relationship is considered to be a weak one. Any programme outcome that does not indicate a strong relationship with any of the units is one that contributes to the synergy of the programme. (See overleaf.)

	D 1	D 2	D 3	D 4	D 5	D 6/7
Outcome i	XXX	XXX	XXX	XXX	XXX	XXX
Outcome ii	OOO	XXX	XXX	***	XXX	XXX
Outcome iii	XXX	XXX	XXX	***	XXX	OOO
Outcome iv	***	OOO	XXX	OOO	XXX	XXX
Outcome v	XXX	OOO	OOO	XXX	OOO	OOO
Outcome vi	***	OOO	OOO	XXX	XXX	***
Outcome vii	OOO	OOO	XXX	XXX	XXX	XXX
Outcome viii	OOO	OOO	OOO	XXX	XXX	OOO

Key: XXX = Strong OOO = Normal *** = Weak

4.2 Programme of study

The IQA Diploma in Quality has been designed as a professional qualification for delivery on a part-time attendance mode at the IQA approved educational institution. The basis of the qualification is the completion of the five mandatory units and the one optional unit. These units may be taken in any order by the student, with the exception of D5.

4.2.1 The mandatory units

The four mandatory units (D1, D2, D3, D4) incorporate the pedagogy of the IQA devised body of quality knowledge and are designed for delivery over a one semester (15 week) period. The fifth mandatory unit - project (D5) involves less contact time and is based on assessment of student centred activity. The breakdown of delivery is shown in the table below:

Unit	Contact hours	Directed study	Independent study	CATS tariff at cats level 4
D 1	45	75	80	20
D 2	45	75	80	20
D 3	45	75	80	20
D 4	45	75	80	20
D 5	30	75	195	30
D 6	45	75	80	20
D 7	45	75	80	20

4.2.2 The optional unit

Introduced to allow diversity of the programme. This unit will contain subject material approved by the IQA (and QCA) as appropriate to the philosophy of the Diploma. Each approved educational institution delivering this unit can submit syllabi proposals.

The submission shall include the following at a minimum a detailed syllabus which includes:

- Unit rationale
- Modular aims
- Learning outcomes
- Indicative content
- Teaching and learning strategy
- Assessment rationale
- Indicative reading
 - Essential text
 - Supplementary text
- A unit implementation plan

The design of each optional unit will bear the same principles as that of the mandatory units in terms of contact and study hours and CATS Tariff.

4.2.3 Directed study

Directed study time will have a number of important features within each unit. It will:

- Allow students to read and prepare materials for subsequent lectures and assignments.
- Engage in relevant activities within their professional sphere.
- Develop a broader view of their studies by extending the breadth of knowledge, and provide important conceptual and practical links to other units

4.2.4 Independent study

Independent study time will allow the student to develop and refine individual skills and knowledge base This allows the student to make use of both primary and secondary source material, and in developing research skills.

4.3

Pre course requirements

All applicants should undertake an interview with a centre to ensure that they have the necessary skills and knowledge (see below) to build upon to complete the course successfully.

The centre should ensure that all students enrolling on the course are aware that IQA will ask for details of their interview as well as pre-course requirements (4.3.1/4.3.2 and 4.3.3) for statistical purposes when they register for the Diploma.

The interview should address the following areas:

4.3.1 Academic qualifications

Although the IQA does not require any formal academic qualifications students should be made aware that they will be required to make mathematical calculations for two of the units. Where possible those with weaker skills should be encouraged onto a foundation course to assist their development.

A pass at maths and english GCSE is advisable.

4.3.2 Vocational/Occupational qualifications:

IQA does not stipulate that potential students should have any particular qualifications before entering this programme. It should be stipulated this is a level 4 qualification and explained the level of attainment that will be required. Level 3 qualifications in both engineering and management will assist the candidate in different ways. Those with an engineering background may find Units D1 and D3 easier and those with a management background may find D2 and D4 easier.

Candidates who have previous qualifications at level 4 (eg management) should be made aware that this course may broaden their expertise. If students have already fully covered one or more units they should be encouraged to apply for Accreditation of Prior Certificated Learning (APCL) [Section 4.4] available at www.iqa.org

4.3.3 Vocational experience

As quality is a subject that covers all industries, the candidate may have skills and knowledge from a variety of experiences within their background. Eg time spent in service industry, manufacturing industry, etc. The BoQK that is produced by IQA may be of interest when looking at experience of skills and knowledge. See www.iqa.org

The candidate should be working where quality principles can be applied or they can be involved in quality within a working environment. This can be paid or unpaid work. Where candidates have in depth experience in certain areas they should be encouraged to pursue Accreditation of Experiential Learning (APEL) [Section 4.4].

4.4 Accreditation of Prior Learning

IQA operates a policy for both individuals and centres. This information is available from the IQA website on www.iqa.org/education.

5.0 ASSESSMENT AND AWARDS

5.1 Introduction

This section deals with the summative assessment of student performance. The assessment framework has been designed to allow flexibility in matching forms of assessment to:

- teaching and learning strategies
- the overall aims and learning outcomes of the programme
- the desired outcomes of individual units

Coursework assessments may take a variety of forms, eg essay, report, presentation, critique, review etc. Formative exercises may be employed within units to assist progression and development of course members.

5.2 Assessment profile

5.2.1 Unit coursework

Unit assessment will be achieved by a variety of means and these are identified in each unit specification. In general terms the assessments can be divided into a coursework element and an examination element. This is useful as it provides a guideline by which workload can be distributed more evenly. This additionally enables students to plan their study activities. When combined with a plan of assignment handout and submission dates these form a vital tool for students, especially part-time students who have to juggle study with work commitments.

The normal assessment profile for each of the units D1, D2, D3, D4, D6 and D7 will involve students undertaking one summative assessment submission equivalent to between 2,000-3,000 words. This will be followed by an end of semester examination.

In order to ensure that the learning outcomes of each unit are addressed, assignment briefs will be sent to academic institutions prior to the commencement of courses.

Samples of completed assignments will be required by IQA before the individual can sit the examination.

5.2.2 Projects

Projects are approved by individual institutions within guidelines included in the unit outline D5. Projects found to be outside the guidelines will be returned without grade.

Projects will be marked by the individual institution and moderated by the IQA.

Project results will be confirmed within the structure of the examination board.

Projects will contain between 7,000 and 10,000 words. The content is outlined in the unit specification.

5.3 End of unit examination

The examinations for Units D1, D2, D3, D4, D6 and D7 will be held twice a year in January and June.

5.3.1 Unit examination (external assessment)

The unit examinations will be set, marked and moderated by the IQA.

Examination results will be posted to students within three weeks of the IQA examination board. Examination results will be communicated using the grading system outlined below.

Mark	Grade	Descriptor
0 - 39	Fail	F
40 - 59	Pass	P
60 - 74	Merit	M
75 +	Distinction	D

5.3.2 Students wishing to sit examinations

Examination fees will be set by the IQA and communicated to all academic establishments, one academic year in advance.

There will be no limit to the number of re-sit examinations per student.

Students who have successfully completed all coursework, but who fail the examination may carry forward their coursework mark for a maximum of two successive exams. Students can also carry examination marks forward for two successive exam terms. The IQA recommend that if a student has failed coursework, by the given deadline, they should defer to the next examination.

Students who have not successfully completed all coursework for a unit may not carry forward any coursework marks for that unit.

5.3.3 Appeals

The IQA operates a full and independent appeals procedure. Information is available on the IQA website at www.iqa.org

5.4 Award

Each unit will be graded and certificated individually.

ONLY students who successfully complete all six units, within a six year time frame, will be eligible for the award of IQA Diploma in Quality. This will not be graded.

The IQA Education Advisory Group confers the award of Diploma in Quality. In order to confirm the intellectual rigour of the qualification, and its recognition by the IQA, Diploma in Quality graduates will each receive a certificate signed by the director of operations.

5.5

Progression

5.5.1 Employment Progression

Successful students will be able to use the designatory letters DipQ after their name which may enhance their career prospects and professional recognition.

Possible employment areas and career development could be the following:

Quality Assurance Manager
Quality Manager
Business Improvement Manager
Business Systems Manager
Senior Quality Engineer
Quality Management Specialist/Consultant

5.5.2 Qualification Progression

Upon successful completion of the award students may wish to continue their studies for a masters degree. The IQA Centres of Excellence have endorsed this qualification as an entry level qualifications and the different qualifications that they may wish to apply for - www.iqa.org/education (Centres of Excellence).

Some of the qualifications they have on offer are as follows:

- MSc Quality Management
- MA Customer Services Management
- MSc Process Systems Engineering
- MSc Total Quality Management
- MSc Management of Quality Excellence

The Open University has given accreditation for this award. Students will be exempt from year one on selected honours degree courses.

In addition students may apply for other qualifications at different universities. The onus will be on the student to demonstrate what has been attained by their studies to date and how this relates to the course they wish to study.

There is also a vocational progression to complete the NVQ Level 4 in Quality Management which should accept this qualification as some form of exemption from the full qualification.

5.5.3 Professional Status

Students with the appropriate experience will also be eligible to apply for full membership of the IQA to enhance their professional status and use the initials MIQA.

6.0

TEACHING STRATEGY

6.1

Learning outcomes

The drivers behind the coursework assessment and examination are the learning outcomes. When preparing the course material this should be considered. This is a level 4 qualification therefore the descriptors of the learning outcomes will reflect this. They are as follows:

- Analyse and interpret complex technical data
- Critically evaluate
- Recommendations
- Critical importance to industry

A sample coursework assessment and examination is supplied as part of the sample centre assessment pack which provides guidance on the type of examinations questions that may arise.

6.2 Indicative content

The indicative content is guidance for the areas to be addressed which may arise in the examination. These are areas which will be expected to be discussed within the framework of assessment. The way that the questions are approached is governed by the learning outcomes. (See 6.1)

For details of what areas will be addressed by the indicative content the indicative reading list will be used as the basis for the preparation.

Where units refer to standards please refer to the standards for definitions and interpretations

6.3 Weighting for assessment = %

Each of the learning outcomes carries the same weighting within the unit. eg if there are five learning outcomes for one unit then each will carry a 20% weighting.

Work covered by the coursework assessment will not be covered in the examination.

The most appropriate form of assessment, eg coursework or examination, will be used for each learning outcome.

6.4 Harvard referencing system

When referencing the projects the Harvard referencing system should be used.

ASSESSMENT GRID - MODULAR ASSESSMENT BREAKDOWN

IQA LEVEL 4 DIPLOMA IN QUALITY

(Assurance and Management)

Unit	Components/Learning outcomes								Total
	1	2	3	4	5	6	7	8	
D1	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	100
D2	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	100
D3	16.5	16.5	16.5	16.5	16.5	17.5			100
D4	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	100
D5	16.5	16.5	16.5	16.5	16.5	17.5			100
D6.1	16.5	16.5	16.5	16.5	16.5	17.5			100
D7	16.5	16.5	16.5	16.5	16.5	17.5			100