No. 1419 **10 December 2004**

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

Building Construction

Registered by NSB 12, Physical Planning and Construction, publishes the following qualifications for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of qualifications. The qualifications 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, Hatfield Forum West, 1067 Arcadia Street, Hatfield.

Comment on the unit standards should reach SAQA at the address ***below and no later than '9 January 2005.*** All correspondence should be marked **Standards Setting – SGB Building Construction** and addressed to

The Director: Standards Setting and Development
SAQA
Attention: *Mr. D Mphuthing*
Postnet Suite **248**
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DIRECTOR: STANDARDS SETTING AND DEVELOPMENT

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

Bachelor's Degree: Quantity Surveying

SAQA QUAL ID	QUALIFICATION TITLE		
49094	Bachelor's Degree: Quantity Surveying		
SGB NAME	SGB Building Construction		
NSB ACRONYM	PROVIDER NAME		
NSB 12			
QUAL TYPE	SUBFIELD		
National First Degree	Physical Planning, Design and Management		
ABET BAND	MINIMUM CREDITS	NQF LEVEL	QUALIFICATION CLASS
Undefined	360	Level 6	Regular-ELOAC

PURPOSE OF THE QUALIFICATION

The principal purposes of the Qualification are to:

> Provide learners with qualifying-level knowledge, skills and competence appropriate to a vocation as a Quantity Surveyor
> Equip learners with a foundation for further intellectual development and opportunities for gainful employment and rewarding contributions to society
> Provide learners with the ability to solve **well** defined and frequently encountered problems using well established procedures and techniques
> Contribute towards meeting the prerequisites for statutory registration with the South African Council for the Quantity Surveying Profession as a Professional Quantity Surveyor (PrQS) or Candidate Quantity Surveyor (CandidateQS) in terms of Sections 18.(1)(a) and (b) of the Quantity Surveying Profession Act 2000 (No **49** Of 2000)

This Qualification will provide the quantity surveying and related professions in South Africa with graduates who possess contextually specific fundamental skills, thereby facilitating upliftment, empowerment and transformation.

The relation between this Qualification and the principles of the National Qualifications Framework (NQF):

> Recognition of Prior learning: Allows for Recognition of Prior Learning, especially as a means of career advancement
> Articulation/Progression: Forms part of a Learning Pathway of whole Qualifications for Quantity Surveying
> Life-Long learning: The purpose of this Qualification is **to** produce learners who are prepared for and understand the principles of:
- Life-long learning
- Critical citizenship

Rationale for the qualification:

This Qualification denotes competence in the application of fundamental expertise in the theory and practice of quantity surveying relating to the financial and contractual management of new and existing facilities in the built environment.

The Bachelor's Degree in Quantity Surveying is for persons who:

> Desire to study towards a vocation in the Quantity Surveying profession.
> Meet the admittance requirements as candidates for the qualification, or the appropriate Recognition of Prior Learning (RPL) requirements
> Satisfy the requirements for the award of the qualification
> Desire to undertake post-graduate study leading to the enhancement of their Qualification

This Qualification is intended to assist all relevant stakeholders and role-players, such as potential employers operating in the Built Environment or other fields related to physical planning and construction, curriculum developers and providers of learning programmes, all education and training bodies and relevant moderators as well as learners and their parents, to understand the criteria determining the level and the outcomes associated with the Bachelors Degree in Quantity Surveying.

This qualification is bound by fundamental, discipline-specific knowledge and has been developed by consensus on the complexity of learning and competencies to be acquired by learners undertaking the programme of study, who will be empowered to build learning programmes with a view to articulate towards other Qualifications associated with the Built Environment

This 3-year Bachelor's Degree in Quantity Surveying (NQF level 6) is the new qualification which intends to serve as the prerequisite qualification needed for entry to the I-year programme leading to the award of the qualification of the Honours Degree in Quantity Surveying (NQF level 7), the combination of the "3-year + 1-year" qualifying Qualifications will replace the previous four-year programme formerly designated as "Bachelor of Science in Quantity Surveying".
The Bachelor's Degree in Quantity Surveying can serve as the prerequisite Qualification needed for entry to the programme leading to the award of the Honours Degree in Quantity Surveying at NQF level 7 and contributes towards meeting the requirements for professional registration.

This Qualification will contribute towards the development of a community of competent Quantity Surveyors and is essential for social and economic transformation, empowerment and upliftment within the context of the Built Environment.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED TO BE IN PLACE

> Reading and writing proficiency in the required medium of instruction
> Proficiency in algebra, geometry and trigonometry
> Demonstrable knowledge and skills in at least three other discrete subject areas such as, but not limited to, Physical Science, Biology, Geography, History, Economics, Technical Drawing, Woodwork, Metalwork, Information Technology: all at a level equivalent to that required for the award of a Grade 12 or equivalent certificate with university exemption.

Recognition of Prior Learning

Persons desiring entrance to the programme leading to this Qualification are

> Advised, assisted and supported (portfolio compilation, orientation to required levels of competence, substantiation of their claims regarding prior skills / experience, planning of progression)
> Evaluated and assessed in accordance with their claims regarding prior skills and experience gained

(portfolio review, implementation of assessment / evaluation methods, recommendations arising from the assessment / evaluation processes)
> Provided with quality management / assurance objectives to support the achievement of competence leading to the award of the Qualification (assessment of competence in respect of required outcomes, auditing, approval, recommendation, reporting).

QUALIFICATION RULES

It is required that students must satisfy minimum standards in core skills including: scientific reasoning; communication skills in the context of a science discipline or sub-field; numeracy; and computer skills. These competencies are fundamental to achieving the purpose of this Qualification. In addition, for programmes of learning for this Qualification, due consideration should be given to the learner's depth and breadth of knowledge. It is important that breadth is achieved through the appreciation of a scientific discipline different in content and method from the one in which the learner will specialise.

The exit level outcomes have been grouped into Fundamental, Core and Elective learning components.

EXIT LEVEL OUTCOMES

1. Analyse and solve well-defined and frequently encountered problems related to the built environment

2. Deal with fundamental commercial, entrepreneurial and management issues related to the built environment

3. Interpret and apply fundamental economic and legal principles within the context of the built environment

4. Use and apply information technology

5. Execute tasks requiring numerical and quantification expertise

6. Apply knowledge of technology within the context of the built environment

7. Communicate effectively on all matters to which their skills and competencies have been applied

There are no interim exit level outcomes. The award of the Qualification follows successful completion of the full qualification programme (taking into account that core knowledge related to quantity surveying is appropriately represented in the learning programme). However, learners are awarded credits for each individual programme component, which on completion, meets the stated assessment criteria. These credits support portability, learners' mobility and articulation.

Bachelor's Degree in Quantity Surveying qualifying learners are competent to:

> Demonstrate familiarity with and display knowledge and understanding of the content, theory and scholarly positions related to quantity surveying practice and procedure at a fundamental level.

> Demonstrate systematic, well-rounded knowledge and an ability to question basic assumptions related to core theory, practice and basic methodology used in quantity surveying and other disciplines operating in the Built Environment

> Display competence in fundamental modes of inquiry employed in the practice of quantity surveying and other disciplines operating in the Built Environment, in response to well defined and frequently encountered problems

> Analyse and locate the principles and performance of own work within current practice related to the Built Environment professions and the construction industry

> Interpret a wide range of domain-related, well-defined and frequently encountered issues by applying various systems of enquiry appropriate to the discipline of quantity surveying and its allied professions

> Construct debate and argument around welldefined and frequently encountered information and situations, to demonstrate competence in interpretation and explanation of such information, etc

> Prepare written reports in response to well-defined briefs and within specific fundamental parameters.

> Apply fundamental expertise in the theory and practice of quantity surveying relating to the financial and contractual management of new and existing facilities in the built environment.

Exit level outcomes relating to Fundamental learning

On completion of this programme, qualifying learners will be capable of the following:

(i) Communicate effectively with Built Environment audiences and the community at large using both oral and written skills.

(ii) Display critical awareness of the impact of Built Environment activity on society and the environment and the skill to exercise appropriate judgement in the provision of professional services

(iii) Demonstrate competence in working effectively as individuals and in teams in construction project environments by showing leadership potential and performing critical support functions.

(iv) Display awareness of the need to:
> Act professionally and ethically,
> Take responsibility for those actions
> Accept accountability for those actions
> Exercise judgement commensurate with knowledge and experience

(v) Demonstrate competence in the implementation of quantitative methods, technology, economics, finance, management and law, from first principles, to solving well-defined and frequently encountered problems within the context of the Built Environment.

(vi) Demonstrate competence in the implementation of procedural analysis of well-defined and frequently encountered problems occurring within the Built Environment related to systems, products or processes.

(vii) Demonstrate competence in undertaking and completing investigations and data analysis in the construction sector.

(viii) Demonstrate competence in the use and application of appropriate problem-solving methods, skillg and tools (which include the use of computer packages) for computation, analysis and handling of information in the Built Environment.

Exit level outcomes relating to Core learning

Qualifying learners will be capable of performing specific quantity surveying functions related to:

> Prepare and manage tender and contractual documents for construction projects
> Implement the contractual management *of* construction projects
> Prepare estimates of cost for construction projects
> Implement the financial management **of** construction projects
> Evaluate economic issues concerning the construction and property sectors at both micro- and macro-

levels
> Evaluate alternative property investment options, including market analyses
> Communicate with construction and property professionals concerning:
- Spatial concepts
- Economic, financial and contractual matters
- Construction assembly problems
- Sustainability concepts
- Health and safety matters

Exit level outcomes relating to Elective learning:

Qualifying learners will be capable of performing specific quantity surveying functions related to:

The Elective learning component would be determined by the learner's chosen area of specialisation and the chosen institution. Such areas of specialization might, for example, include any of the following: mining, low-income housing, mechanical and electrical services, and civil engineering.

ASSOCIATED ASSESSMENT CRITERIA

Assessment criteria relating to Fundamental learning:

Exit level outcomes will be judged by the following associated assessment criteria:

(i) Qualifying learners will be required to demonstrate competence in the following skills:
> Production of documents and reports according to industry norms.
> Delivery of an oral presentation that appropriately describes both a frequently encountered Built Environment problem and a range of alternative well defined solutions to the problem under consideration.
> Proposal of alternative methodologies which could be applied to achieving the range of proposed solutions.

(ii) Qualifying learners will be required to demonstrate competence in the following: Implementation of
> Plans, strategies and actions that benefit society in fair and equitable ways that improve the quality of life in the Built Environment.
> Economically viable solutions to problems encountered in the course of panning and executing construction / property development projects, which take cognisance of the need for protection of the environment.

(iii) Qualifying learners will be required to demonstrate competence in implementing solutions to well defined and frequently encountered problems in the Built Environment, supported by demonstration of their own
> Contribution to the achievement of those solutions in the Built Environment;
> Benefits of interaction with other role players in achieving those solutions in the Built Environment; and
> Successful interaction with stakeholders affected by construction.

(iv) Qualifying learners will be required to demonstrate competence in exercising
> Ethics in the workplace; and
> Codes of professional conduct.

(v) Qualifying learners will be required to demonstrate competence in the implementation of
> Quantitative data analysis:
> Qualitative data analysis and provide
> Solutions to a variety of well defined and frequently encountered problems within the context of the Built Environment

(vi) Qualifying learners will be required to implement solutions to well defined and frequently encountered problems within the context of the Built Environment, which are successful in terms of being
> Fit for purpose;
> Innovative and
> Economically viable.

(vii) Qualifying learners will be required to demonstrate competence in translating well defined and frequently encountered problems within the context of the Built Environment into well-planned solutions devised to provide data that are
> Quantitative; and
> Qualitative, and
> That are capable of being analysed to provide solutions.

(viii) Qualifying learners will be required to demonstrate a
> Good working knowledge of analytical methods and a
> High level of computer literacy.

(b) Assessment criteria relating to Core learning:
Outcomes will be judged by the following criteria:

Learners will be required to demonstrate fundamental competence in dealing with issues and problems related to the following aspects of the construction sector:
> Economic
> Financial
> Managerial
> Legal
> Technological
> Construction assembly

Assessment criteria relating to elective learning:

Outcomes will be judged by learners' ability to apply the core quantity surveying learning in the chosen area(s) of specialization, examples of which are provided in category (c) of the Exit Level Outcomes.

Integrated assessment:

Learning and assessment are integrated throughout the programme. Continuous formative assessment is applied to ensure that learners receive feedback on their progress towards the achievement of specific learning outcomes. Summative assessment concerned with the evaluation of the learning achievements relative to the exit-level outcomes of the qualification includes "overall integrated assessment" which evaluates the learner's ability to combine the various components and modules of the broader scope of knowledge, skills, competencies and attitudes represented by the exit-level outcomes, as a whole or as individual component-processes *of* the overall learning experience leading to the Qualification

(i) A variety of assessment methods are combined to collect evidence of
> Exit level outcomes having been attained
> Competence to apply the integrated knowledge, skills and values/attitudes gained from the learning programme leading to the award of the Qualification

(ii) The Combination of assessment methods may include
> Adjudication of portfolios
> Evaluation of simulations (group and individual)
> Assessment of assignments and tutorials (group and individual)

> Work-place assessment
> Written examinations
> Evaluation of reports and essays
> Oral examinations and interviews
> Assessment of competence achieved relative to exit, general and specific outcomes associated with the Qualification.

INTERNATIONAL COMPARABILITY

The quality of this Qualification is subject to a 5-yearly process of international accreditation and is ranked amongst similar, sought-after Qualifications within the context of the Built Environment (certificates / diplomas / degrees) awarded by tertiary institutions eg Australia, Hong Kong, Kenya, New Zealand, Nigeria and the United Kingdom. This Qualification is also recognised by the Royal Institution of Chartered Surveyors (RICS) and the Chartered Institute of Building International (CIOB), which are represented in many countries worldwide. These bodies are involved in the quality assurance of South African qualifications via periodical visits to educational institutions. In addition, this Qualification would be subject to annual quality review by the South African Council for the Quantity Surveying Profession, in consultation with the South African Qualifications Authority and the Council on Higher Education.

ARTICULATION OPTIONS

This Qualification provides career-path advancement articulation options leading to the award of a variety of Honours Qualifications within the context of the Built Environment.

Learners will also have career path articulation options, leading to a variety of other Degrees in fields such as Project Management, Construction Management, Commerce, Housing Development, Information Technology, Property Studies, Facilities Management, etc.

MODERATION OPTIONS

Moderation and accreditation options include:

> Peer review (academic - interdisciplinary)

> Peer review (work-place practitioners - interdisciplinary)

> Accreditation of qualifications by statutory Councils (South African Council for the Quantity Surveying Profession, in terms of the Quantity Surveying Profession Act No 49 of 2000) and international institutions (e.g. Royal Institution of Chartered Surveyors and the Chartered Institute of Building International, both domiciled in England). The actual accreditation process will vary depending upon the specific requirements of the accrediting body. Typically it will involve the submission of external examiners reports, interim accreditation visits by appointed external moderators, and a main accreditation visit every five years.

> Assessment of competence by external, statutory Councils (South African Council for the Quantity Surveying Profession, in terms of the Quantity Surveying Profession Act No 49 of 2000)

> Assessment of competence by international institutions (e.g. Chartered Institute of Building International and Royal Institution of Chartered Surveyors, both domiciled in England)

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Examiners / assessors are appointed in a manner which is consistent with the quality assurance system of the institution as per regulation. The assessor should at least be competent at the same level or be at a level above this level 6 Qualification with at least two years of practical experience in the quantity surveying or related environment. The assessor needs to be competent in planning, conducting and providing

feedback on assessment of learning outcomes and in the design and development of assessments as described in the qualification. The assessor should possess well-developed interpersonal skills and subject matter expertise and should understand various assessment methods and strategies.

NOTES

Specified requirements:

Specified requirements include legal and legislative specific requirements and are contained in one or more of the following documents:

Regulations:

Occupational Health and Safety Act: Construction Regulations, published in Government Gazette No **25207,** Regulation Gazette **7721, 18** July **2003**

Legal:

Act **1**: Natural Scientific Professions Act (No **27** of **2003)**
Act **2:** Natural Environment Management Protected Areas Act (No **57** of **2003)**
Act **3:** Quantity Surveying Profession Act (No **49** of **2000)**
Act **4:** Project and Construction Management Professions Act (No **48** of **2000)**
Act 5: Council for the Built Environment Act (No **43** of **2000)**
Act **6:** Occupational Health and Safety Act (No **85** of **1993)**
Act **7:** Compensation for Occupational Injuries and Diseases Act (No **130** of **1993)**
Act **8:** South African Qualifications Authority Act (No **58** of **1995)**
Act **9:** Skills Development Act (No **97** of **1998)**
Act 10: Environmental Conservation Act (No **73** of **1989),** and all subsequent amendments.

UNIT STANDARDS
(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

Doctor of Philosophy (PhD): Built Environment

SAQA QUAL ID	*QUALIFICATION TITLE*		
49095	Doctor of Philosophy (PhD): Built Environment		
SGB NAME	SGB Building Construction		
NSB ACRONYM	*PROVIDER NAME*		
NSB 12			
QUAL TYPE		*SUBFIELD*	
Doctoral Degree		Physical Planning, Design and Management	
ABET BAND	*MINIMUM CREDITS*	*NQF LEVEL*	*QUALIFICATION CLASS*
Undefined	360	Level 8 and above	Regular-ELOAC

PURPOSE OF THE QUALIFICATION

The principal purposes of the Qualification are:

(i) To provide advanced training in research methods and procedures appropriate to the built environment;
(ii) To facilitate advanced, prescribed study as appropriate;
(iii) To produce qualified persons
> Who are capable of undertaking research at an advanced level
> Whose work will be to the advantage of the national economy
> Who **possess** the capacity of independent work on advanced research projects
> Who are competent to work as educators and researchers in institutions of higher learning
> With the capacity to work in teams appointed to conduct advanced research in the context of the built environment.
> For employment in fields of economic activity related to the built environment.

This Qualification will enhance the body of knowledge pertaining to the built environment in South Africa through the pursuance of research-based enquiry and the dissemination of information.

The relation between this Qualification and the principles of the National Qualifications Framework **(NQF):**

> Recognition of Prior learning: Allows for Recognition of Prior Learning, especially as a means of career advancement
> Articulation/Progression: Forms part of a Learning Pathway of whole qualifications for Quantity Surveying and related disciplines in the context of the built environment.
> Life-Long learning: The purpose of this Qualification is to produce learners who are prepared for and understand the principles of:
- Life-long learning
- Critical citizenship
- Lateral, critical and creative thinking
- **A** wide range of issues which are crucial to the welfare of the society

Rationale for the qualification:

This qualification is based on research and is awarded for a substantial and original contribution to the discipline. Research, and other such advanced study as may be required, is undertaken under the guidance of a supervisor or supervisors appointed for that purpose.

The Doctor of Philosophy in the context of the Built Environment is for persons who:

> Meet the admittance requirements;
> Satisfy the requirements for the award of the qualification; and
> Desire to undertake research and specified study at an advanced level.

This Qualification is intended to assist all relevant stakeholders and role-players, such as potential employers operating in the built environment or other fields related to physical planning and construction, curriculum developers and providers of learning programmes, all education and training bodies and relevant moderators as well as learners and their parents, to understand the criteria determining the level and the outcomes associated with the Doctor of Philosophy in the context of the built environment.

This Qualification will enhance the body of knowledge pertaining to the built environment and related fields in South Africa.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED TO BE IN PLACE

> A Qualification at Master's-level, or equivalent
> Prior experience in research
> Demonstrable competence for analytical thought at a level appropriate to the carrying out of advanced independent research and advanced study (as appropriate)
> Good communication skills.

Recognition of prior learning (RPL):

Persons desiring entrance to the programme leading to this Qualification are

> Advised, assisted and supported (portfolio compilation, orientation to required levels of competence, substantiation of their claims regarding prior skills / experience, planning of progression)
> Evaluated and assessed in accordance with their claims regarding prior skills and experience gained (portfolio review, implementation of assessment / evaluation methods, recommendations arising from the assessment / evaluation processes)
> Provided with quality management / assurance objectives to support the achievement of competence leading to the award of the Qualification (assessment of competence in respect of required outcomes, auditing, approval, recommendation, reporting).

QUALIFICATION RULES

There will be a minimum of 360 credits awarded for the Qualification. The Qualification is obtained by the successful completion of a research thesis. Since this is a post-graduate Qualification in a specialised area, all the credits are allocated to elective learning, with fundamental and core learning being assumed.

EXIT LEVEL OUTCOMES

There are no interim exit levels. The Qualification is awarded on completion of the programme requirements and on completion, qualifying learners will be competent to:

> Demonstrate a thorough grounding in epistemological issues and research methods
> Demonstrate a thorough familiarity with the relevant literature
> Demonstrate their capacity for independent execution of the following research tasks:
> Writing a research proposal
> Using literature to identify the theoretical issues pertaining to the proposal
> Formulating precise research questions
> Selecting or devising appropriate research methods
> Executing the research
> Critical analysis of the results and findings emanating from the research
> Writing up the research
> Demonstrate competence in carrying out research of a quality suitable for publication in international peer-reviewed journals (i e research that significantly contributes to knowledge).

ASSOCIATED ASSESSMENT CRITERIA

Qualifying learners will be required to demonstrate:

> Their understanding of epistemological and methodological issues in drafting a research thesis
> Their thorough and critical familiarity with the relevant literature
> Their competence in respect of advanced research such that:
- A research proposal is written in accordance with built environment norms
- A critical literature review is conducted in accordance with built environment norms
- Precise research questions are structured in accordance with built environment norms
- Appropriate research methods are selected or devised in accordance with built environment norms
- The research is executed in accordance with built environment norms
- Results emanating from the research are critically analysed in accordance with built environment norms
- The research thesis is written in accordance with built environment norms
- That their work meets the prerequisite standards for publication in international peer-reviewed journals (i e research that significantly contributes *to* knowledge).

Integrated assessment:

The evaluation of the thesis is formative in character and synoptically assesses all outcomes. In each case, external examiners submit formal reports on the thesis, which are made available to the candidate

INTERNATIONAL COMPARABILITY

An accepted Doctoral thesis is expected to be of a standard and rigour comparable with international benchmarks. The required quality standards are assured by the design of external examination systems associated with Doctoral degree programmes

ARTICULATION OPTIONS

A PhD is the highest academic qualification attainable, therefore articulation possibilities do not apply. However, while the possibility exists that learners who are admitted to programmes leading to the awarding of Master's qualifications (by virtue of the quality of the work executed) may be permitted to change their respective candidatures to those for a PhD award, retrospective registration is not normally permitted.

MODERATION OPTIONS

A Doctoral thesis is examined by at least two examiners external to the university concerned. External examiners and supervisors of doctoral research should ideally themselves be in possession of a doctorate. The external examiners/assessors and supervisory academic staff of the university concerned will be appointed in a manner consistent with the quality assurance system of the institution.

Accreditation options are not applicable to research doctoral programmes.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Examiners / assessors are appointed in a manner which is consistent with the quality assurance system of the institution

NOTES

An original contribution to knowledge is a fundamental requirement of a programme leading to a Doctoral Qualification. No work will be accepted which has been accepted by another academic institution for the purpose of obtaining a Qualification. The examination consists primarily of an assessment of the written thesis, but may be supplemented by a written or oral examination on the subject of the work presented

Supplementary information:

A thesis may not be submitted more than twice for examination

Specified requirements

Specified requirements include legal and legislative specific requirements and are contained in one or more of the following documents:

Regulations:

Occupational Health and Safety Act: Construction Regulations, published in Government Gazette No 25207, Regulation Gazette 7721, 18 July 2003

Legal:

Act 1: Natural Scientific Professions Act (No 27 of 2003)
Act 2: Natural Environment Management Protected Areas Act (No 57 of 2003)
Act 3: Quantity Surveying Profession Act (No 49 of 2000)
Act 4: Project and Construction Management Professions Act (No 48 of 2000)
Act 5: Council for the Built Environment Act (No 43 of 2000)
Act 6: Occupational Health and Safety Act (No 85 of 1993)
Act 7: Compensation for Occupational Injuries and Diseases Act (No 130 of 1993)
Act 8: South African Qualifications Authority Act (No 58 of 1995)
Act 9: Skills Development Act (No 97 of 1998)
Act 10: Environmental Conservation Act (No 73 of 1989), and all subsequent amendments

A glossary of terms about the terminology: Not applicable

CONTEXT SPECIFIC: Not applicable

User manuals supplied by manufacturers: Not applicable

Specifications, agreements and policies and procedures: Not applicable

UNIT STANDARDS
(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

Master's Degree: Quantity Surveying (Built Environment)

SAQA QUAL ID	QUALIFICATION TITLE		
49096	Master's Degree: Quantity Surveying (Built Environment)		
SGB NAME	SGB Building Construction		
NSB ACRONYM	PROVIDER NAME		
NSB 12			
QUAL TYPE	SUBFIELD		
Doctoral Degree	Physical Planning, Design and Management		
ABET BAND	MINIMUM CREDITS	NQF LEVEL	QUALIFICATION CLASS
Undefined	120	Level 8 and above	Regular-ELOAC

PURPOSE OF THE QUALIFICATION

The principal purposes of the Qualification are:

(i) To provide basic training in research methods and procedures appropriate to quantity surveying;
(ii) To facilitate advanced, prescribed study as appropriate;
(iii) To produce qualified persons
- > Whose work will be to the advantage of the national economy
- > With the capacity to work in teams appointed to conduct research in the discipline of quantity surveying.
- > For employment in fields of economic activity related to the built environment
- > With the capacity to work at an advanced level in the discipline of quantity surveying; and

(iv) To provide appropriately qualified persons with opportunities for career-path advancement/articulation routes leading to admission to PhD qualifications.

This Qualification will enhance the body of knowledge pertaining to quantity surveying in South Africa through the pursuance of research-based enquiry and dissemination of information via dynamic post-graduate courses

The relation between this Qualification and the principles of the National Qualifications Framework (NQF):

> Recognition of Prior learning: Allows for Recognition of Prior Learning, especially as a means of career advancement
> Articulation/Progression: Forms part of a Learning Pathway of whole qualifications for Quantity surveying,
> Life-Long learning: The purpose of this Qualification is to produce learners who are prepared for and understand the principles of:
- Life-long learning
- Critical citizenship
- Lateral, critical and creative thinking
- A wide range of issues which are crucial to the welfare of the society

Rationale for the qualification:

This Qualification is achieved within in the discipline of quantity surveying and may be obtained by completing

> A research thesis
or
> Advanced study of prescribed coursework and a research dissertation

The Qualification is research-based and includes such advanced study as may be specified, under the guidance of a supervisor or supervisors appointed for that purpose.

The Masters Degree in Quantity surveying and related fields in the built environment is for persons who:

> Meet the admittance requirements;
> Satisfy the requirements for the award **of** the qualification; and
> Desire *to* undertake research and specified study at an advanced level.

This Qualification is intended to assist all relevant stakeholders and role-players, such as potential employers operating in the built environment or other fields related to physical planning and construction, curriculum developers and providers of learning programmes, all education and training bodies and relevant moderators as well as learners and their parents, to understand the criteria determining the level and the outcomes associated with the Masters Degree in Quantity Surveying and related fields in the **built** environment.

The Masters Degree in Quantity Surveying and related fields in the built environment can serve as the prerequisite Qualification needed for entry to the Doctorate Qualification in the context of the built environment.

This Qualification will enhance the body of knowledge pertaining to quantity surveying and related fields in South Africa.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED TO BE IN PLACE

> A Qualification at Honours level, or equivalent
> Prior experience in research
> Competence in analytical thought at a level appropriate to the carrying out of independent research and advanced study
> Good communication skills.

Recognition of Prior Learning:

Persons desiring entrance to the programme leading to this Qualification are

> Advised, assisted and supported (portfolio compilation, orientation to required levels **of** competence, substantiation of their claims regarding prior skills **/** experience, planning **of** progression)
> Evaluated and assessed in accordance with their claims regarding prior skills and experience gained (portfolio review, implementation of assessment **/** evaluation methods, recommendations arising from the assessment **/** evaluation processes)
> Provided with quality management **/** assurance objectives to support the achievement of competence leading to the award of the Qualification (assessment **of** competence in respect of required outcomes, auditing, approval, recommendation, reporting).

QUALIFICATION RULES

There will be a minimum of **120** credits awarded for the Qualification. Three options exist for the awarding of credits:

1. Degrees by dissertation only: **120** credits for the successful completion of a research thesis
2. Part coursework - part dissertation Degrees: ***60*** credits for the successful completion of advanced study of prescribed coursework and ***60*** credits for the successful completion of a research dissertation
3. Part coursework - part dissertation Degrees: 90 credits for the successful completion of advanced study of prescribed coursework and the balance (30 credits) for the successful completion of a research dissertation

The apportioning **of** credits should reflect the purpose (area of specialisation) of the Qualification and the emphasis, which is placed on independent research.

Since this is a post-graduate Qualification in a specialised area, all the credits are allocated to elective learning, with fundamental and core learning being assumed

EXIT LEVEL OUTCOMES

There are no interim exit levels. The qualification is awarded on completion of the programme. The outcomes on completion of this Qualification will render qualifying learners who are competent to:

> Demonstrate acquired skills following exposure to basic epistemological issues and research methods
> Demonstrate familiarity with the relevant literature
> Demonstrate their capacity for the execution of the following research tasks:
- Writing a research proposal
- Using literature to identify the theoretical issues pertaining to the proposal
- Fformulating precise research questions
- Selecting or devising appropriate research
- Executing the research
- Critical analysis of the results and findings emanating from the research
- Writing up the research
- Undertaking study within quantity surveying or related built environment disciplines at an advanced level

ASSOCIATED ASSESSMENT CRITERIA

Qualifying learners will be required to demonstrate:
> Their understanding of the basic principles of epistemological and methodological issues in drafting a dissertation
> Their familiarity with the relevant literature
> Their competence in respect of research such that:
- A research proposal is written in accordance with construction industry norms
- A critical literature review is conducted in accordance with construction industry norms
- Precise research questions are structured in accordance with construction industry norms
- Appropriate research methods are selected or devised in accordance with construction industry norms
- The research is executed in accordance with construction industry norms
- Results emanating from the research are critically analysed in accordance with construction industry norms
- The research dissertation is written in accordance with construction industry norms
- Study has been undertaken at an advanced level in accordance with the construction industry research writing standards

Integrated assessment:

In the case of part coursework - part dissertation programmes, where the outcome of the coursework demonstrates sufficient theoretical understanding of the principles which are prerequisite to undertaking research, both summative and formative evaluation methods are used for the coursework (examinations and projects). Evaluation of the dissertation is formative in character and synoptically assesses all outcomes

In the case of a Qualification awarded on the basis of a dissertation only, evaluation of the dissertation is formative in character and synoptically assesses all outcomes

In each case, examiners submit formal reports on the dissertation, which are made available to the candidate

INTERNATIONAL COMPARABILITY

An accepted Master's dissertation and associated specified study is expected to be of a standard and rigour comparable with international benchmarks. The required quality standards are assured by the design of external examination systems associated with Masters programmes.

ARTICULATION OPTIONS

Masters Qualifications provide articulation routes leading to admission to PhD studies.

Learners will also have career path articulation options with Masters Degrees in fields such as Project Management, Construction Management, Housing, Town Planning, Property Studies, Facilities Management, etc.

MODERATION OPTIONS

Masters dissertations are examined by at least two examiners external to the university concerned. External examiners and supervisors of Master's research should, ideally, themselves be in possession of a Master's degree

In the case of part coursework - part dissertation programmes, the coursework component (examinations and projects) is subject to both internal and external examination

Accreditation options include:

> Accreditation of qualifications by statutory Councils (e.g. South African Council for the Quantity Surveying Profession, in terms of the Quantity Surveying Profession Act No 49 of 2000) and international institutions (e.g. Royal Institution of Chartered Surveyors, domiciled in England). The actual accreditation process will vary depending upon the specific requirements of the accrediting body. Typically it will involve the submission of external examiners reports, interim accreditation visits by appointed external moderators, and a main accreditation visit every five years.

> Assessment of competence by external, statutory Councils (South African Council for the Quantity Surveying Profession, in terms of the Quantity Surveying Profession Act No 49 of 2000)

> Assessment of competence by international institutions (e.g. Royal Institution of Chartered Surveyors, domiciled in England)

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Examiners / assessors are appointed in a manner which is consistent with the quality assurance system of the institution

NOTES

In the case of degrees by dissertation only, the thesis submitted shall constitute a rigorous research endeavour in the discipline of quantity surveying or a related field in the built environment. An original contribution to knowledge is not a requirement of a programme leading to a Masters Qualification. No work will be accepted which has been accepted by another academic institution for the purpose of obtaining a Qualification. The examination consists primarily of an assessment of the written dissertation, but may be supplemented by a written or oral examination on the subject of the work presented

In the case of part coursework - part dissertation programmes, a dissertation must be completed on the subject of the research project indicating an advanced study of applications, methods or theories, in some branch of the built environment AND specified prescribed courses at an advanced level
> Supplementary information:
> A dissertation may not be submitted more than twice for examination

Specified requirements

Specified requirements include legal and legislative specific requirements and are contained in one or more of the following documents:

Regulations:

Occupational Health and Safety Act: Construction Regulations, published in Government Gazette No **25207,** Regulation Gazette **7721, 18** July **2003**

Legal:

Act 1: Natural Scientific Professions Act (No **27** of **2003)**
Act **2:** Natural Environment Management Protected Areas Act (No **57** of **2003)**
Act **3:** Quantity Surveying Profession Act (No **49** of **2000)**
Act **4:** Project and Construction Management Professions Act (No **48** of **2000)**
Act **5:** Council for the Built Environment Act (No **43** of **2000)**
Act **6:** Occupational Health and Safety Act (No **85** of **1993)**
Act **7:** Compensation for Occupational Injuries and Diseases Act (No **130** of **1993)**
Act **8:** South African Qualifications Authority Act (No **58** of **1995)**
Act **9:** Skills Development Act (No **97** of **1998)**
Act **10**: Environmental Conservation Act (No **73** of **1989),** and all subsequent amendments

A glossary of terms about the terminology: Not applicable

CONTEXT SPECIFIC: Not applicable

User manuals supplied by manufacturers: Not applicable

Specifications, agreements and policies and procedures: Not applicable.

UNIT STANDARDS
(Note: A blank space after this line means that the qualification is not based on Unit Standards.)