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SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with Regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Generic Management

registered by Organising Field 03 – Business, Commerce and Management Studies, publishes the following Qualification and Unit Standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the Qualification and Unit Standards. The full Qualification and Unit Standards can be accessed via the SAQA web-site at **www.saqa.org.za**. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the Qualification and Unit Standards should reach SAQA at the address below and *no later than 14 April 2009.* All correspondence should be marked **Standards Setting** – SGB for Generic Management and addressed to

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SOUTH AFRICAN QUALIFICATIONS AUTHORITY

SAQA

QUALIFICATION:
National Certificate: Quality Management Systems

SAQA QUAL ID	QUALIFICATION TITLE		
66189	National Certificate: Quality Management Systems		
ORIGINATOR		PROVIDER	
SGB Generic Management			
QUALIFICATION TYPE	FIELD	SUBFIELD	
National Certificate	3 - Business, Commerce and Management Studies	Generic Management	
ABET BAND	MINIMUM CREDITS	NQF LEVEL	QUAL CLASS
Undefined	120	Level 5	Regular-Unit Stds Based

This qualification does not replace any other qualification and is not replaced by another qualification.

PURPOSE AND RATIONALE OF THE QUALIFICATION
Purpose:

This Qualification is for any individual who is, or wishes to be, involved as an assistant or a technician to a quality management systems manager in the quality sector. The Qualification contains all the competencies, skills and values required by a learner who may wish to access a higher Qualification within this quality systems sector.

The core component of the National Certificate: Quality Management Systems at NQF Level 5 contains general competencies that help the learner acquire a broad and meaningful overview of the quality management systems sector before proceeding to the proposed more specialised Level 6 qualification in this field. The fundamental and core components consist of competencies in:

> Quality requirements for a quality management system.
> Business processes in quality management systems.
> Internal quality management system audits.
> Legal framework and compliance.
> Quality management systems documentation.
> Statistical Process Control (SPC).
> Project management.
> Risk management.
> Improving quality of management systems.
> Ethics.
> Communication in a business environment.
> Reporting and report writing skills.
> Gathering and managing information for decision-making.

The Elective component allows for the development of other competencies that will facilitate access to the proposed NQF Level 6 Qualification in quality management systems and other related fields.

Learners working towards this Qualification will find that the acquisition of competence in the Unit Standards, which make up the Qualification, will add value to their conceptual understanding of the field and their work performance. This Qualification is intended to enhance the provision of service within the quality management systems sector.

The Qualification will provide the broad knowledge, skills and values needed in the quality management field and will facilitate access to, and mobility and progression within, education and training for learners who:

> Were previously disadvantaged.
> Have worked in this field for many years, but have no formal Qualification and would like to achieve this Qualification through the process of Recognition of Prior Learning (RPL) and/or formal study.
> Wish to extend their range of skills and knowledge and hence their competencies in quality management systems environment.

The Qualification has building blocks that can be developed further in Qualifications at a higher level. It also focuses on the skills, knowledge, values and attitudes required to progress further.

The intention is to:

> Promote the development of knowledge, skills and values that are required for service excellence within the field of quality systems; release the potential of people; provide opportunities for people to explore different activities within the quality management systems sector.

Rationale:

The function of the quality assistant/technician would be to assist the Quality manager/specialist in the performance of those tasks and activities that would lead to the development, implementation, effective maintenance and improvement of Quality systems. It will in the interest of the country as a whole to ultimately have quality managers/specialists who would ensure that their assistants/technicians are trained according to this Qualification in order to improve productivity, efficiency and effectiveness.

Currently there are no national Qualifications for these learners at this level. Learners tend to enter the field by completing their schooling and acquiring work experience that will lead to becoming a quality technician. This will be the first national Qualification in the higher education band that will constitute the initial step for these learners towards becoming quality systems managers/specialists.

Broadly-speaking, quality management constitutes essential processes and services currently being rendered in a variety of contexts; mainly in production, manufacturing and services. Quality management, of which the basis is the ISO 9000 series, is becoming increasingly vital in ensuring that quality is maintained at every level within the contexts mentioned above.

The structure of this Qualification will allow learners to acquire a set of generic competencies in Quality Management Systems. Acquiring these competencies will enable the individual to pursue a higher level qualification through which they would become highly skilled Quality Management Systems managers/specialists.

The National Certificate: Quality Management Systems at NQF Level 5 is the first national Qualification in this sector. In terms of a learning pathway the learner will be able to pursue the Diploma: Operations Management, NQF Level 6 (ID 62189) or the Diploma: Management Services, NQF Level 6 (ID 881).

The National Certificate: Quality Management Systems at NQF Level 5 supports the objectives of the NQF in that it gives the learner access to a registered Qualification. It will ensure that the quality of education and training in the sub-field is enhanced and of a world-class standard. The Qualification will allow learners not only to develop their knowledge and skills in the field of Quality Management but will also enable them to benchmark their competence against international standards.

RECOGNIZE PREVIOUS LEARNING?
Y

LEARNING ASSUMED IN PLACE
Learners wishing to study towards this Qualification are assumed to have:

> Mathematical literacy at NQF Level 4.
> Communication at NQF Level 4.

Recognition of Prior Learning:

This Qualification makes the Recognition of Prior Learning possible, if the learner is able to demonstrate competence in the knowledge, skills, values and attitudes implicit in this Marketing Qualification. Recognition of Prior Learning will be done by means of an Integrated Assessment as mentioned in the previous paragraph.

This Recognition of Prior Learning may allow:

> For accelerated access to further learning.
> Gaining of credits towards a unit standard.
> For full or partial recognition of the Qualification.

All recognition of Prior Learning is subject to quality assurance by the relevant accredited Education, Training, Quality, and Assurance Body and is conducted by a registered workplace assessor. Because the standards are only core and fundamental, these standards may have been acquired in a range of economic sectors and these will be recognizes as appropriate.

QUALIFICATION RULES
The Qualification consists of a Fundamental, a Core and an Elective Component.

To be awarded the Qualification learners are required to obtain a minimum of 120 credits as detailed below.

Fundamental Component:

> The Fundamental Component consists of Unit Standards to the value of 30 credits all of which are compulsory.

Core Component:

> The Core Component consists of Unit Standards to the value of 82 credits all of which are compulsory.

Elective Component:

> The Elective Component consists of individual unit standards from which the learner must choose unit standards totaling a minimum of 8 credits.

EXIT LEVEL OUTCOMES

1. Demonstrate an understanding of the Quality Management System.

2. Enhance the quality management system through implementation of statistical process control, QMS documentation management and problem solving/improvement strategies.

3. Execute and control a QMS project using a management plan project management skills for a simple to moderately complex project.

4. Conduct communication using the appropriate channels and mechanisms and use knowledge of statistics and probability in the business environment.

5. Apply the principles of ethics to improve organisational culture.

Critical Cross-Field Outcomes:

Identify and solve problems in which responses display that responsible decisions using critical and creative thinking have been made when:

> Solving a variety of problems based on data, statistics and probability.
> Using context to decode and make meaning individually and in groups in oral, reading and written activities.
> Solving problems related to defects and products utilising creative thinking processes.
> Applying monitoring and verification methods and taking corrective action after conducting an internal audit.
> Maintaining and improving quality management systems.
> Applying ethical principles in the unit or workplace.
> Dealing with risks associated with stakeholders, products and project management processes.
> Using sampling methodologies to obtain data.
> Interpreting data.
> Using tools and techniques to develop alternative solutions to solve problems and/or improve quality in an organisation.

Work effectively with others as a member of a team, group, organisation, community to:

> Use interactive speech in activities, discussion and research projects.
> Collect and collate data for interpretation and participate in the data processing team.
> Plan, prepare and conduct an internal audit.
> Maintain and improve quality management systems.
> To improve the culture of the unit in terms of ethics.
> Manage risks and compile recommendations for identified new risks and issues.
> Prepare closing the administration, clients agreements and releasing project resources, develop and/or amend documents and establish records.
> Resolve problems and/or improve efficiency and effectiveness in terms of quality.

Organise and manage oneself and one's activities responsively and effectively when:

> Applying technical skills and managing configurations.
> Applying monitoring and verification methods.
> Planning, preparing and conducting an internal audit and implementing corrective action.
> Using sampling methodologies to obtain and collate data, interpret data and compile charts.
> Maintaining and improving quality management systems.
> Obtaining the required information to prepare the handover of the products of a project.
> Managing risks.
> Assessing documents, developing and/or amending documents, controlling documents and establishing records.

> Using tools and techniques to develop alternative solutions to solve problems and/or improve quality in an organisation.
> Preparing a proposal to improve the quality management system.

Collect, analyse, organise and critically evaluate information to:

> Develop language capability across language applications and fields of study.
> Distinguish between useful, relevant information and useless information.
> Critically interpret data and statistics to make sense of situations.
> Ensure that findings are correct and implement corrective action.
> Maintain and improve quality management systems.
> Identify areas of unethical conduct in the unit or workplace.
> Monitor the performance of the project.
> Verify and validate that project products are ready for handover.
> Manage project risks.
> Interpret data and compile chart.
> Select the most appropriate solution to solve the problem of improve efficiency and effectiveness in a specific area/aspect.

Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation to:

> Represent data, statistics and probability and effectively communicate or critique conclusions to stakeholders.
> Prepare and conduct internal audits.
> Report findings to auditees and clients and to promote ethical conduct in the unit.
> Communicate the project closure.
> Discuss project stakeholders, including team members regarding the risk plan and status of risk occurrence.
> Plan, implement and monitor a solution to a problem or a method of improving quality in a selected area.

Contributing to the full development of oneself by:

> Engaging with texts that stimulate awareness and development of life skills and the learning process in general and in the workplace.
> Being culturally and aesthetically sensitive across a range of social contexts in a diverse team of people in the data gathering and processing processes and when managing risks.
> Participating as responsible citizens in the life of local, national and global communities by promoting ethical practices in the unit and entity.

Demonstrating an understanding of the world as a set of related systems by:

> Using mathematics to critically analyse, describe and represent situations and to solve problems related to the life or work situations of the adult with increasing responsibilities.
> Demonstrating how personal, social, organisational and national values and beliefs impact on the entity's culture.
> Participating as responsible citizens in the life of local, national and global communities when identifying and responding to risks.
> Recognising that the problem-solving contexts do not exist in isolation when engaging with a problem or an exercise to improve the quality management system.

Use science and technology effectively and critically, showing responsibility towards the environment and the health of others by:

> Using the equipment according to manufacturer's instructions.

ASSOCIATED ASSESSMENT CRITERIA
Associated Assessment Criteria for Exit Level Outcome 1:

> An awareness is created regarding the regulatory framework within which the QMS technician operates.
> The history of quality and quality standards is described in terms of ideas of key theorists in QMS.
> The importance of the International Standard Organisation (ISO) 9000 family of documentation is described to show how these serve as the benchmarks for quality management.
> The terms and definitions used in quality terminology are explained to ensure that the differences are clearly understood.
> Business processes are identified and explained in terms of their inter-relationships and associated risks and impacts.
> Technical skills are applied to the business process approach to compile a flowchart The inter relationships and integration of business processes are explained with regard to quality management systems.
> Different types of audit processes are explained before drawing audit plan.
> A systems audit is planned, prepared and conducted and a report compiled under supervision.
> Problems in the quality management sector are resolved using problem solving techniques.

Associated Assessment Criteria for Exit Level Outcome 2:

> Statistical concepts pertaining to statistical process control are explained to indicate how they can be used to improve understanding of QMS.
> The importance and use of sampling is explained in terms of methodologies, data collection and collation.
> Charts are compiled and interpreted to analyse process variation and trends/or points in out-of-control situations.
> A new is developed and/or existing document is amended and a record is established.
> A document is controlled as per organisational procedures.
> Opportunities for process improvement are identified through techniques to recognise current and potential problems.
> Process related problems are analysed, possible solutions are considered and appropriate solutions are developed.
> A solution is planned and implemented and the effectivity of results is monitored.

Associated Assessment Criteria for Exit Level Outcome 3:

> The performance of the project is monitored and controlled in accordance with project procedures.
> Project baselines are managed through integrated change control.
> Product development and change control procedures are planned and agreed with stakeholders.
> Project risk management is explained in terms of the major processes for managing risk and the tools and techniques that support risk management.
> Potential risks and their impact on the project are analysed to unable preventative action to be taken. A risk management plan for the project is developed in terms of a variety of factors.
> Risk events are monitored, evaluated and responded to in accordance with agreed procedures and project plan.
> Products of the project are verified and validated and made ready for handover.
> Project administration and client agreements are closed and project resources are released.
> Lessons learnt are documented and recorded in required format for future use.

Associated Assessment Criteria for Exit Level Outcome 4:

> Communication channels are established and used in business and everyday life.
> Written and verbal communication are used in the business environment to achieve a variety of purposes for different audiences and contexts.
> Access information through an information gathering team and process, re-organise, and synthesise it in order to present it to others.
> Knowledge of statistics and probability is applied to critically interrogate and effectively communicate findings on life related problems.
> Appropriate language conventions, textual features and style for specific are used for workplace purposes.
> Reports are prepared and presented on the basis of information gathered.
> A feedback system is developed to ensure that information is circulated amongst team members.

Associated Assessment Criteria for Exit Level Outcome 5:

> The relationship between values, ethics and organisational culture and its impact on achieving goals and objectives is explained using examples form the South African workplace.
> Apply the concept of corporate ethics to a unit in terms of the imperatives of ethical conduct and the role of corporate governance.
> A business or workplace unit is analysed in relation to the principles of corporate ethics.
> Recommendations for strengthening shared organisational values, the code of conduct and ethical practices are formulated to guide the unit/workplace in its practices.

Integrated Assessment:

Because assessment practices must be open, transparent, fair, valid, and reliable and ensure that no learner is disadvantaged in any way whatsoever, an integrated assessment approach is incorporated into the Qualification. Learning, teaching and assessment are inextricably linked. Whenever possible, the assessment of knowledge, skills, attitudes and values shown in the unit standards should be integrated.

A variety of methods must be used in assessment and tools and activities must be appropriate to the context in which the learner is working. Where it is not possible to assess the learner in the workplace or on-the-job, simulations, case studies, role-plays and other similar techniques should be used to provide a context appropriate to the assessment.

The term 'Integrated Assessment' implies that theoretical and practical components should be assessed together. During integrated assessments the assessor should make use of formative and summative assessment methods and assess combinations of practical, applied, foundational and reflective competencies.

Assessors and moderators should make use of a range of formative and summative assessment methods. Assessors should assess and give credit for the evidence of learning that has already been acquired through formal, informal and non-formal learning and work experience.

Assessment should ensure that all Specific Outcomes, Essential Embedded Knowledge and Critical Cross-Field Outcomes are assessed. The assessment of the Critical Cross-Field Outcomes should be integrated with the assessment of Specific Outcomes and Essential Embedded Knowledge.

INTERNATIONAL COMPARABILITY
Several countries were investigated as part of the International Comparability. These are:

> New Zealand.
> Japan.

> India.
> The United Kingdom.
> Canada.
> The United States.
> Egypt.
> Botswana.
> Ghana.

New Zealand:

The following qualification was found on the New Zealand Qualifications Authority (NZQA) qualifications framework - the National Certificate in Quality Management at Level 4 worth 65 credits.

The National Certificate in Quality Management [Ref: 0369] is for:

> Managers, team leaders, and facilitators with responsibility for quality.
> Members of quality improvement teams or work units who are integrating quality into their work.
> People who are seeking a career in quality management at a middle management or technician level.

This qualification recognises knowledge, skills and competencies in core quality management concepts, processes and systems. The compulsory section of the qualification and Elective are designed to provide the core quality management knowledge and skills required by organisations. These include team work, supply chain relationships, auditing, quality management tools, and data collection and analysis. Elective B enables the selection of specialist quality management competencies and other related skills. The following are the main competencies:

> Establish, develop, and improve quality-focused aspects of supplier relationships.
> Establish, develop, and improve quality-focused aspects of customer relationships.
> Participate in a team to achieve specified quality improvement objectives.
> Demonstrate knowledge of quality and its management.
> Demonstrate knowledge required for quality auditing.
> Use core quality management tools.

The qualification also provides for a number of elective options.

As can be seen from the information below, the National Certificate: Quality Management Systems at NQF Level 5 represents a watered-down version of the Graduate Diploma in Quality Systems at Massey University in New Zealand, which focusses on quality management as a developing field of theory and practice which brings together quality thinking and methods, the application of management theory, and leadership in the context of modern organisational systems thinking.

The Graduate Diploma aims to provide students with the knowledge and skills to enable them to become managers who have as their goal, quality throughout the whole organisation. It covers the concepts and methods of quality management as a holistic framework and the contribution of various disciplines to the whole.

The Graduate Diploma includes the following courses:

Quality Management or Quality Management for Medical Laboratories and Quality Assurance Project and 60 credits selected from:

> Ergonomics: Work, Performance, Health, and Design.
> Statistical Methods for Quality and Six Sigma.
> Quality Improvement.
> Service Quality.
> Quality and People.
> Quality and Production.
> Managing Services.
> Product Development Process.
> Packaging Technology II.

As can be seen there is an overlap between the competencies covered by the Massey University qualification and this Level 5 qualification.

The Open Polytechnic of New Zealand offers a course in Quality Management (applicable to the manufacturing and services industries), which is available as part of the following programmes, inter alia:

> Diploma in Purchasing & Supply Management for Business Level 5.
> Diploma in Communication Studies Level 5.
> Diploma in Information & Library Studies Level 6.

Topics in the course include:

> Philosophy of quality management and total commitment of management.
> Quality culture.
> Internal and external customers.
> Statistical quality control and the stable system.
> Managing for continuous improvement (Kaizen).
> Quality control and assurance techniques.
> Business process re-engineering.

Students will be able to:

> Evaluate the organisational culture and change required as a precondition for the introduction of quality management.
> Identify the appropriate strategies to develop quality management in a chosen organisation.
> Design, develop, and implement quality systems to suit a specific organisation.

As can be seen there is significant overlap between this course and aspects covered by the Units Standards of this Level 5 qualification.

Another short course offered by the Open Polytechnic is called Managing for Quality. Quality systems have been evolving from simple inspection activities to quality control. This course introduces the learner to the philosophy of quality management - the culture, policy and systems required for the management of quality and the techniques used in the control and assurance of quality. This course is available in the following programme(s):

> Graduate Diploma in Management.
> Graduate Certificate in Management.

The course includes the following:

> The quality management approach.
> Meaning of quality.
> Costs and benefits.

> Moments of truth.
> The culture, policy and systems required by quality management.
> Continuous improvement.
> The control cycle.
> Quality measurement.
> Quality management strategies.
> Techniques to achieve quality results.
> Standards, including ISO 9000.
> Quality tools.
> Project management.
> Process engineering.

Again many aspects of this course resonate with this Level 5 qualification in quality management systems.

The New Zealand Organisation for Quality offers a course entitled Internal Auditor Training. Internal Auditing is a Unit Standard in this qualification. Internal audits are a powerful management tool for improving the performance of an organisation's quality systems. This two day course provides participants with the knowledge and skills to conduct internal quality systems audits in their own organisations. The course is intended for persons who are familiar with the basic concepts of quality management systems and who have had some involvement with their own organisation's quality management system.

At the conclusion of this programme, participants are able to:

> Interpret and apply the elements of the ISO 9000 Standards.
> Plan and prepare for an internal audit.
> Develop a practical checklist.
> Develop and use audit documentation.
> Develop an internal audit report.
> Present audit findings in a constructive manner.
> Determine the roles and responsibilities of an internal auditor.

The New Zealand Quality College offers the following short training courses in ISO 9001 and Quality Management Systems.

ISO 9001 Management Systems:

This course give a sound understanding of all the principles of the ISO 9001 standard, what they mean, why they exist and how they are applied. It is suitable for a learner just starting out as a management system practitioner, or for someone who requires an introductory course for understanding basic quality management principles, this workshop is the ideal starter.

This two day course covers in detail the clauses of ISO 9001. It provides a valuable guide to developing and auditing an ISO 9001 system. The learner will have the opportunity to apply the standard to their own organisation.

Learning Outcomes:

At the end of this course, the learner will:

> Know more about the standard, including its origin and philosophy.
> Know how to interpret the standard and relate each principle to your workplace.
> Know about ISO 9001 and how to use it to support ISO 9001.
> Know how to use the ISO 9001 standard as a practical tool for improved business management.

Quality Management Systems Implementation:

This three day course provides participants with the core competencies to implement quality management systems to meet the requirements of the ISO 9001 standard.

Upon successful completion of this course participants will have gained the following knowledge and skills and be able to:

> Apply quality management principles.
> Understand the terminology, intent and how to meet the requirements of ISO 9001.
> Set up quality management systems to improve organisational effectiveness.
> Identify and produce required documentation using the process approach and know how to implement it.
> Evaluate the implementation and effectiveness of the quality management system.

When combined with the RABQSA-AU Auditing Management Systems competency unit, this course qualifies participants to become a Provisional Quality Auditor under the RABQSA Auditor Certification Scheme. The New Zealand Quality College offers this course in partnership with ANDSAM Training, which provides training and assessment services specialising in the development, implementation and auditing of management systems.

Management Systems Auditor Training:

This short course is about checking that all systems are performing effectively and in line with the organisation's goals. Regular internal audits are necessary to maintain control and pave the way for successful accreditation and certification assessments.

Implementing and Auditing Quality Management Systems:

This five day course provides participants with the core competencies to both implement and audit quality management systems that ensure they meet the requirements of the ISO 9001 standard.

Upon successful completion of this course participants will have gained the following knowledge and skills and be able to:

> Apply quality management principles.
> Understand the terminology, intent and how to meet the requirements of ISO 9001.
> Set up QMS to improve organisational effectiveness.
> Identify and produce required documentation using the process approach and know how to implement it.
> Evaluate the implementation and effectiveness of the QMS.
> Establish audit objectives, scope and criteria.
> Schedule audits and develop site audit plans and audit guidance tools.
> Organise and direct audit team members.
> Gather objective evidence using interviewing, observation and sampling techniques.
> Analyse and interpret information to determine conformance with requirements.
> Report audit findings, prepare audit reports and undertake follow-up.

Upon successful completion of the course, participants will receive a Certificate of Attainment. This course is suitable for those involved in developing a quality management system, or those carrying out audits of quality management systems and looking to gain formal recognition of their knowledge and experience. This course is offered in partnership with ANDSAM Training, which provides training and assess. The training has been structured to address the elements of competency required under the RABQSA International competency units:

> RABQSA-QM Auditing Quality Management Systems.
> RABQSA-AU Auditing Management Systems.
> RABQSA-TL Leading Management System Audit Teams.

Japan:

There is a paucity of information available in English on Quality Management.

The Association of Overseas Technical Scholarship (AOTS) was established in 1959 with the support of the Ministry of International Trade and Industry (which is the present Ministry of Economy, Trade and Industry: METI) as the first technical cooperation organization on a private basis in Japan.

The following is a list of AOTS Management Training Courses in Quality Management Quality Control.

> The Program for Quality Management extends over 20 days and its objectives are to enhance the ability to promote quality management among middle and senior managers.
> The Training Course on Practical Solution of Quality-Related Problems extends over 13 days and its objectives are to enhance the basic abilities to solve critical quality problems.
> The Executive Program on Quality Management is to enhance quality-oriented management capability among owners, partners, and corporate executives who wish to implement quality-oriented management in their organizations.
> The Quality Control Training Course is to enhance TQM promotion capabilities among managers and staff responsible for the promotion of TQM/quality control activities at manufacturing companies, with a basic knowledge of the seven QC tools.

In an article entitled Statistical Training of Researchers in Total Quality Management: The Japanese Experience, by Chihiro Hirotsu describes five courses to learn the statistical methods that are most useful in practice:

> Elementary statistics: Basic idea of variations in data, statistical estimation and tests, concept of Total Quality Management (TQM), basic tools such as QC seven tools and control charts.
> Design of Experiments: One- and two-way layouts, split plot design, hierarchical design, orthogonal array, analysis of variance (ANOVA), reliability analysis.
> Multivariate Analysis: Regression analysis, discriminant analysis, principal component analysis, correspondence analysis, cluster analysis, contingency tables.
> Advanced: Beyond ANOVA techniques, graphical modelling, GLM, GAM, Multiple correspondence analysis, Taguchi method.
> Applications: Problem solving by integrated use of various statistical methods.

In Japan there are many TQM education courses outside companies. A variety of systems of education courses exist, such as post-oriented, division-oriented, theme-oriented, methodology-oriented courses, statistical software courses and a correspondence course.

There are also various levels from elementary to advanced, which include also rather philosophical seminars to introduce the concept of TQM as well as more technical statistical seminars. It should also be noted that there are courses provided not only for the manufacturing processes but also for the planning, marketing and management processes. The following is an expansion of the range of courses in quality management relevant to this qualification. In some cases, while the courses are designed for senior and executive management the content is in keeping with the level of the competencies in this Qualification. Many of the courses below constitute part of this qualification.

Post oriented courses:

> Top Management Course (intensive, 9 hrs. ×4 days): Introducing the managing director to management and TQM for the promotion of company-wide quality management activities.
> Executive Management Course (intensive, 9 hrs. ×4 days): Introducing the general manager to planning and implementing TQM.
> Senior Management Course (6 hrs. ×3 days): Introductory course for senior managers to the basic principles of TQM and TQC.
> Middle Management Course (6 hrs. ×9 days): Practical course for middle managers to promote TQM in their respective departments.
> Chief Basic Course (6 hrs. ×6 days): Role of chief staff in the ordinary quality control activities.

Division oriented courses:

> Elementary Course for Sales Department (6 hrs. × 4 days): Concept of TQM and QA (Quality Assurance) in sales department.
> Advanced Course for Sales Department (6 hrs. × 8 days): Roles of sales department for TQM and the current method of QA for customer satisfaction.
> QC Seminar for Good Manufacturing Practice (6 hrs. × 3 days): Necessary knowledge of GMP (Good Manufacturing Practice) to promote TQM and QA in manufacturing and selling foods and drugs.

Theme oriented courses:

> Introductory Course for TQM (6 hrs.×3 days): Basic concept of TQM, quality and control; Method of problem solving and approaching a project.

Methodology oriented courses (elementary):

> QC Seminar Basic Course (6 hrs.×30 days): Seminar of quality control concepts and theory and application of statistics for engineers and staff with at least 3 years business experience; Lectures, practice with personal computer and QC games for basics statistics methods, statistical test and estimation, design of experiments, regression analysis, reliability engineering, sensory test, feeling evaluation and so on.
> QC Seminar Elementary Course (6 hrs.×8 days): Basic concept of quality control and elementary statistics methods including QC seven tools, collecting and summarising data, test and estimation, analysis of variance and correlation and regression analyses.
> QC New Seven tools (6 hrs. ×3 days): Affinity chart method, relation chart method, system chart method, arrow diagram method, process decision program chart (PDPC), matrix chart and matrix data analysis.
> Seminar for Computer Application for Problem Solving (6 hrs. ×2 days): Problem solving, decision making and information system.

The Japanese Standards Association (JSA) provides some standard courses, in particular, ISO 9000 and ISO 14000 seminars.

In-company TQM education and training:

Although these external seminars provide a very good opportunity for TQM education and training the internal education of people in a company is even more important for practising these methods and techniques in their ordinary activities. Most companies, if not all, arrange education and training courses in TQM for their employees. Examples are the Takenaka Corporation and the Toyota Motor Corporation.

The Japanese Standards Association (JSA) Quality System Center was accredited by the Japan Accreditation Board for Conformity Assessment in July 1994 to implement auditing and registration of the quality systems of companies applying the JIS Z 9900 (ISO 9000) series and

was accredited by the same board in February 1997 to implement similar activities for companies applying the Big Three Auto company QS-9000 series.

The Education and Training offered by the JSA includes seminars on the management techniques of quality management and quality engineering. Moreover, JSA sponsors seminars on training for internal auditors, seminars on establishing the management systems taken up in the ISO 9000 and ISO 14000 series of standards, and training seminars for personnel employed at JIS Mark approved factories.

JSA plans and implements education and training at companies in quality management, engineering and other quality techniques.

India:

The Standardization Testing and Quality Certification (STQC) Directorate is an attached office of the Department of Information Technology(DIT), Government of India, provides quality assurance services in the area of Electronics and IT and has specialized institutions such as Indian Institute of Quality Management (IIQM) for quality related training programmes.

Training is a critical enabler in an organization's pursuit of quality. Organizations need to upgrade the knowledge and skills of their professionals to achieve business goals with high quality products and services. The training programs are mostly accredited by International/National agencies like IRCA (UK), itSMF (UK), QCI, NABL etc. In other cases, the Body of Knowledge is generally based either on International Bodies like ASQ, QAI, IEEE or on National/International Standards.

STQC has trained more than 20,000 working professionals from all over the Indian industry including private, public sector and Government. Overseas training services have also been provided to Mauritius, UAE, China, and Taiwan.

These trainings are conducted at following STQC Centres as well as On-site: Indian Institute of Quality Management (IIQM) at Jaipur is a specialised training center that conducts courses on, among others, quality management, environmental management, laboratory accreditation and does a joint two-year distance learning programme with BITS Pilani to offer M S in Quality Management.

Certificates from IRCA, UK include:

> TO approval.
> QMS Auditor/Lead auditor Course.
> Foundation & Internal QMS Auditor Course.

Certificate from itSMF, UK:

Certificate from NRBPT (QCI, India):

The following courses are being offered:

A. Quality Management & Environmental Management System Courses. Many of these courses are contained in this Qualification:

> QMS Auditor/Lead Auditor Training Course (IRCA, U.K. Approved).
> Understanding Quality Awards.
> Customer Relationship Management.
> Planning Implementation & Documentation for ISO 9001:2000.

> ISO 9000:2000 Series Foundation and Internal QMS Auditor Training Course (IRCA, U.K. Approved).
> Internal EMS Auditor Training Course.
> M.S. Quality Management: Contact Session (BITS, Pilani/ IIQM) Collaborative Programme.

B. Quality Technology Courses:

> Application of Statistical Technique for Process Control.

C. Laboratory Quality Management Courses:

> Laboratory Quality Management System & Internal Audit as per ISO 17025:2005.
> Measurement Uncertainty (Electro Tech & Mechanical Parameters) for Laboratories.
> Proficiency Testing.

The United Kingdom:

The Chartered Management Institute (CMI) awards the Diploma in Quality Management which has significant overlap with this Level 5 Qualification. It must be said that the CMI's diploma is both for the manager and for the individual aspiring to become a manager.

The emphasis of the Diploma in Quality Management is on the tactical aspects of managing quality. The programme is designed for the hands-on manager who has the authority and personal skills to direct operations and to contribute towards organisational strategy. It is equally valuable for the person who aspires to such a role. In the syllabus that follows, the role is described as the manager while the members of staff who report to the candidate are described as team members or personnel.
The aim is to enable the operational manager to improve the effectiveness and efficiency of the management of the quality function by means of:

> Optimum tactical utilisation of resources.
> Effective communications.
> Development of the team as a coherent, mutually-supportive and motivated group of people who, with the manager, share a common vision and purpose as to the nature of their business.

> 20 hours - Control of Quality, Safety & Outputs.
> 30 hours - Development of Personal Management Style.
> 40 hours - Planning & Controlling the Work of Teams & Individuals.
> 30 hours - Meetings & Decision Making.
> 20 hours - Quality Assurance Policies.
> 20 hours - Continuous Improvement.
> 20 hours - Managing Quality Systems.
> 20 hours - Compliance and Audit.
> 20 hours - Determine Effective Use of Resources.

Overarching Project, drawing together the content of the other nine Units.

Total: 220 hours.

The National Database of Accredited Qualifications in the United Kingdom has the Diploma in Quality (Assurance and Management) at Level 5. The duration is 450 hours. The qualification structure is as follows:

> Mandatory Units.
> Principles of Quality and Data Analysis.

> Quality management.
> Tools and techniques.
> Communication and project management.
> Quality project.

Optional Units:

> Quality and environmental management.
> Information technology and quality management.

This Level 5 Qualifications contains many of the aspects outlined in the qualification structure.

The Institute of Leadership and Management (ILM) offers the Level NVQ in Quality Management some of whose competencies overlap with this Level 5 Qualification.

The structure of the qualification is as follows:

Mandatory Units:

> Develop Your Own Resources.
> Provide Advice and Support for the Development and Implementation of Quality Policies.
> Manage Continuous Quality Improvement.
> Implement Quality Assurance Systems.
> Provide Advice and Support for the Development and Implementation of Quality Systems.
> Monitor Compliance with Quality Systems.

Optional Units:

Candidates must complete 3 units from this group:

> Manage activities to meet requirements.
> Determine the Effective Use of Resources.
> Develop Teams and Individuals to Enhance Performance.
> Manage the Performance of Teams and Individuals.
> Develop Productive Working Relationships.
> Facilitate Meetings.
> Provide Information to Support Decision Making.
> Promote the Importance and Benefits of Quality.
> Carry Out Quality Audits.

The Institute of Quality Assurance (IQA) which later became the Chartered Quality Institute (CQI) offers the Level 5 CQI Diploma in Quality (Assurance & Management), launched in September 2002. It includes the following modules:

> Principles of Quality and Data Analysis.
> Quality Management.
> Tools and Techniques.
> Communications and Project Management.
> Quality Project - Major assignment - no exam.

Elective Modules select one from:

> Quality & Environmental Management.
> Information Technology & Quality Management.

In total only six modules must be completed to achieve the Diploma qualification. In line with CQI requirements, all these modules are now available as distance learning courses from Quality Management and Training Limited.

The Diploma course provides the student with a clear route to obtaining the prestigious qualification of Diploma in Quality (Assurance & Management) and facilitates the membership of the CQI (with appropriate quality experience). These courses not only afford the opportunity for CQI membership, but can also be taken individually, providing the student with a widely recognised and greatly respected qualification, enhancing their quality currency. The delegate can work at their own pace towards the ultimate goal of a Diploma in Quality and a membership of the CQI.

Canada:

The University of Manitoba offers the Certificate in Quality Management, akin to the competencies in this Qualification. This programme is designed to provide you with knowledge and skills necessary to be an effective manager in the field of quality management.

Individuals wishing to implement or manage quality programs within their organizations will benefit from this program, which is endorsed by the Manitoba Section of the American Society for Quality (ASQ). Past graduates come from private industry, government, educational institutions, non-profit organizations and consulting firms.

Program Length: 1 year - 2 courses (part time) 72 hours.

Delivery Methods: Classroom or Distance.

The program consists of two 36 hour courses which may be taken in any order and can be completed within a single academic year, either on campus or at a distance:

> Quality Assurance Planning.
> Quality Control: Principles and Procedures.

Quality Assurance Planning - This course introduces you to the field of quality and to the philosophy known as Total Quality Management (TQM). The course will enable you to explain, develop and implement quality assurance procedures, management practices, and tools and techniques. You will learn about the importance of a customer focus and the necessity for a continuous improvement culture in today's highly competitive global economy. Finally, you will be introduced to the requirements of ISO 9000:2000 and other quality system standards, and to the criteria for major quality awards such as the Malcolm Baldridge National Quality Award.

Quality Improvement: Principles and Procedures - This course reviews the concepts, principles and procedures of quality improvement, including: prevention and detection, process capability and statistical tools for quality control. This course will introduce you to some of the basic concepts of statistical thinking, such as sampling, probability distribution and data analysis. You will learn practical application of those concepts through Statistical Process Control (SPC). The course will demonstrate how SPC control charts are designed, constructed and interpreted. You will also be exposed to other tools and techniques for quality control, such as measurement, testing and inspection.

The home of Ashbrooke Quality Assurance International Limited offers the Quality Management Systems Auditor/Lead Auditor Training Course. This is a Unit Standard in this Qualification. This intensive 5-day course is certified by the Governing Board of the International Register of Certificated Auditors (IRCA Cert. No. A17020). This training course and certificate of attainment is recognized by RABQSA as equivalent to their QMS Lead Auditor Course. On successful completion the delegate will know the ISO 9000 Series, be trained Auditors, be competent to

audit their own organization, subcontractors and suppliers as Auditors or Lead Auditors, be able to prepare for audits and understand the economic advantages of Quality Management Systems.

Persons who should attend this course include:

> Managers introducing Quality Management Systems.
> Personnel who audit within their organization and those of their suppliers.
> Management consultants who need to know more about ISO 9000.
> Persons wishing to pursue a career as third party IRCA QMS 2000 Auditors and Lead Auditors.

Developing good communication skills is encouraged early and is reinforced throughout the course as it is essential for an Auditor/Lead Auditor to hold well developed written and verbal communication skills. The course examines these issues by opening with standardization and the evolution of ISO 9000. This is followed by reviewing:

> Quality management principles.
> Principles of continual improvement.
> ISO 9001:2008.
> ISO 19011:2002.
> Quality Management System documentation.
> Planning and conducting audits.
> Process mapping.
> Audit teams.
> Communication with the auditee.
> Interviews.
> Writing audit reports.
> Quality audit meetings.

United States:

The American Society for Quality (ASQ) offers training in a variety of quality aspects. There is no complete qualification like this Level 5 Qualification on offer. The following is a description of some of the courses offered, relevant to this qualification.

Auditing (CQA) Fundamentals I:

The course is designed to provide an understanding of the ASQ Quality Auditor 2004 Body of Knowledge (BOK) for preparing, performing, reporting, and following up audit results. The course is intended for those interested in learning auditing process fundamentals and as a review for those preparing to take the ASQ Certified Quality Auditor (CQA) exam. ISO 19011 audit standard changes that influence the CQA BOK are included as well as auditing process-based systems. The Auditing Fundamentals I course consists of series of lessons, illustrations, diagrams, examples, supplemental handout information, interactive exercises, and quizzes. There is a question bank of 130 questions. A desk reference that covers all lessons and the Quality WBT Glossary are included in the class as PDF files. The course covers Part II (audit process) of the ASQ Quality Auditor Body of Knowledge (BOK).

Auditing basics are discussed further in Auditing Fundamentals II and III.

Benefits:

> Identify the steps needed to prepare for an audit.
> Use general audit terminology.
> Identify types of data used as evidence.

> Conduct the steps for performing an audit.
> Use working papers such as checklists.
> Determine when a practice or situation represents a non-conformance or finding.
> Determine methods to analyze and classify nonconformities or findings.
> Report results of an audit.
> Verify corrective action of audit findings.
> Close out audit findings.
> Apply follow-up techniques in the work place.
> Demonstrate linkages between reporting and follow-up to ensure there was action.
> Integrate process auditing practices and auditing process-based management systems into auditing conventions.

Auditing (CQA) Fundamentals II:

The course contains auditing fundamental conventions, auditor conduct requirements, auditor competencies (skill and knowledge needs), audit program management, and business applications. It may be used for professional development, as a refresher or for preparing for the ASQ Certified Quality Auditor (CQA) examination based on the 2004 CQA Body of Knowledge (BOK). ISO 19011 audit standard changes that influence the CQA BOK are included as well as auditing process-based systems. The course covers CQA BOK Part I (auditing fundamentals), Part III (auditor competencies), and Part IV (audit program management and business applications) of the ASQ quality auditor 2004 Body of Knowledge. The course is intended for those interested in conducting quality system or process audits using any performance standard (ISO 9001, FDA GMPs, FAA, QS 9000 and so on). The class consists of a series of lessons, illustrations, diagrams, interactive exercises, quizzes, tests, and case study test questions. A desk reference that covers all lessons and the Quality WBT Glossary are included in the class as PDF files. The class has a bank of 157 multiple choice test questions and 30 case study questions that cover BOK topics.

Auditing basics are discussed further in the Auditing Fundamentals I and Auditing Fundamentals III course.

Benefits:

> Explain audit terminology.
> Apply the principles of professional conduct.
> Respond to unethical situations and conduct.
> Determine the purpose of audits.
> Relate how audits add value.
> Apply new auditor competencies for team leadership.
> Apply verification and validation techniques during audits.
> Implement audit program management strategies.
> Assess configuration management systems.
> Explain risk management basics.
> Explain business processes and how they are linked.
> Contrast joint and combined auditing.
> Provide advisor and other roles that add value.
> Explain the 2004 CQA Body of Knowledge.
> Incorporate ISO 19011:2002 guidance to current practices.
> Answer case study questions related to the CQA BOK.

Quality Audits for Improved Performance:

This is a basic course for both internal and external auditing. Move from compliance (policing) to management (performance improvement) auditing. It covers preparation, performance, reporting and closure. The curriculum follows the ASQ Certified Quality Auditor Body of Knowledge and

assumes participants have no auditing experience. Learn how to present audit findings such that managers want to change current practices.

ASQ's Quality Basics:

This course is also offered at colleges and universities across the country.

A new cost-effective, four-hour, instructor-led course designed to meet organizational needs for basic quality awareness and competency.

ASQ is proud to offer Quality Basics to the Foundations in Quality Learning Series for organizations dedicated to improving and maintaining the highest level of quality excellence from the ground up. ASQ's Quality Basics is truly an introductory course in fundamental quality practices and principles.

ASQ's Quality Basics is effective for employee training, orientation programs or reinforcing common quality competencies throughout your organization. It also satisfies Section 6.2 resource-management requirements for the new ISO 9001:2000, TL 9000, ISO/TS 16949:2002, and AS9000 standards which cover competence, awareness and training.

Upon completion of Quality Basics, participants will:

> Understand why quality is important.
> Understand the concepts of Total Quality Management and process improvement.
> Be able to define seven commonly used quality tools and understand how they are used in problem-solving for quality control or improved quality.

This course is offered at the following colleges and universities:

> Tallahassee Community College.
> Valencia Community College.
> Georgia Southern University.
> Valdosta State University.
> Ivy Tech Community College of Indiana - Columbus Campus.
> Ivy Tech South Bend.
> Owensboro Community & Technical College.
> Cuyahoga Community College District.
> Tulsa Community College.
> Roane State Community College.
> Texas A & M University - Corpus Christi.
> Shoreline Community College.

Quality Methods for the Service Industry:

More and more jobs in the U.S. economy are shifting toward the service industry. If your major career focus has changed from the manufacturing sector to the service sector this is the ideal course to help you improve your business. This course takes the traditional quality tools and process-improvement applications and translates them into service language and examples. The focus is on those quality professionals who must shift from producing products to improving transactional processes, distribution capacity, logistical processes, etc. Other applications and examples are used.

Quality Tools:

This course is designed to teach team members and individuals about the basic quality tools needed to identify and analyze challenges within their organization. Participants become

acquainted with a simple quality model - Deming's Shewhart Cycle - and then learn about tools to identify issues and to analyze problems.

The quality tools included are brainstorming, nominal group techniques, flow-charting, affinity diagrams, cause and effect diagrams, force field analysis, dot plots, tree diagrams, Pareto diagrams, scatter diagrams and prioritization matrices. Participants learn the definition for each tool, when to use it, how to use it, and specific guidelines and tips for applying these powerful, yet simple, quality tools.

This course includes interactive exercises, quizzes, Excel templates, a final exam, and a certificate of completion. Participants receive a downloadable workbook containing team building exercises, forms for team charters and responsibility matrices, a list of key process questions to identify issues, and a comprehensive team meeting evaluation form.

Benefits:

> Describe the components in the Shewhart Cycle.
> Identify the different types of teams in an organization.
> Summarize which tools identify issues.
> Recognize the tools that analyze problems.
> Use quality tools to solve problems.
> Analyze scenarios and determine correct applications for each quality tool.
> Evaluate a situation and decide which quality tools are most appropriate to use.

Egypt:

The American University in Cairo offers the following programmes in quality management at its Institute of Quality Management (IQM). Established in 1994, the Institute of Quality Management became one of the pioneering institutions in total quality management in Egypt and the Middle East. The institute promotes quality disciplines and systems in the business and healthcare sectors. It offers a wide range of educational, training and technical assistance programs for organizations and individuals in the area of quality management. The institute's programs and activities are divided into segments namely, education and training for the business sector and education and training for healthcare providers.

Programs Offered for the Business Sector:

> The American Society for Quality (ASQ) Manager of Quality/Organizational Excellence (MQOE) Program. The program prepares participants for the exam of "Manager of Quality/Organizational Excellence" held by the American Society for Quality (ASQ). This exam was held for the first time in Egypt in October 2000 at the Institute of Quality Management, which is one of ASQ's international centers. The Institute of Quality Management has developed the training material required to cover the knowledge for the certified quality manager exam, and continuously works to make the program competitive and unique in the marketplace.

> Quality Technicians Professional Certificate. The certificate is designed for quality technicians to enhance their skills in analyzing quality problems, preparing inspection plans and work instructions, measuring process performance, and preparing formal reports using fundamentals statistical methods. The certificate duration is two semesters. It is offered in Arabic to ensure that participants gain the maximum benefit. This programme is the closest to this Level 5 Qualification in quality management.

Programs Offered in the area of Six Sigma:

The Institute of Quality Management offers in collaboration with Quality America-USA, the following Sigma training certification relevant to this Qualification:

> Six Sigma Green Belt Certificate. A Green Belt is an employee of the organization who will participate in a Six Sigma project team. Green Belts are employees trained in Basic Six Sigma concepts, including project management, team building, general problem solving and statistical analysis. They work on part-time basis, as part of a team assigned to a given project while maintaining their operational roles in the organization.

Botswana:

The Botswana Bureau of Standards is registered and accredited by the Botswana Training Authority (BOTA) as a Training Institution under the Vocational Training Act No 22 of 1998. The Botswana Bureau of Standards (BOBS) is an organization whose main role is the promotion and maintenance of standardization and quality assurance in the provision of commodities and the rendering of services by organizations in Botswana. In the continuing fulfilment of its mandate, BOBS invites the private sector, parastatals, government, the public and other interested parties to participate in the training. BOBS also caters for in-house training when requested by organizations. The following short courses are offered:

> Awareness of the BOS ISO 9001:2000 Quality Management System.
> Implementation of a Quality Management System according to BOS ISO 9001:2000.
> BOS ISO 9001:2000 Documentation.

Ghana:

The Ghana Standards Board offers Training and Sensitization Activities in aspects of quality management but thee is no information on the kind, level and depth of training.

The Ghana Institute for Management and Public Administration (GIMPA) operates under the auspices of the Canadian Education and Training Awards Africa Program (CETAA). CETAA is a program that promotes training and education in recipient countries. Its mission is to enable organizations and individuals to access quality education and training through local and regional providers. CETAA partner countries are: Mali, Senegal, Ethiopia, and Ghana. GIMPA offers a short -term programme on Total Quality Management but no details are available.

No information could be found on any course or programme in quality management offered by the University of Ghana.

Conclusion:

It would seem that many countries offer some kind of training in quality management systems. In most cases, the training constitutes short courses while in some cases there are substantial training programmes and qualifications. This Level 5 Qualification compares very favourably with all the courses, programmes and qualifications mentioned in this overview. This Qualification covers a number of competencies in quality management and is more extensive than all those mentioned here.

ARTICULATION OPTIONS
This Qualification lends itself to both vertical and horizontal articulation possibilities.

Horizontal articulation is possible with the following Qualifications:

> ID 59201: National Certificate: Generic Management, NQF Level 5.
> ID 22901: National Certificate: Environmental Education, Training and Development Practice, NQF Level 5.

Vertical articulation is possible with the following qualifications:

> National Diploma: Operations Management, NQF Level 6.
> National Diploma: Management Services, NQF Level 6.

MODERATION OPTIONS
> Anyone assessing a learner or moderating the assessment of a learner against this Qualification must be registered as an assessor with the relevant Education, Training, Quality, and Assurance (ETQA) Body.

> Any institution offering learning that will enable the achievement of this Qualification must be accredited as a provider with the relevant ETQA.

> Assessment and moderation of assessment will be overseen by the relevant ETQA according to the ETQA's policies and guidelines for assessment and moderation; in terms of agreements reached around assessment and moderation between ETQA's (including professional bodies); and in terms of the moderation guideline detailed immediately below.

> Moderation must include both internal and external moderation of assessments at exit points of the Qualification, unless ETQA policies specify otherwise. Moderation should also encompass achievement of the competence described both in individual unit standards, the integrated competence described in the Qualification.

> Anyone wishing to be assessed against this Qualification may apply to be assessed by any assessment agency, assessor or provider institution that is accredited by the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS
For an applicant to register as an assessor, the applicant needs:

> A minimum of 2 (two) years' practical, relevant occupational experience.
> A relevant Qualification at NQF Level 6 or higher.
> To be registered as an assessor with the relevant ETQA.

NOTES
N/A

UNIT STANDARDS

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Fundamental	10622	Conduct communication within a business environment	Level 5	8
Fundamental	263377	Demonstrate and apply an understanding of quality requirements for a quality management system.	Level 5	12
Fundamental	115823	Gather and manage information for decision-making	Level 5	5
Fundamental	115790	Write and present for a wide range of purposes, audiences and contexts	Level 5	5
Core	252042	Apply the principles of ethics to improve organisational culture	Level 5	5
Core	263400	Conduct audits of the quality management system	Level 5	10
Core	243819	Coordinate the closure of a simple to moderately complex project	Level 5	8
Core	263395	Demonstrate and understanding of Statistical Process Control (SPC)	Level 5	12
Core	263379	Explain the business processes in quality management	Level 5	8
Core	263397	Explain the regulatory framework for quality management systems (QMS)	Level 5	5
Core	263376	Improve the effectiveness and efficiency of quality management system	Level 5	8
Core	263394	Manage documentation and records within a Quality Management system	Level 5	8
Core	243980	Manage risks on a simple to moderately complex project	Level 5	6

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Core	243812	Monitor and control the execution of the project management plan for a simple to moderately complex project	Level 5	12
Elective	243267	Apply and continuously improve company policies and procedures	Level 5	10
Elective	15234	Apply efficient time management to the work of a department/division/section	Level 5	4
Elective	252033	Demonstrate ways of dealing with the effects of dreaded diseases and in particular HIV/AIDS	Level 5	8
Elective	15219	Develop and implement a strategy and action plans for a team, department or division	Level 5	4
Elective	252032	Develop, implement and evaluate an operational plan	Level 5	8

LEARNING PROGRAMMES RECORDED AGAINST THIS QUALIFICATION
None

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

SAQA

UNIT STANDARD:

Improve the effectiveness and efficiency of quality management system

SAQA US ID	UNIT STANDARD TITLE			
263376	Improve the effectiveness and efficiency of quality management system			
ORIGINATOR		PROVIDER		
SGB Generic Management				
FIELD		SUBFIELD		
3 - Business, Commerce and Management Studies		Generic Management		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL		CREDITS
Undefined	Regular	Level 5		8

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1
Identify opportunities for process improvement.

SPECIFIC OUTCOME 2
Propose solutions to problems and improvement opportunities.

SPECIFIC OUTCOME 3
Implement solutions to improvement plans.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	66189	National Certificate: Quality Management Systems	Level 5

SAQA

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Demonstrate and apply an understanding of quality requirements for a quality management system.

SAQA US ID	UNIT STANDARD TITLE		
263377	Demonstrate and apply an understanding of quality requirements for a quality management system.		
ORIGINATOR		PROVIDER	
SGB Generic Management			
FIELD		SUBFIELD	
3 - Business, Commerce and Management Studies		Generic Management	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	12

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1
Describe the history of quality and quality standards.

SPECIFIC OUTCOME 2
Describe the importance of the international standard organisations in quality.

SPECIFIC OUTCOME 3
Understand and interpret the relevant and current quality management standards.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Fundamental	66189	National Certificate: Quality Management Systems	Level 5

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

SAQA

UNIT STANDARD:

Explain the business processes in quality management

SAQA US ID	UNIT STANDARD TITLE		
263379	Explain the business processes in quality management		
ORIGINATOR		PROVIDER	
SGB Generic Management			
FIELD		SUBFIELD	
3 - Business, Commerce and Management Studies		Generic Management	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	8

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1
Demonstrate an understanding of the business process approach model.

SPECIFIC OUTCOME 2
Apply discipline specific technical skills to the businesses.

SPECIFIC OUTCOME 3
Explain the interaction and integration of business processes with regard to quality of management systems.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	66189	National Certificate: Quality Management Systems	Level 5

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

SAQA

UNIT STANDARD:

Manage documentation and records within a Quality Management system

SAQA US ID	UNIT STANDARD TITLE		
263394	Manage documentation and records within a Quality Management system		
ORIGINATOR		PROVIDER	
SGB Generic Management			
FIELD		SUBFIELD	
3 - Business, Commerce and Management Studies		Generic Management	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	8

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1
Develop new or amend existing document.

SPECIFIC OUTCOME 2
Control of documents.

SPECIFIC OUTCOME 3
Control of records.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	66189	National Certificate: Quality Management Systems	Level 5

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Demonstrate and understanding of Statistical Process Control (SPC)

SAQA US ID	UNIT STANDARD TITLE		
263395	Demonstrate and understanding of Statistical Process Control (SPC)		
ORIGINATOR		PROVIDER	
SGB Generic Management			
FIELD		SUBFIELD	
3 - Business, Commerce and Management Studies		Generic Management	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	12

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1
Explain the statistical concepts pertaining to statistical process control.

SPECIFIC OUTCOME 2
Explain the importance and use of sampling of product characteristics to construct control charts.

SPECIFIC OUTCOME 3
Construct and interpret charts.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	66189	National Certificate: Quality Management Systems	Level 5

SAQA

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Explain the regulatory framework for quality management systems (QMS)

SAQA US ID	UNIT STANDARD TITLE		
263397	Explain the regulatory framework for quality management systems (QMS)		
ORIGINATOR		PROVIDER	
SGB Generic Management			
FIELD		SUBFIELD	
3 - Business, Commerce and Management Studies		Generic Management	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	5

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1
Provide a broad overview of how law works in the country.

SPECIFIC OUTCOME 2
Explain the importance of legislation to the QMS environment.

SPECIFIC OUTCOME 3
Discuss legislation and the QMS standards and conventions.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	66189	National Certificate: Quality Management Systems	Level 5

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

SAQA

UNIT STANDARD:

Conduct audits of the quality management system

SAQA US ID	UNIT STANDARD TITLE		
263400	Conduct audits of the quality management system		
ORIGINATOR		PROVIDER	
SGB Generic Management			
FIELD		SUBFIELD	
3 - Business, Commerce and Management Studies		Generic Management	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	10

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1
Demonstrate knowledge of auditing quality of management systems.

SPECIFIC OUTCOME 2
Plan and prepare for an audit.

SPECIFIC OUTCOME 3
Conduct audits.

SPECIFIC OUTCOME 4
Compile an audit report.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	66189	National Certificate: Quality Management Systems	Level 5